
Rambus
2013 ANNUAL REPORT

RAMBUS INC

FORM 10-K
(Annual Report)

Filed 02/21/14 for the Period Ending 12/31/13

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Telephone	408-462-8000
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Symbol	RMBS
SIC Code	3674 - Semiconductors and Related Devices
Industry	Semiconductors
Sector	Technology
Fiscal Year	12/31

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

(Mark One)

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2013

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number: 000-22339

RAMBUS INC.
(Exact name of registrant as specified in its charter)

Delaware	**94-3112828**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
1050 Enterprise Way, Suite 700 Sunnyvale, California	**94089**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code:
(408) 462-8000

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, $.001 Par Value	The NASDAQ Stock Market LLC (The NASDAQ Global Select Market)

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☑ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☑

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☑ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☑

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☑	Accelerated filer ☐	Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☑

The aggregate market value of the Registrant's Common Stock held by non-affiliates of the Registrant as of June 30, 2013 was approximately $838.1 million based upon the closing price reported for such date on The NASDAQ Global Select Market. For purposes of this disclosure, shares of Common Stock held by officers and directors of the Registrant and persons that may be deemed to be affiliates under the Act have been excluded. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

The number of outstanding shares of the Registrant's Common Stock, $.001 par value, was 113,483,805 as of January 31, 2014.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information is incorporated into Part III of this report by reference to the Proxy Statement for the Registrant's annual meeting of stockholders to be held on or about April 24, 2014 to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Form 10-K.

TABLE OF CONTENTS

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K ("Annual Report") contains forward-looking statements. These forward-looking statements include, without limitation, predictions regarding the following aspects of our future:

- Success in the markets of our products and services or our customers' products;
- Sources of competition;
- Research and development costs and improvements in technology;
- Sources, amounts and concentration of revenue, including royalties;
- Success in signing and renewing license agreements;
- Technology product development;
- Outcome and effect of current and potential future intellectual property litigation and other significant litigation;
- Dispositions, acquisitions, mergers or strategic transactions and our related integration efforts;
- Impairment of goodwill and long-lived assets;
- Pricing policies of our customers;
- Changes in our strategy and business model;
- Deterioration of financial health of commercial counterparties and their ability to meet their obligations to us;
- Engineering, marketing and general and administration expenses;
- Contract revenue;
- Operating results;
- International licenses and operations;
- Effects of changes in the economy and credit market on our industry and business;
- Ability to identify, attract, motivate and retain qualified personnel;
- Growth in our business;
- Methods, estimates and judgments in accounting policies;
- Adoption of new accounting pronouncements;
- Effective tax rates;
- Realization of deferred tax assets/release of deferred tax valuation allowance;
- Trading price of our common stock;
- Internal control environment;
- Corporate governance;
- The level and terms of our outstanding debt;
- Resolution of the governmental agency matters involving us;
- Litigation expenses;
- Protection of intellectual property;
- Terms of our licenses and amounts owed under license agreements;
- Indemnification and technical support obligations;
- Refinancing debt;

- Issuances of our securities, which could involve restrictive covenants or be dilutive to our existing stockholders; and
- Likelihood of paying dividends or repurchasing securities.

You can identify these and other forward-looking statements by the use of words such as “may,” “future,” “shall,” “should,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “intends,” “potential,” “continue,” “projecting” or the negative of such terms, or other comparable terminology. Forward-looking statements also include the assumptions underlying or relating to any of the foregoing statements.

Actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under Item 1A, “Risk Factors.” All forward-looking statements included in this document are based on our assessment of information available to us at this time. We assume no obligation to update any forward-looking statements.

PART I

Rambus, RDRAM ™, XDR ™, FlexIO ™, FlexPhase ™, R+ ™, CryptoFirewall ™, Imerz ™, and MicroLens ® are trademarks, registered trademarks or copyrights of Rambus Inc. Other trademarks or copyrights that may be mentioned in this annual report on Form 10-K are the property of their respective owners.

Industry terminology, used widely throughout this annual report, has been abbreviated and, as such, these abbreviations are defined below for your convenience:

Differential Power Analysis	DPA
Double Data Rate	DDR
Dynamic Random Access Memory	DRAM
Field Programmable Gate Arrays	FPGA
Graphics Double Data Rate	GDDR
High Definition Television	HDTV
Input/Output	I/O
Light Emitting Diodes	LED
Liquid Crystal Display	LCD
Low-Power Double Data Rate	LPDDR
Peripheral Component Interconnect	PCI
Rambus Dynamic Random Access Memory	RDRAM ™
Simple Power Analysis	SPA
Single Data Rate	SDR
Synchronous Dynamic Random Access Memory	SDRAM
eXtreme Data Rate	XDR ™

On occasion we will refer to the abbreviated names of certain entities and, as such, have provided a chart to indicate the full names of those entities for your convenience.

Advanced Micro Devices Inc.	AMD
Broadcom Corporation	Broadcom
Cooper Lighting, LLC	Cooper Lighting
Cryptography Research, Inc.	CRI
Elpida Memory, Inc.	Elpida
Freescale Semiconductor Inc.	Freescale
Fujitsu Limited	Fujitsu
General Electric Company	GE
Hewlett-Packard Company	Hewlett-Packard
Infineon Technologies AG	Infineon
Inotera Memories, Inc.	Inotera
Intel Corporation	Intel
International Business Machines Corporation	IBM
Joint Electronic Device Engineering Councils	JEDEC
Lighting and Display Technology	LDT
LSI Corporation	LSI
MediaTek Inc.	MediaTek
Memory and Interfaces Division	MID
Micron Technology, Inc.	Micron
Mobile Technology Division	MTD
Nanya Technology Corporation	Nanya
NVIDIA Corporation	NVIDIA
Qimonda AG (formerly Infineon’s DRAM operations)	Qimonda
Panasonic Corporation	Panasonic
Renesas Electronics	Renesas
Samsung Electronics Co., Ltd.	Samsung
SK hynix, Inc.	SK hynix
Sony Computer Electronics	Sony
ST Microelectronics N.V.	STMicroelectronics
Toshiba Corporation	Toshiba

Item 1. ***Business***

Rambus Inc., referred to as we, us or Rambus, was founded in 1990 and reincorporated in Delaware in March 1997. Our principal executive offices are located at 1050 Enterprise Way, Suite 700, Sunnyvale, California. Our website is www.rambus.com. You can obtain copies of our Forms 10-K, 10-Q, 8-K, and other filings with the SEC, and all amendments to these filings, free of charge, from our website as soon as reasonably practicable following our filing of any of these reports with the SEC. In addition, you may read and copy any material we file with the SEC at the SEC's Public Reference Room at 100 F Street NE, Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website that contains reports, proxy, and information statements, and other information regarding registrants that file electronically with the SEC at www.sec.gov.

We are an innovative technology solutions company that brings invention to market. Our customers leverage our customizable platforms, services and tools to improve, differentiate and accelerate the development of products and services. Our extensive technology portfolio addresses the evolving power, performance and security requirements of the mobile, cloud computing and connected device markets. Today, we’re driving innovations in smart memory, chip interfaces and architectures, end-to-end security, and advanced LED lighting, while Rambus Labs looks to disruptions and opportunities in tomorrow’s high-growth markets. We generate revenue by licensing our inventions and solutions and providing services to market-leading companies.

While we have historically focused our efforts on the development of technologies for electronics memory and chip interfaces, we have been expanding our portfolio of inventions and solutions to address additional markets in chip and system security as well as LED-based lighting. We also are exploring new areas within the semiconductor space such as computational sensing and imaging. We intend to continue to identify disruptions and opportunities in both traditional and new technology fields, consistent with our goal of creating great value through our innovations and to make those technologies available through both our licensing and non-licensing business models. Key to our efforts, both in our current businesses and in any new area of diversification, will be hiring and retaining world-class inventors, scientists and engineers to lead the development of inventions and technology solutions for these fields of focus, and the management and business support personnel necessary to execute our plans and strategies.

Rambus has four main operational units: (1) Memory and Interfaces Division, or MID, which focuses on the design, development and licensing of technology that is related to memory and interfaces; (2) Cryptography Research, Inc., or CRI, which focuses on the design, development and licensing of technologies for chip and system security and anti-counterfeiting; (3) Lighting and Display Technologies, or LDT, which focuses on the design, development and licensing of technologies for lighting; and (4) Chief Technology Office, or CTO, which focuses on the design, development and productization of emerging technologies.

Our inventions and technology solutions are offered to our customers through either a patent license or a solutions license. Royalties from licenses accounted for 97%, 99% and 96% of our consolidated revenue for the years ended December 31, 2013, 2012 and 2011, respectively. Today, a majority of our revenues are derived from patent licenses, through which we provide our customers a license to use a certain portion of our broad portfolio of patented inventions. The license provides our customers with a defined right to use our innovations in the customer's own digital electronics products, systems or services, as applicable. The licenses may also define the specific field of use where our customers may use or employ our inventions in their products. License agreements are structured with fixed, variable or a hybrid of fixed and variable royalty payments over certain defined periods ranging for up to ten years. The majority of our intellectual property in MID was developed in-house and we intend to expand our business strategy of monetizing our MID intellectual property to include the sale of select intellectual property. In 2013, we signed patent license agreements with customers for aggregate revenues of up to $1.2 billion, to be paid over the next ten years.

While patent licensing makes up the majority of our revenue today, our goal is to migrate more of our efforts toward providing solutions licenses where our technologies are incorporated into our customers’ products and/or systems. Our solutions licenses are designed to support the implementation and adoption of our technology into our customers’ products or services. As part of these offerings, we can provide a range of services that can include access to technical experts, advanced system design and analysis, hardware and software to enhance design and validation, system IP and specifications, and process-specific hard and soft macros, along with other services. These solutions license agreements may have both a fixed price (non-recurring) component and ongoing royalties. Further, under solutions licenses, our customers typically receive licenses to our patents necessary to implement these solutions in their products with specific rights and restrictions to the applicable patents elaborated in their individual contracts with us.

Background

The demand for increased performance and improved power efficiency in computers, tablets, smartphones, consumer electronics and other electronic systems rises dramatically with each passing year. Semiconductor and system designers face key challenges in sustaining this pace of innovation. We strive to offer compelling technologies that provide value to our customers. A key component of our current business model is intellectual property licensing. Our intellectual property broadly includes (but is not limited to) our technologies, solutions, and patents that incorporate our innovations. We focus on intellectual property that has the potential to enable future high-volume, mass-market platforms.

Memory and Interfaces

There are three main areas of focus in our Memory and Interface Division: mobile memory, server memory and links, and custom solutions. The main markets for these memory types include memory (DRAM today, NAND in the future), System-on-a-Chip (SoCs) that connect to memory (DRAM controllers), and SoCs that use high-speed serial link interfaces. Since battery technology improves modestly over time, mobile device designers face adding increased functionality and higher performance with only small increases in power budget. For plug-in systems, there is a strong desire to reduce power consumption for both economic and environmental reasons while still providing increased computing capability and more visually compelling displays. At the chip level, it becomes increasingly difficult to maintain signal integrity and power efficiency as data transfer speeds rise to support more powerful, multi-core processors.

To address these challenges and enable the continued improvement of electronics systems, ongoing innovation is required. The many contributions and patented innovations developed by Rambus scientists and engineers have been, and continue to be, critical in addressing some of the most difficult chip and system challenges. To maximize the value of our intellectual property, we have adopted a licensing strategy that takes advantage of the adoption life cycle of new technologies. During early adoption, we enable our customers to utilize our innovations through technology solutions that offer value in large and/or emerging markets. Working with industry leaders positions our inventions for broad market adoption. As our innovations reach broad adoption, we also pursue patent licensing to monetize products not covered by our solutions licenses.

We have developed technologies, advanced designs, and development tools for building high-performance and low-power memory and serial-link interface cores for semiconductor chips. We develop both proprietary and industry-standard interfaces that we provide to our customers under solutions license agreements. We also offer a range of services as part of our solutions licenses which can include know-how and technology transfer, product design and development, system integration, and other services. In 2013, we introduced a set of solutions under the name R+ ™ enhanced standard solutions. Fully compatible with industry standards, R+ solutions offer compelling benefits that enable our customers to differentiate their products. Also in 2013, we announced the first R+ solution, the R+ LPDDR3 memory architecture. The R+ LPDDR3 architecture includes improvements to power efficiency and performance that enable longer battery life and enhanced mobile device functionality for streaming HD video, gaming and data-intensive applications. We continue to focus significant resources and effort to help bring products to market under solutions license agreements with leading companies in the industry.

Chip and System Security Technology

Security challenges are increasingly prevalent in a multitude of industries, including high-growth sectors such as mobile and content distribution, providing a variety of opportunities for our hardware-based security technologies and services. This market trend provides us with the opportunity to provide critical technologies, and we are deploying and developing products to enable us to achieve this objective. Through CRI, we own a portfolio of patented inventions and technology solutions that are needed for creating secure tamper-resistant electronic devices and systems. CRI's patented DPA countermeasures are critical in protecting devices against side channel attacks such as differential power analysis, which involve monitoring the variations in power consumption or electromagnetic emissions of a device. In addition, CRI's CryptoFirewall™ cores provide a robust hardware-based solution to protect electronics systems from counterfeiting, piracy, and other attacks. We believe the hardware based security that can be achieved with our technologies is vastly superior to many software-based security solutions.

For DPA countermeasures, our business model is to provide a combination of patent licenses, technology, consulting services (training, evaluation, and design), and test equipment. We are recognized worldwide for our expertise in this area, and our strategy is to strengthen our offering beyond stand-alone patent licensing. We discovered the existence of SPA and DPA vulnerabilities in the 1990s, and patented the fundamental techniques for preventing against this method of attack. DPA protections are a critical security ingredient in tamper-resistant products, and are important or required for a broad range of applications and devices (including smart cards, mobile devices, FPGAs, government/defense applications, consumer set-top boxes, postage meters and security tokens).

In addition to the DPA countermeasures portfolio, we have developed technologies, expertise, advanced designs, and development tools for building highly secure cryptographic semiconductor cores. We provide semiconductor cores under our CryptoFirewall™ brand. We have successfully deployed these cores in two primary application areas where effective security is valued and paid for by customers: content protection and anti-counterfeiting. For CryptoFirewall™ cores, our most common business model is to partner with chip manufacturers to integrate our technology, and then license it to downstream customers.

Lighting and Display Technology

The continued evolution of LED as a bright, reliable and energy-efficient light source creates significant market opportunities in consumer electronics and in general lighting. Harnessing the benefits of LEDs, however, presents a new set of challenges for companies that offer and provide electronics and lighting products and solutions. Our technology allows customers to efficiently and uniformly spread the point source of light emitted from an LED over a large area in a very cost effective way. Moreover, we can control and direct the emitted light to improve the overall product performance or application efficiency. This technology enables class-leading price/performance and freedom of design in the general lighting field. We believe our patented technology, software and know-how, which enables precise placement of MicroLens® optics on light guides, provides our customers with a fundamental competitive advantage over alternative products in the market. We continue to focus resources and effort to help our customers bring new products to market under solutions license agreements. Our business model is a blend of patent and technology licensing, product sales and services to help bring innovative products to market.

Design and Manufacturing

Our technology solutions are developed with high-volume commercial manufacturing processes in mind. Our solutions can be delivered in a number of ways, from reference designs to full turnkey custom development deliverables. A reference design engagement might include an architectural specification, data sheet, theory of operation and implementation guides. A custom development project would entail a specific design implementation optimized for the customer's manufacturing process. In some cases, we may provide supply chain enablement services where we assist our customers in designing and establishing certain manufacturing processes to implement our technologies in their product offerings. We often develop testchips of our designs and, in some cases, may deliver our solutions to the market through physical product.

Our Strategy

Our strategy is to evolve from providing primarily patent licenses to providing additional technology, products and services while creating and leveraging strategic synergies to increase revenue. We believe that the successful execution of this strategy requires an exceptional business model that relies on the skills and talent of our employees. Accordingly, we seek to hire and retain world-class scientific and engineering expertise in all of our fields of technological focus, as well as the executive management and operating personnel required to successfully execute our business strategy. In order to attract the quality of employees required for this business model, we have created an environment and culture that encourages, fosters and supports research, development and innovation in breakthrough technologies with significant opportunities for broad industry adoption. We believe we have created a compelling company for inventors and innovators who are able to work within a business model and platform that focuses on technology development to drive strong future growth.

Research and Development and Employees

Our ability to compete in the future will be substantially dependent on our ability to develop key innovations that meet the future needs of a dynamic market. To this end, we have assembled a team of highly skilled inventors, engineers and scientists whose activities are focused on continually developing new innovations within our chosen technology fields. Using this foundation of innovations, our technical teams develop new solutions that enable increased performance, greater power efficiency, increased levels of security, as well as other improvements and benefits. Our solution design and development process is a multi-disciplinary effort requiring expertise in multiple fields across all of our operational units.

As of December 31, 2013, we had approximately 300 employees in our engineering departments, representing approximately 70 % of our total number of 447 employees. None of our employees are covered by collective bargaining agreements. As noted, we believe our future success is dependent on our continued ability to identify, attract, motivate and retain qualified personnel. To date, we believe that we have been successful in recruiting qualified employees and that our relationship with our employees is good.

A significant number of our scientists and engineers spend all or a portion of their time on research and development. For the years ended December 31, 2013, 2012 and 2011, research and development expenses were $118.0 million, $140.5 million and $115.7 million, respectively, including stock-based compensation of approximately $6.6 million, $9.5 million and $10.5 million, respectively. For the years ended December 31, 2013 , 2012 and 2011, research and development expenses also included $8.6 million, $20.5 million and $15.7 million, respectively, for the accrual of retention bonuses for engineers. Since innovation is critical to our future success, we expect to continue to invest substantial funds in research and development activities. In addition, because our customer agreements often call for us to provide engineering support, a portion of our total engineering costs are allocated to the cost of contract revenue.

Competition

Our selected industries are intensely competitive and have been impacted by price erosion, rapid technological change, short product life cycles, cyclical market patterns and increasing foreign and domestic competition. We face competition from semiconductor and digital electronics products and systems companies, other semiconductor intellectual property companies that provide security cores and non-edge lit LED lighting options that are available to the market.

We believe the principal competition for our technologies may come from our prospective customers, some of whom are evaluating and developing products based on technologies that they contend or may contend will not require a license from us. Some of our competitors use a system-level design approach similar to ours, including activities such as board and package design, power and signal integrity analysis, and thermal management. Many of these companies are larger and may have better access to financial, technical and other resources than we possess.

To the extent that alternatives might provide comparable system performance at lower than or similar cost to our technologies, or are perceived to require the payment of no or lower royalties, or to the extent other factors influence the industry, our customers and prospective customers may adopt and promote alternative technologies. Even to the extent we determine that such alternative technologies infringe our patents, there can be no assurance that we would be able to negotiate agreements that would result in royalties being paid to us without litigation, which could be costly and the results of which would be uncertain. In the past, litigation has been and in the future may be required to enforce and protect our intellectual property rights, as well as the substantial investments undertaken to research and develop our innovations and technologies.

In 2013, we continued our recent focus of putting behind us years of legal disputes with competitors and opening doors for future cooperation. In 2013, we settled all outstanding litigation with LSI, Micron, SK hynix, and STMicroelectronics, and we entered into license agreements with each of them, and we renewed our long-term license agreement with Samsung. We remain committed to developing innovative technology and furthering a more open, collaborative relationship with the broader industry.

Patents and Intellectual Property Protection

We maintain and support an active program to protect our intellectual property, primarily through the filing of patent applications and the defense of issued patents against infringement. As of December 31, 2013, our semiconductor, lighting, security and other technologies are covered by 1,837 U.S. and foreign patents, having expiration dates ranging from 2014 to 2037. Additionally, we have 837 patent applications pending. Some of the patents and pending patent applications are derived from a common parent patent application or are foreign counterpart patent applications. We believe our patented innovations provide our customers with the ability to achieve improved performance, lower risk, greater cost-effectiveness and other benefits in their products and services.

We have a program to file applications for and obtain patents in the United States and in selected foreign countries where we believe filing for such protection is appropriate and would further our overall business strategy and objectives. In some instances, obtaining appropriate levels of protection may involve prosecuting continuation and counterpart patent applications based on a common parent application. In addition, we attempt to protect our trade secrets and other proprietary information through agreements with current and prospective customers, and confidentiality agreements with employees and consultants and other security measures. We also rely on trademarks and trade secret laws to protect our intellectual property.

Information concerning revenue, results of operations and revenue by geographic area is set forth in Item 6, “Selected Financial Data,” in Item 7, “Management's Discussion and Analysis of Financial Condition and Results of Operations,” and in Note 7, “Segments and Major Customers,” of Notes to Consolidated Financial Statements of this Form 10-K, all of which are incorporated herein by reference. Information concerning identifiable assets and segment reporting is also set forth in Note 7, “Segments and Major Customers,” of Notes to Consolidated Financial Statements of this Form 10-K. Information on customers that comprise 10% or more of our consolidated revenue and risks attendant to our foreign operations is set forth below in Item 1A, “Risk Factors **.”**

Our Executive Officers

Information regarding our executive officers and their ages and positions as of February 28, 2014, is contained in the table below. Our executive officers are appointed by, and serve at the discretion of, our Board of Directors. There is no family relationship between any of our executive officers.

Name	Age	Position and Business Experience
Ronald D. Black, Ph.D.	50	Chief Executive Officer and President. Dr. Black has served as our chief executive officer and president since June 2012 and as a director since July 2012. Dr. Black was previously the Managing Director of R.D. Black & Company, a consulting firm, since August 2011. From September 2010 to August 2011, Dr. Black was the Chief Executive Officer of MobiWire, formerly Sagem Wireless, a privately-held mobile handset company headquartered near Paris, France that offers products and services to original equipment manufacturers and mobile network operators in the mobile phone marketplace. From June 2009 to October 2010, Dr. Black served as Chairman and CEO of UPEK, Inc. Dr. Black currently serves as a board member of EnOcean GmbH, a German-based company that manufactures and markets energy harvesting technology, sensors, and radio frequency communication. From September 2010 to November 2012, he served as a board member of AuthenTec, Inc., which he joined following the AuthenTec-UPEK merger in September 2010 and from 2007 to 2013, he served as a board member of Inside Contactless, a France-based company engaged in the semiconductors and information technology industry. From September 2004 to June 2009, he was chief executive officer of Wavecom S.A., a publicly traded French wireless solutions company. Dr. Black holds a Bachelor of Science, a Masters of Science, and a Ph.D. in materials science and engineering from Cornell University in Ithaca, N.Y.
Kevin Donnelly	52	Senior Vice President, GM, Memory & Interfaces. Mr. Donnelly joined us in 1993. Mr. Donnelly has served in his current position since August 2012. From November 2008 to August 2012, Mr. Donnelly served as Senior Vice President, IP Strategy, from March 2006 to November 2008, as Senior Vice President, Engineering and from January 2005 to March 2006, as co-vice president of Engineering. From October 2002 to January 2005 he served as vice president, Logic Interface Division. Mr. Donnelly held various engineering and management positions before becoming vice president, Logic Interface Division in October 2002. Before joining us, Mr. Donnelly held engineering positions at National Semiconductor, Sipex, and Memorex, over an eight year period. He holds a B.S. in Electrical Engineering and Computer Sciences from the University of California, Berkeley, and an M.S. in Electrical Engineering from San Jose State University.
Jae Kim	43	Senior Vice President and General Counsel. Mr. Kim has served as the senior vice president and general counsel since February 2013 and as our vice president, corporate legal since joining us in July 2010. Prior to his tenure at Rambus, Mr. Kim held senior legal positions at Aricent Inc., a privately-held communications technology company and Electronics for Imaging Inc., a digital printing technology company. Mr. Kim has also had significant experience in private practice with the law firm of Wilson Sonsini Goodrich & Rosati, P.C., where he advised high technology and emerging growth companies on mergers and acquisitions, private financings, public offerings, securities compliance, public company reporting and corporate governance. Mr. Kim began his legal career as an attorney with the United States Securities and Exchange Commission, Division of Corporation Finance, in Washington, DC. Mr. Kim is a member of both the California State Bar and New York State Bar, and received a J.D. from the American University, Washington College of Law, and his bachelor's degree from Boston University.

Name	Age	Position and Business Experience
Satish Rishi	54	Senior Vice President, Finance and Chief Financial Officer. Mr. Rishi joined us in his current position in April 2006. Prior to joining us, Mr. Rishi held the position of executive vice president of Finance and chief financial officer of Toppan Photomasks, Inc., (formerly DuPont Photomasks, Inc.) one of the world's leading photomask providers, from November 2001 to April 2006. During his 27-year career, Mr. Rishi has held senior financial management positions at semiconductor and electronic manufacturing companies. He served as vice president and assistant treasurer at Dell Inc. Prior to Dell, Mr. Rishi spent 13 years at Intel Corporation, where he held financial management positions both in the United States and overseas, including assistant treasurer. Mr. Rishi holds a B.S. with honors in Mechanical Engineering from Delhi University in Delhi, India and an M.B.A. from the University of California at Berkeley's Haas School of Business. He also serves as a director of Measurement Specialties, Inc.
Martin Scott, Ph.D.	58	Senior Vice President, Chief Technology Officer. Dr. Scott has served in his current position since August 2012. From August 2010 until August 2012, Dr. Scott served as our Senior Vice President, GM, New Business Group and from December 2006 to August 2010, as our Senior Vice President, Engineering. Dr. Scott joined us from PMC-Sierra, Inc., a provider of broadband communications and storage integrated circuits, where he was most recently vice president and general manager of its Microprocessor Products Division from March 2006. Dr. Scott was the vice president and general manager for the I/O Solutions Division (which was purchased by PMC-Sierra) of Avago Technologies Limited, an analog and mixed signal semiconductor components and subsystem company, from October 2005 to March 2006. Dr. Scott held various positions at Agilent Technologies, including as vice president and general manager for the I/O Solutions division from October 2004 to October 2005, when the division was purchased by Avago Technologies, vice president and general manager of the ASSP Division from March 2002 until October 2004, and, before that, Network Products operation manager. Dr. Scott started his career in 1981 as a member of the technical staff at Hewlett Packard Laboratories and held various management positions at Hewlett Packard and was appointed ASIC business unit manager in 1998. He earned a B.S. from Rice University and holds both an M.S. and Ph.D. from Stanford University.
Laura Stark	45	Senior Vice President, Corporate Strategy and M&A. Ms. Stark has served in her current position since August 2012. From April 2008 to August 2012, Ms. Stark served as Senior Vice President, Corporate Development, from February 2005 to April 2008 as Senior Vice President, Platform Solutions and from October 2002 to February 2005 as vice president, Memory Interface Division. Ms. Stark held various business and management positions before becoming vice president, Memory Interface Division in October 2002. Prior to joining us, Ms. Stark held various positions in the semiconductor products division of Motorola, a communications equipment company, during a six year tenure, including technical sales engineer for the Apple sales team and field application engineer for the Sun and SGI sales teams. Ms. Stark holds a B.S. in Electrical Engineering from the Massachusetts Institute of Technology.

Item 1A. *Risk Factors*

RISK FACTORS

Because of the following factors, as well as other variables affecting our operating results, past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods. See also “Special Note Regarding Forward-Looking Statements” elsewhere in this report.

Risks Associated With Our Business, Industry and Market Conditions

The success of our business depends on sustaining or growing our licensing revenue and the failure to achieve such revenue would lead to a material decline in our results of operations.

Our revenue consists mainly of patent and technology license fees paid for access to our patents, developed technology and development and support services provided to our customers. Our ability to secure the licenses from which our revenues are derived depends on our customers adopting our technology and using it in the products they sell. If we do not achieve our revenue goals, our results of operations could decline.

We have traditionally operated in industries that are highly cyclical and competitive.

Our target customers are companies that develop and market high volume business and consumer products in semiconductors, computing, tablets, handheld devices, mobile applications, gaming and graphics, high-definition televisions and displays, general lighting, cryptography and data security. The electronics industry is intensely competitive and has been impacted by price erosion, rapid technological change, short product life cycles, cyclical market patterns and increasing foreign and domestic competition. We are subject to many risks beyond our control that influence whether or not we are successful in winning target customers or retaining existing customers, including, primarily, competition in a particular industry, market acceptance of such customers' products and the financial resources of such customers. In particular, DRAM manufacturers, which make up many of our historic customers, have suffered material losses and other adverse effects to their businesses, leading to industry consolidation that may result in loss of revenues under our existing license agreements or loss of target customers. As a result of ongoing competition in the industries in which we operate and the economic downturn of the past several years, we may achieve a reduced number of licenses or experience tightening of customers' operating budgets, difficulty or inability of our customers to pay our licensing fees, extensions of the approval process for new licenses and consolidation among our customers, all of which may adversely affect the demand for our technology and may cause us to experience substantial fluctuations in our operating results.

We may have to invest more resources in research and development than anticipated, which could increase our operating expenses and negatively impact our operating results.

If new competitors, technological advances by existing competitors, and/or development of new technologies or other competitive factors require us to invest significantly greater resources than anticipated in our research and development efforts, our operating expenses could increase. If we are required to invest significantly greater resources than anticipated in research and development efforts without an increase in revenue, our operating results could decline. We expect these expenses to increase in the foreseeable future as our technology development efforts continue.

Our revenue is concentrated in a few customers, and if we lose any of these customers through terminations or acquisitions, our revenue may decrease substantially.

We have a high degree of revenue concentration. Our top five customers for each reporting period represented approximately 62%, 68%, and 66% of our revenues for the years ended December 31, 2013, 2012, and 2011, respectively. For the year ended December 31, 2013 and 2012, revenues from Samsung accounted for more than 10% or more of our revenue. For the year ended December 31, 2011, revenues from Elpida, NVIDIA and Samsung, each accounted for 10% or more of our revenue. We extended our license agreement with Samsung in December 2013 for ten years, and we expect Samsung to continue to account for a significant portion of our licensing revenue. We also entered into settlement agreements with each of SK hynix and Micron (which included Elpida, which Micron had acquired in July 2013) in June 2013 and December 2013, respectively. As a result of the renewal and such settlements, we expect each of Samsung, SK hynix and Micron to account for a significant portion of our licensing revenue in the future. We expect to continue to experience significant revenue concentration for the foreseeable future as a result of the addition of new contracts, expiration or termination of existing contracts, renewal of existing contracts, and industry consolidation.

In addition, our license agreements are complex and some of our license agreements contain terms that require us to provide certain customers with the lowest royalty rate that we provide to other customers for similar technologies, volumes and schedules. These clauses may be subject to interpretation and may limit our ability to effectively price differently among our customers, to respond quickly to market forces, or otherwise to compete on the basis of price. These clauses may also require us to reduce royalties payable by existing customers when we enter into or amend agreements with other customers. Any adjustment that reduces royalties from current customers or licensees may have a material adverse effect on our operating results and financial condition.

We continue to be in negotiations with customers and prospective customers to enter into license agreements. Furthermore, any future agreement, as well as our recent agreements with LSI, SK hynix, STMicroelectronics, Micron and Samsung, may trigger our obligation to offer comparable terms or modifications to agreements with our existing customers, which may be less favorable to us than the existing license terms. We expect licensing fees will continue to vary based on our success in renewing existing license agreements and adding new customers, as well as the level of variation in our customers' reported shipment volumes, sales price and mix, offset in part by the proportion of customer payments that are fixed. In particular, under our license agreement with Samsung, the license fees payable by Samsung are subject to certain adjustments and conditions, and we therefore cannot provide assurances that the revenues generated by this license will not decline in the future. In addition, some of our material license agreements may contain rights by the customer to terminate for convenience, or upon certain other events, such as change of control, material breach, insolvency or bankruptcy proceedings. If we are unsuccessful in entering into license agreements with new customers or renewing license agreements with existing customers, on favorable terms or at all, or if they are terminated, our results of operations may decline significantly.

If our counterparties are unable to fulfill their financial and other obligations to us, our business and results of operations may be affected adversely.

Any downturn in economic conditions or other business factors could threaten the financial health of our counterparties, including companies with whom we have entered into licensing and/or settlement agreements, and their ability to fulfill their financial and other obligations to us. Such financial pressures on our counterparties may eventually lead to bankruptcy proceedings or other attempts to avoid financial obligations that are due to us. Because bankruptcy courts have the power to modify or cancel contracts of the petitioner which remain subject to future performance and alter or discharge payment obligations related to pre-petition debts, we may receive less than all of the payments that we would otherwise be entitled to receive from any such counterparty as a result of bankruptcy proceedings.

Our business and operations could suffer in the event of security breaches.

Attempts by others to gain unauthorized access to our information technology systems are becoming more sophisticated. These attempts, which might be related to industrial or other espionage, include covertly introducing malware to our computers and networks and impersonating authorized users, among others. We seek to detect and investigate all security incidents and to prevent their recurrence, but in some cases, we might be unaware of an incident or its magnitude and effects. While we have not identified any material incidents of unauthorized access to date, the theft, unauthorized use or publication of our intellectual property and/or confidential business information could harm our competitive position, reduce the value of our investment in research and development and other strategic initiatives or otherwise adversely affect our business. To the extent that any future security breach results in inappropriate disclosure of our customers' confidential information, we may incur liability.

Failures in our products and services or in the products of our customers, including those resulting from security vulnerabilities, defects or errors, could harm our business.

Because the techniques used by hackers to access or sabotage secure chip and other technologies change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques and may not address them in our data security technologies. Furthermore, our data security technologies may fail to detect or prevent security breaches due to a number of reasons such as the evolving nature of such threats and the continual emergence of new threats. An actual or perceived security breach of our customers or their end-customers, regardless of whether the breach is attributable to the failure of our data security technologies, could adversely affect the market's perception of our security technologies. We may not be able to correct any security flaws or vulnerabilities promptly, or at all. Any breaches, defects, errors or vulnerabilities in our data security technologies could result in:

- expenditure of significant financial and research and development resources in efforts to analyze, correct, eliminate or work-around breaches, errors or defects or to address and eliminate vulnerabilities;
- financial liability to customers for breach of certain contract provisions;
- loss of existing or potential customers;
- delayed or lost revenue;
- delay or failure to attain market acceptance;
- negative publicity, which would harm our reputation; and
- litigation, regulatory inquiries or investigations that would be costly and harm our reputation.

Some of our revenue is subject to the pricing policies of our customers over whom we have no control.

We have no control over our customers' pricing of their products and there can be no assurance that licensed products will be competitively priced or will sell in significant volumes. Any premium charged by our customers in the price of memory and controller chips over alternatives must be reasonable. If the benefits of our technology do not match the price premium charged by our customers, the resulting decline in sales of products incorporating our technology could harm our operating results.

Our licensing cycle is lengthy and costly, and our marketing and licensing efforts may be unsuccessful.

The process of persuading customers to adopt and license our chip interface, lighting, data security, and other technologies can be lengthy. Even if successful, there can be no assurance that our technologies will be used in a product that is ultimately brought to market, achieves commercial acceptance or results in significant royalties to us. We generally incur significant marketing and sales expenses prior to entering into our license agreements, generating a license fee and establishing a royalty stream from each customer. The length of time it takes to establish a new licensing relationship can take many months or even years. We may incur costs in any particular period before any associated revenue stream begins, if at all. If our marketing and sales efforts are very lengthy or unsuccessful, then we may face a material adverse effect on our business and results of operations as a result of failure to obtain or an undue delay in obtaining royalties.

Future revenue is difficult to predict for several reasons, and our failure to predict revenue accurately may result in our stock price declining.

Our lengthy license negotiation cycles could make our future revenue difficult to predict because we may not be successful in entering into licenses with our customers on our estimated timelines.

In addition, while some of our license agreements provide for fixed, quarterly royalty payments, many of our license agreements provide for volume-based royalties, and may also be subject to caps on royalties in a given period. The sales volume and prices of our customers' products in any given period can be difficult to predict. As a result, our actual results may differ substantially from analyst estimates or our forecasts in any given quarter.

Furthermore, a portion of our revenue comes from development and support services provided to our customers. Depending upon the nature of the services, a portion of the related revenue may be recognized ratably over the support period, or may be recognized according to contract accounting. Contract revenue accounting may result in deferral of the service fees to the completion of the contract, or may be recognized over the period in which services are performed on a percentage-of-completion basis. There can be no assurance that the product development schedule for these projects will not be changed or delayed.

We may fail to meet our publicly announced guidance or other expectations about our business, which would likely cause our stock price to decline.

We provide guidance regarding our expected financial and business performance including our anticipated future revenues and operating expenses. Correctly identifying the key factors affecting business conditions and predicting future events is inherently an uncertain process.

Such guidance may not always be accurate or may vary from actual results due to our inability to meet our assumptions and the impact on our financial performance that could occur as a result of the various risks and uncertainties to our business as set forth in these risk factors. We offer no assurance that such guidance will ultimately be accurate, and investors should treat any such guidance with appropriate caution. If we fail to meet our guidance or if we find it necessary to revise such guidance, even if such failure or revision is seemingly insignificant, investors and analysts may lose confidence in us and the market value of our common stock could be materially adversely affected.

We have in the past made and may in the future make acquisitions or enter into mergers, strategic transactions, sales of assets or other arrangements that may not produce expected operating and financial results.

From time to time, we engage in acquisitions, strategic transactions and strategic investments. We completed a number of acquisitions from 2009 to 2012, including the acquisition of CRI in 2011, our largest acquisition to date. Many of our acquisitions or strategic investments entail a high degree of risk, and such investments may not become liquid for several years after the date of the investment, if at all. Our acquisitions or strategic investments may not generate the financial returns we expect, and we may be subject to liabilities that either are not covered by indemnification protection we may obtain or become subject to litigation. Achieving the anticipated benefits of business acquisitions depends in part upon our ability to integrate the acquired businesses in an efficient and effective manner. The integration of companies that have previously operated independently may result in significant challenges, including, among others: retaining key employees; successfully integrating new employees, business systems and technology; retaining customers of the acquired business; minimizing the diversion of management's attention from ongoing business matters; coordinating geographically separate organizations; consolidating research and development operations; and consolidating corporate and administrative infrastructures.

Our strategic investments in new areas of technology may involve significant risks and uncertainties, including distraction of management from current operations, greater than expected liabilities and expenses, inadequate return of capital, and unidentified issues not discovered in due diligence. These investments are inherently risky and may not be successful.

In addition, we may record impairment charges related to our acquisitions (in the third quarter of 2013, we recorded an impairment of goodwill related to our MTD reporting unit) or strategic investments. Any losses or impairment charges that we incur related to acquisitions, strategic investments or sales of assets will have a negative impact on our financial results, and we may continue to incur new or additional losses related to acquisitions or strategic investments.

We may have to incur debt or issue equity securities to pay for any future acquisition, which debt or equity securities could involve restrictive covenants or be dilutive to our existing stockholders.

From time to time, we may also divest certain assets, where we may be required to provide certain representations, warranties and covenants to their buyers. While we would seek to ensure the accuracy of such representations and warranties and fulfillment of any ongoing obligations, we may not be completely successful and consequently may be subject to claims by a purchaser of such assets.

A substantial portion of our revenue is derived from sources outside of the United States and this revenue and our business generally are subject to risks related to international operations that are often beyond our control.

For the years ended December 31, 2013, 2012, and 2011, revenue received from our international customers constituted approximately 70%, 73%, and 67%, respectively, of our total revenue. We expect that future revenue derived from international sources will continue to represent a significant portion of our total revenue.

To date, all of the revenue from international customers has been denominated in U.S. dollars. However, to the extent that such customers' sales are not denominated in U.S. dollars, any royalties which are based on a percentage of the customers' sales that we receive as a result of such sales could be subject to fluctuations in currency exchange rates. In addition, if the effective price of licensed products sold by our foreign customers were to increase as a result of fluctuations in the exchange rate of the relevant currencies, demand for licensed products could fall, which in turn would reduce our royalties. We do not use financial instruments to hedge foreign exchange rate risk.

We currently have international design operations in India and France and business development operations in Japan, Korea and Taiwan. Our international operations and revenue are subject to a variety of risks which are beyond our control, including:

- hiring, maintaining and managing a workforce and facilities remotely and under various legal systems;
- natural disasters, acts of war, terrorism, widespread illness or security breaches;
- export controls, tariffs, import and licensing restrictions and other trade barriers;
- profits, if any, earned abroad being subject to local tax laws and not being repatriated to the United States or, if repatriation is possible, limited in amount;
- adverse tax treatment of revenue from international sources and changes to tax codes, including being subject to foreign tax laws and being liable for paying withholding, income or other taxes in foreign jurisdictions;
- unanticipated changes in foreign government laws and regulations;
- lack of protection of our intellectual property and other contract rights by jurisdictions in which we may do business to the same extent as the laws of the United States;
- social, political and economic instability;
- geopolitical issues, including changes in diplomatic and trade relationships; and
- cultural differences in the conduct of business both with customers and in conducting business in our international facilities and international sales offices.

We and our customers are subject to many of the risks described above with respect to companies which are located in different countries. There can be no assurance that one or more of the risks associated with our international operations will not result in a material adverse effect on our business, financial condition or results of operations.

Weak global economic conditions may adversely affect demand for the products and services of our customers.

Our operations and performance depend significantly on worldwide economic conditions. Uncertainty about global economic conditions poses a risk as consumers and businesses may postpone spending in response to tighter credit, negative financial news and declines in income or asset values, which could have a material negative effect on the demand for the products of our customers in the foreseeable future. If our customers experience reduced demand for their products as a result of economic conditions or otherwise, this could result in reduced royalty revenue and our business and results of operations could be harmed.

If we are unable to attract and retain qualified personnel, our business and operations could suffer.

Our success is dependent upon our ability to identify, attract, compensate, motivate and retain qualified personnel, especially engineers, senior management and other key personnel. Our employee turnover has accelerated after our reduction-in-force efforts in 2012 and 2013 and subsequent voluntary and involuntary separations. The loss of the services of any key employees could be disruptive to our development efforts or business relationships and could cause our business and operations to suffer.

We are subject to various government restrictions and regulations, including on the sale of products and services that use encryption technology and those related to privacy and other consumer protection matters.

Regulatory initiatives throughout the world can also create new and unforeseen regulatory obligations on us and the technology we develop. The impact of these potential obligations varies based on the jurisdiction, but any such changes could impact whether we enter, maintain or expand our presence in a particular market or with particular potential customers.

Various countries have adopted controls, license requirements and restrictions on the export, import and use of products or services that contain encryption technology. In addition, governmental agencies have proposed additional requirements for encryption technology, such as requiring the escrow and governmental recovery of private encryption keys. Restrictions on the sale or distribution of products or services containing encryption technology may impact the ability of CRI to license its data security technologies to the manufacturers and providers of such products and services in certain markets or may require CRI or its customers to make changes to the licensed data security technology that is embedded in such products to comply with such restrictions. Government restrictions, or changes to the products or services of CRI's customers to comply with such restrictions, could delay or prevent the acceptance and use of such customers' products and services. In addition, the United States and other countries have imposed export controls that prohibit the export of encryption technology to certain countries, entities and individuals. Our failure to comply with export and use regulations concerning encryption technology of CRI could subject us to sanctions and penalties, including fines, and suspension or revocation of export or import privileges.

We are subject to a variety of laws and regulations in the United States, the European Union and other countries that involve, for example, user privacy, data protection and security, content and consumer protection. A number of proposals are pending before federal, state, and foreign legislative and regulatory bodies that could significantly affect our business. Existing and proposed laws and regulations can be costly to comply with and can delay or impede the development of new products, result in negative publicity, increase our operating costs and subject us to claims or other remedies.

Our operations are subject to risks of natural disasters, acts of war, terrorism, widespread illness or security breach at our domestic and international locations, any one of which could result in a business stoppage and negatively affect our operating results.

Our business operations depend on our ability to maintain and protect our facilities, computer systems and personnel, which are primarily located in the San Francisco Bay Area and Bangalore, India. The San Francisco Bay Area is in close proximity to known earthquake fault zones. Our facilities and transportation for our employees are susceptible to damage from earthquakes and other natural disasters such as fires, floods and similar events. Should a catastrophe disable our facilities, we do not have readily available alternative comprehensive facilities from which we could conduct our business, so any resultant work stoppage could have a negative effect on our operating results. We also rely on our network infrastructure and technology systems for operational support and business activities, which are subject to damage from malicious code and other related vulnerabilities common to networks and computer systems, including acts of vandalism and potential security breach by third parties. Acts of terrorism, widespread illness, war and any event that causes failures or interruption in our network infrastructure and technology systems could have a negative effect at our international and domestic facilities and could harm our business, financial condition, and operating results.

We do not have extensive experience in manufacturing and marketing products, and as a result, will rely on sales and distribution channels for selling certain products. If we are unable to secure sales and distribution channels or do not manage them successfully, our operating results could be adversely affected.

In order to grow and in some cases maintain our business, we need to work with various partners to enable them to sell and deploy our solutions. We may be unable to successfully establish and expand the effectiveness of our distribution channels. If our channel partners do not effectively market and sell our solutions, if they choose to place greater emphasis on products of their own or those offered by our competitors, or if they fail to meet the needs of our customers, our ability to grow our business and our operating results may be adversely affected.

Our business and operating results could be harmed if we undertake any restructuring activities.

From time to time, we may undertake restructurings of our business. There are several factors that could cause restructurings to have adverse effects on our business, financial condition and results of operations. These include potential disruption of our operations, the development of our technology, the deliveries to our customers and other aspects of our business. Loss of sales, service and engineering talent, in particular, could damage our business. Any restructuring would require substantial management time and attention and may divert management from other important work. Employee reductions or other restructuring activities also would cause us to incur restructuring and related expenses such as severance expenses. Moreover, we could encounter delays in executing any restructuring plans, which could cause further disruption and additional unanticipated expense.

Risks Related to Capitalization Matters and Corporate Governance

The price of our common stock may continue to fluctuate.

Our common stock is listed on The NASDAQ Global Select Market under the symbol “RMBS.” The trading price of our common stock has at times experienced price volatility and may continue to fluctuate significantly in response to various factors, some of which are beyond our control. These factors include:

- any progress, or lack of progress, real or perceived, in the development of products that incorporate our innovations and technology companies' acceptance of our products, including the results of our efforts to expand into new target markets;
- our signing or not signing new licenses and the loss of strategic relationships with any customer;
- announcements of our technological innovations or new products by us, our customers or our competitors;
- changes in our strategies, including changes in our licensing focus and/or acquisitions of companies with business models or target markets different from our own;
- positive or negative reports by securities analysts as to our expected financial results and business developments;
- developments with respect to patents or proprietary rights and other events or factors;
- new litigation and the unpredictability of litigation results or settlements;
- trading activity related to our share repurchase plans; and
- issuance of additional securities by us, including in acquisitions.

In addition, the stock market in general, and prices for companies in our industry in particular, have experienced extreme volatility that often has been unrelated to the operating performance of such companies. These broad market and industry fluctuations may adversely affect the price of our common stock, regardless of our operating performance.

We have outstanding senior convertible notes in an aggregate principal amount totaling $310.5 million. Because these notes are convertible into shares of our common stock, volatility or depressed prices of our common stock could have a similar effect on the trading price of such notes. In addition, the existence of these notes may encourage short selling in our common stock by market participants because the conversion of the notes could depress the price of our common stock.

We have been party to, and may in the future be subject to, lawsuits relating to securities law matters which may result in unfavorable outcomes and significant judgments, settlements and legal expenses which could cause our business, financial condition and results of operations to suffer.

We and certain of our current and former officers and directors, as well as our current auditors, were subject to several stockholder derivative actions, securities fraud class actions and/or individual lawsuits filed in federal court against us and certain of our current and former officers and directors. The complaints generally alleged that the defendants violated the federal and state securities laws and stated state law claims for fraud and breach of fiduciary duty. For more information about this litigation, see Note 18, “Litigation and Asserted Claims,” of Notes to Consolidated Financial Statements contained in this Form 10-K. Although to date these complaints have either been settled or dismissed, the amount of time to resolve any future lawsuits is uncertain, and these matters could require significant management and financial resources. Unfavorable outcomes and significant judgments, settlements and legal expenses in litigation related to any future securities law claims could have material adverse impacts on our business, financial condition, results of operations, cash flows and the trading price of our common stock.

We are leveraged financially, which could adversely affect our ability to adjust our business to respond to competitive pressures and to obtain sufficient funds to satisfy our future research and development needs, to protect and enforce our

intellectual property, and to meet other needs.

We have material indebtedness. In 2009, we issued $172.5 million aggregate principal amount of our 2014 Notes, all of which remains outstanding and will mature in June 2014. In August 2013, we issued $138.0 million aggregate principal amount of our 2018 Notes (together with the 2014 Notes, the "Notes"), all of which remains outstanding. The degree to which we are leveraged could have negative consequences, including, but not limited to, the following:

- we may be more vulnerable to economic downturns, less able to withstand competitive pressures and less flexible in responding to changing business and economic conditions;
- our ability to obtain additional financing in the future for working capital, capital expenditures, acquisitions, litigation, general corporate or other purposes may be limited;
- a substantial portion of our cash flows from operations in the future may be required for the payment of the principal amount of our existing indebtedness when it becomes due, including the remaining aggregate principal amount of the 2014 Notes at maturity in June 2014 and the remaining aggregate principal amount of the 2018 Notes at maturity in August 2018; and
- we may be required to make cash payments upon any conversion of the Notes, which would reduce our cash on hand.

A failure to comply with the covenants and other provisions of our debt instruments could result in events of default under such instruments, which could permit acceleration of all of our outstanding Notes. Any required repurchase of the Notes as a result of a fundamental change or acceleration of the Notes would reduce our cash on hand such that we would not have those funds available for use in our business.

If we are at any time unable to generate sufficient cash flows from operations to service our indebtedness when payment is due, we may be required to attempt to renegotiate the terms of the instruments relating to the indebtedness, seek to refinance all or a portion of the indebtedness or obtain additional financing. There can be no assurance that we will be able to successfully renegotiate such terms, that any such refinancing would be possible or that any additional financing could be obtained on terms that are favorable or acceptable to us.

Compliance with changing regulation of corporate governance and public disclosure may result in additional expenses.

Changing laws, regulations and standards relating to corporate governance and public disclosure have historically created uncertainty for companies such as ours. Any new or changed laws, regulations and standards are subject to varying interpretations due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

Our certificate of incorporation and bylaws, Delaware law and our outstanding convertible notes contain provisions that could discourage transactions resulting in a change in control, which may negatively affect the market price of our common stock.

Our certificate of incorporation, our bylaws and Delaware law contain provisions that might enable our management to discourage, delay or prevent a change in control. In addition, these provisions could limit the price that investors would be willing to pay in the future for shares of our common stock. Pursuant to such provisions:

- our board of directors is authorized, without prior stockholder approval, to create and issue preferred stock, commonly referred to as “blank check” preferred stock, with rights senior to those of common stock, which means that a stockholder rights plan could be implemented by our board;
- our board of directors is staggered into two classes, only one of which is elected at each annual meeting;
- stockholder action by written consent is prohibited;
- nominations for election to our board of directors and the submission of matters to be acted upon by stockholders at a meeting are subject to advance notice requirements;
- certain provisions in our bylaws and certificate of incorporation such as notice to stockholders, the ability to call a stockholder meeting, advance notice requirements and action of stockholders by written consent may only be amended with the approval of stockholders holding 66 2/3% of our outstanding voting stock;
- our stockholders have no authority to call special meetings of stockholders; and
- our board of directors is expressly authorized to make, alter or repeal our bylaws.

We are also subject to Section 203 of the Delaware General Corporation Law, which provides, subject to enumerated exceptions, that if a person acquires 15% or more of our outstanding voting stock, the person is an “interested stockholder” and may not engage in any “business combination” with us for a period of three years from the time the person acquired 15% or more of our outstanding voting stock.

Certain provisions of our outstanding Notes could make it more difficult or more expensive for a third party to acquire us. Upon the occurrence of certain transactions constituting a fundamental change, holders of such Notes will have the right, at their option, to require us to repurchase, at a cash repurchase price equal to 100% of the principal amount plus accrued and unpaid interest on such Notes, all or a portion of their Notes. We may also be required to increase the conversion rate of such Notes in the event of certain fundamental changes.

Warranty and product liability claims brought against us could cause us to incur significant costs and adversely affect our operating results as well as our reputation and relationships with customers.

We may from time to time be subject to warranty and product liability claims with regard to product performance and effects of our lighting solutions. We could incur losses as a result of repair and replacement costs in response to customer complaints or in connection with the resolution of contemplated or actual legal proceedings relating to such claims. In addition to potential losses arising from claims and related legal proceedings, product liability claims could affect our reputation and our relationship with customers.

Unanticipated changes in our tax rates or in the tax laws and regulations could expose us to additional income tax liabilities which could affect our operating results and financial condition.

We are subject to income taxes in both the United States and various foreign jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes and, in the ordinary course of business, there are many transactions and calculations where the ultimate tax determination is uncertain. Our effective tax rate could be adversely affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities, changes in tax laws and regulations as well as other factors. Our tax determinations are regularly subject to audit by tax authorities and developments in those audits could adversely affect our income tax provision, and we are currently undergoing such audits of certain of our tax returns. Although we believe that our tax estimates are reasonable, the final determination of tax audits or tax disputes may be different from what is reflected in our historical income tax provisions which could affect our operating results.

Litigation, Regulation and Business Risks Related to our Intellectual Property

We face current and potential adverse determinations in litigation stemming from our efforts to protect and enforce our patents and intellectual property and make other claims, which could broadly impact our intellectual property rights, distract our management and cause substantial expenses and declines in our revenue and stock price.

We seek to diligently protect our intellectual property rights. In connection with the extension of our licensing program to SDR SDRAM-compatible and DDR SDRAM-compatible products, we became involved in litigation related to such efforts against different parties in multiple jurisdictions. In each of these cases, we have claimed infringement of certain of our patents, while the manufacturers of such products have generally sought damages and a determination that the patents in suit are invalid, unenforceable and not infringed. Among other things, the opposing parties have alleged that certain of our patents are unenforceable because we engaged in document spoliation, litigation misconduct and/or acted improperly during our 1991 to 1995 participation in the JEDEC standard setting organization (including allegations of antitrust violations and unfair competition). We have also become involved in litigation related to infringement of our patents related to products having certain peripheral interfaces. In addition, we did not prevail at jury trial in our antitrust suit against certain memory manufacturers in November 2011, which caused the market price of our stock to drop significantly. Notwithstanding the above, we have settled and dismissed all patent lawsuits against all parties except Nanya. We have also dismissed the antitrust suit against all parties.

Any future intellectual property litigation, whether or not determined in our favor or settled by us, is costly, may cause delays (including delays in negotiating licenses with other actual or potential customers), will tend to discourage future design partners, will tend to impair adoption of our existing technologies and divert the efforts and attention of our management and technical personnel from other business operations. In addition, we may be unsuccessful in any litigation if we have difficulty obtaining the cooperation of former employees and agents who were involved in our business during the relevant periods related to our litigation and are now needed to assist in cases or testify on our behalf. Furthermore, any adverse determination or other resolution in litigation could result in our losing certain rights beyond the rights at issue in a particular case, including, among other things: our being effectively barred from suing others for violating certain or all of our intellectual property rights; our patents being held invalid or unenforceable or not infringed; our being subjected to significant liabilities; our being required to seek licenses from third parties; our being prevented from licensing our patented technology; or our being required to renegotiate with current customers on a temporary or permanent basis.

Even if we are successful in our litigation, or any settlement of such litigation, there is no guarantee that the applicable opposing parties will be able to pay any damages awards or licensing fees timely or at all as a result of financial difficulties or otherwise. Delay or any or all of these adverse results could cause substantial expenses or declines in our revenue and stock price.

From time-to-time, we are subject to proceedings by government agencies that may result in adverse determinations against us and could cause our revenue to decline substantially.

An adverse resolution by or with a governmental agency could result in severe limitations on our ability to protect and license our intellectual property, and could cause our revenue to decline substantially. Third parties have and may attempt to use adverse findings by a government agency to limit our ability to enforce or license our patents in private litigations, to challenge or otherwise act against us with respect to such government agency proceedings.

Further, third parties have sought and may seek review and reconsideration of the patentability of inventions claimed in certain of our patents by the U.S. Patent and Trademark Office ("PTO") and/or the European Patent Office (the "EPO"). These re-examination proceedings may be reviewed by the PTO's Board of Patent Appeals and Interferences ("BPAI"). The BPAI has previously issued decisions in a few cases, finding the challenged claims of Rambus' patents to be invalid. Decisions of the BPAI are subject to further PTO proceedings and/or appeal to the Court of Appeals for the Federal Circuit. A final adverse decision , not subject to further review and/or appeal, could invalidate some or all of the challenged patent claims and could also result in additional adverse consequences affecting other related U.S. or European patents, including in any intellectual property litigation. If a sufficient number of such patents are impaired, our ability to enforce or license our intellectual property would be significantly weakened and could cause our revenue to decline substantially.

The pendency of any governmental agency acting as described above may impair our ability to enforce or license our patents or collect royalties from existing or potential customers, as any litigation opponents may attempt to use such proceedings to delay or otherwise impair any pending cases and our existing or potential customers may await the final outcome of any proceedings before agreeing to new licenses or to paying royalties.

Litigation or other third-party claims of intellectual property infringement could require us to expend substantial resources and could prevent us from developing or licensing our technology on a cost-effective basis.

Our research and development programs are in highly competitive fields in which numerous third parties have issued patents and patent applications with claims closely related to the subject matter of our programs. We have also been named in the past, and may in the future be named, as a defendant in lawsuits claiming that our technology infringes upon the intellectual property rights of third parties. As we develop additional products and technology, we may face claims of infringement of various patents and other intellectual property rights by third parties. In the event of a third-party claim or a successful infringement action against us, we may be required to pay substantial damages, to stop developing and licensing our infringing technology, to develop non-infringing technology, and to obtain licenses, which could result in our paying substantial royalties or our granting of cross licenses to our technologies. We may not be able to obtain licenses from other parties at a reasonable cost, or at all, which could cause us to expend substantial resources, or result in delays in, or the cancellation of, new products.

If we are unable to protect our inventions successfully through the issuance and enforcement of patents, our operating results could be adversely affected.

We have an active program to protect our proprietary inventions through the filing of patents. There can be no assurance, however, that:

- any current or future U.S. or foreign patent applications will be approved and not be challenged by third parties;
- our issued patents will protect our intellectual property and not be challenged by third parties;
- the validity of our patents will be upheld;
- our patents will not be declared unenforceable;
- the patents of others will not have an adverse effect on our ability to do business;
- Congress or the U.S. courts or foreign countries will not change the nature or scope of rights afforded patents or patent owners or alter in an adverse way the process for seeking or enforcing patents;
- changes in law will not be implemented, or changes in interpretation of such laws will occur, that will affect our ability to protect and enforce our patents and other intellectual property, including as a result of the passage of the America Invents Act of 2011 (which codifies several significant changes to the U.S. patent laws, including changing from a "first to invent" to a "first inventor to file" system, limiting where a patentee may file a patent suit, requiring the apportionment of patent damages, replacing interference proceedings with derivation actions, and creating a post-grant opposition process to challenge patents after they have issued);
- new legal theories and strategies utilized by our competitors will not be successful;
- others will not independently develop similar or competing chip interfaces or design around any patents that may be issued to us; or

- factors such as difficulty in obtaining cooperation from inventors, pre-existing challenges or litigation, or license or other contract issues will not present additional challenges in securing protection with respect to patents and other intellectual property that we acquire.

If any of the above were to occur, our operating results could be adversely affected.

Furthermore, policymakers, including the President, as well as certain industry stakeholders, have proposed reforming U.S. patent laws and regulations to address perceived issues surrounding patent litigation initiated by non-practicing entities. The U.S. International Trade Commission has also recently taken certain actions that have been viewed as unfavorable to patentees seeking recourse in this forum. While we cannot predict what form any new patent reform laws or regulations may ultimately take, or what impact they may have on our business, any laws or regulations that restrict our ability to enforce our patent rights against third parties could have a material adverse effect on our business.

In addition, our patents will continue to expire according to their terms, with expiration dates ranging from 2014 to 2037. Our failure to continuously develop or acquire successful innovations and obtain patents on those innovations could significantly harm our business, financial condition, results of operations, or cash flows.

Our inability to protect and own the intellectual property we create would cause our business to suffer.

We rely primarily on a combination of license, development and nondisclosure agreements, trademark, trade secret and copyright law and contractual provisions to protect our non-patentable intellectual property rights. If we fail to protect these intellectual property rights, our customers and others may seek to use our technology without the payment of license fees and royalties, which could weaken our competitive position, reduce our operating results and increase the likelihood of costly litigation. The growth of our business depends in large part on the use of our intellectual property in the products of third party manufacturers, and our ability to enforce intellectual property rights against them to obtain appropriate compensation. In addition, effective trade secret protection may be unavailable or limited in certain foreign countries. Although we intend to protect our rights vigorously, if we fail to do so, our business will suffer.

We rely upon the accuracy of our customers' recordkeeping, and any inaccuracies or payment disputes for amounts owed to us under our licensing agreements may harm our results of operations.

Many of our license agreements require our customers to document the manufacture and sale of products that incorporate our technology and report this data to us on a quarterly basis. While licenses with such terms give us the right to audit books and records of our customers to verify this information, audits rarely are undertaken because they can be expensive, time consuming, and potentially detrimental to our ongoing business relationship with our customers. Therefore, we typically rely on the accuracy of the reports from customers without independently verifying the information in them. Our failure to audit our customers' books and records may result in our receiving more or less royalty revenue than we are entitled to under the terms of our license agreements. If we conduct royalty audits in the future, such audits may trigger disagreements over contract terms with our customers and such disagreements could hamper customer relations, divert the efforts and attention of our management from normal operations and impact our business operations and financial condition.

Any dispute regarding our intellectual property may require us to indemnify certain customers, the cost of which could severely hamper our business operations and financial condition.

In any potential dispute involving our patents or other intellectual property, our customers could also become the target of litigation. While we generally do not indemnify our customers, some of our license agreements provide limited indemnities, and some require us to provide technical support and information to a customer that is involved in litigation involving use of our technology. In addition, we may agree to indemnify others in the future. Any of these indemnification and support obligations could result in substantial expenses. In addition to the time and expense required for us to indemnify or supply such support to our customers, a customer's development, marketing and sales of licensed semiconductors, lighting, mobile communications and data security technologies could be severely disrupted or shut down as a result of litigation, which in turn could severely hamper our business operations and financial condition as a result of lower or no royalty payments.

Item 1B. *Unresolved Staff Comments*

None.

Item 2. *Properties*

As of December 31, 2013, we occupied offices in the leased facilities described below:

Number of Offices Under Lease	Location	Primary Use
6	United States	
	Sunnyvale, CA (2) (Corporate Headquarters)	Executive and administrative offices, research and development, sales and marketing and service functions
	Chapel Hill, NC	Research and development
	Brecksville, OH (2)	Research and development and prototyping facility
	San Francisco, CA	Research and development
1	Bangalore, India	Administrative offices, research and development and service functions
1	Tokyo, Japan	Business development
1	Seoul, Korea	Business development
1	Paris, France	Research and development

Item 3. *Legal Proceedings*

For the information required by this item regarding legal proceedings, see Note 18 “Litigation and Asserted Claims,” of Notes to Consolidated Financial Statements of this Form 10-K.

Item 4. *Mine Safety Disclosures*

Not applicable.

PART II

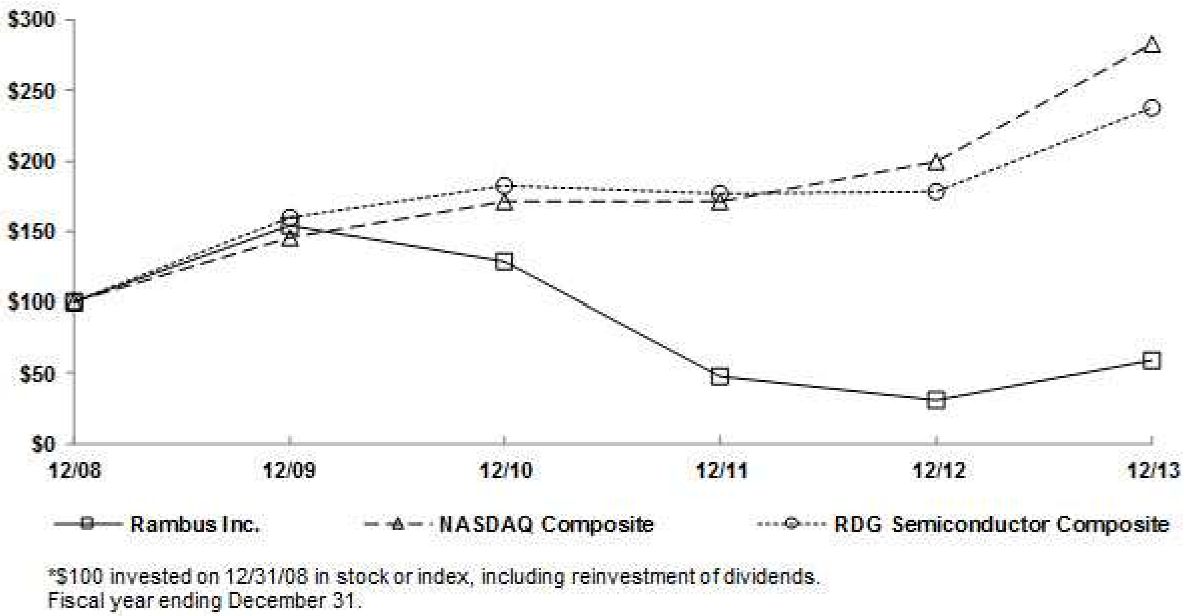
Item 5. *Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities*

Our Common Stock is listed on The NASDAQ Global Select Market under the symbol “RMBS.” The following table sets forth for the periods indicated the high and low sales price per share of our common stock as reported on The NASDAQ Global Select Market.

	Year Ended December 31, 2013		Year Ended December 31, 2012	
	High	Low	High	Low
First Quarter	$ 6.27	$ 4.80	$ 9.29	$ 6.28
Second Quarter	$ 8.99	$ 5.31	$ 6.48	$ 4.16
Third Quarter	$ 10.85	$ 7.95	$ 6.10	$ 3.78
Fourth Quarter	$ 10.57	$ 8.15	$ 5.65	$ 4.01

The graph below compares the cumulative 5-year total return of holders of Rambus Inc.'s common stock with the cumulative total returns of the NASDAQ Composite index and the RDG Semiconductor Composite index. The graph tracks the performance of a $100 investment in our common stock and in each of the indexes (with the reinvestment of all dividends) from December 31, 2008 to December 31, 2013.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
Among Rambus Inc., the NASDAQ Composite Index,
and the RDG Semiconductor Composite Index



Fiscal years ending:

	12/08	12/09	12/10	12/11	12/12	12/13
Rambus Inc.	100.00	153.27	128.64	47.42	30.59	59.48
NASDAQ Composite	100.00	144.88	170.58	171.30	199.99	283.39
RDG Semiconductor Composite	100.00	159.67	182.24	176.00	178.51	236.96

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

Information regarding our securities authorized for issuance under equity compensation plans will be included in Item 12, “Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters,” of this report on Form 10-K.

As of January 31, 2014, there were 624 holders of record of our common stock. Since many of the shares of our common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of beneficial stockholders represented by these record holders.

We have never paid or declared any cash dividends on our common stock or other securities.

Share Repurchase Program

In October 2001, our Board of Directors (the “Board”) approved a share repurchase program of our common stock, principally to reduce the dilutive effect of employee stock options. Under this program, the Board approved the authorization to repurchase up to 19.0 million shares of our outstanding common stock over an undefined period of time. On February 25, 2010, the Board approved a new share repurchase program authorizing the repurchase of up to an additional 12.5 million shares. Share repurchases under the program may be made through open market, established plan or privately negotiated transactions in accordance with all applicable securities laws, rules, and regulations. There is no expiration date applicable to the program. The new share repurchase program replaces the program authorized in October 2001. In addition, on August 19, 2010, we entered into a share repurchase agreement (the “Share Repurchase Agreement”) with J.P. Morgan Securities Inc. JP Morgan delivered to us approximately 4.8 million shares of common stock at an average price of $18.88 at the completion of the Share Repurchase Agreement in December 2010.

For the years ended December 31, 2013 and 2012, we did not repurchase any shares of our common stock under our share repurchase program. As of December 31, 2013, we had repurchased a cumulative total of approximately 26.3 million shares of our common stock with an aggregate price of approximately $428.9 million since the commencement of the program in 2001.

As of December 31, 2013, there remained an outstanding authorization to repurchase approximately 5.2 million shares of our outstanding common stock.

We record stock repurchases as a reduction to stockholders' equity. We record a portion of the purchase price of the repurchased shares as an increase to accumulated deficit when the price of the shares repurchased exceeds the average original proceeds per share received from the issuance of common stock.

Item 6. *Selected Financial Data*

The following selected consolidated financial data for and as of the years ended December 31, 2013, 2012, 2011, 2010 and 2009 was derived from our consolidated financial statements. The following selected consolidated financial data should be read in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," and Item 8, "Financial Statements and Supplementary Data," and other financial data included elsewhere in this report. Our historical results of operations are not necessarily indicative of results of operations to be expected for any future period.

	Years Ended December 31,				
	2013 (1) (2)	2012 (1)	2011 (2)	2010 (2)	2009
	(In thousands, except per share amounts)				
Total revenue	$ 271,501	$ 234,051	$ 312,363	$ 323,390	$ 113,007
Net income (loss)	$ (33,748)	$ (134,336)	$ (43,053)	$ 150,917	$ (92,186)
Net income (loss) per share:					
Basic	$ (0.30)	$ (1.21)	$ (0.39)	$ 1.34	$ (0.88)
Diluted	$ (0.30)	$ (1.21)	$ (0.39)	$ 1.30	$ (0.88)
Consolidated Balance Sheet Data:					
Cash, cash equivalents and marketable securities	$ 387,662	$ 203,330	$ 289,456	$ 512,009	$ 460,193
Total assets	$ 713,379	$ 587,812	$ 693,654	$ 663,172	$ 555,869
Convertible notes	$ 273,676	$ 147,556	$ 133,493	$ 121,500	$ 248,044
Stockholders' equity	$ 340,229	$ 321,594	$ 429,794	$ 334,783	$ 255,327

(1) The net loss for the years ended December 31, 2013 and 2012 included $17.8 million and $35.5 million, respectively, of impairment of goodwill and long-lived assets.

(2) The net income (loss) for the years ended December 31, 2013, 2011 and 2010 included $0.5 million, $6.2 million and $126.8 million, respectively, of gain from settlement which was reflected as a reduction of operating costs and expenses.

Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations*

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements relate to our expectations for future events and time periods. All statements other than statements of historical fact are statements that could be deemed to be forward-looking statements, including any statements regarding trends in future revenue or results of operations, gross margin or operating margin, expenses, earnings or losses from operations, synergies or other financial items; any statements of the plans, strategies and objectives of management for future operations; any statements concerning developments, performance or industry ranking; any statements regarding future economic conditions or performance; any statements regarding pending investigations, claims or disputes; any statements of expectation or belief; and any statements of assumptions underlying any of the foregoing. Generally, the words "anticipate," "believes," "plans," "expects," "future," "intends," "may," "should," "estimates," "predicts," "potential," "continue" and similar expressions identify forward-looking statements. Our forward-looking statements are based on current expectations, forecasts and assumptions and are subject to risks, uncertainties and changes in condition, significance, value and effect. As a result of the factors described herein, and in the documents incorporated herein by reference, including, in particular, those factors described under "Risk Factors," we undertake no obligation to publicly disclose any revisions to these forward-looking statements to reflect events or circumstances occurring subsequent to filing this report with the Securities and Exchange Commission.

Business Overview

We are an innovative technology solutions company that brings invention to market. Our customers leverage our customizable platforms, services and tools to improve, differentiate and accelerate the development of products and services. Our extensive technology portfolio addresses the evolving power, performance and security requirements of the mobile, cloud computing and connected device markets. Today, we are driving innovations in memory, chip interfaces and architectures, end-to-end security, and advanced LED lighting, while Rambus Labs looks to disruptions and opportunities in tomorrow's high-growth markets. We generate revenue by licensing our inventions and solutions and providing services to market-leading companies.

While we have historically focused our efforts on the development of technologies for electronics memory and chip interfaces, we have been expanding our portfolio of inventions and solutions to address additional markets in lighting, chip and system security, as well as new areas within the semiconductor industry, such as computational sensing and imaging. We intend to continue our growth into new technology fields, consistent with our mission to create great value through our innovations and to make those technologies available through both our licensing and non-licensing business models. Key to our efforts, both in our current businesses and in any new area of diversification, will be hiring and retaining world-class inventors, scientists and engineers to lead the development of inventions and technology solutions for these fields of focus, and the management and business support personnel necessary to execute our plans and strategies.

We have four operational units: (1) Memory and Interfaces Division, or MID, which focuses on the design, development and licensing of technology that is related to memory and interfaces; (2) Cryptography Research, Inc., or CRI, which focuses on the design, development and licensing of technologies for chip and system security and anti-counterfeiting; (3) Lighting and Display Technologies, or LDT, which focuses on the design, development and licensing of technologies for lighting; and (4) Chief Technology Office, or CTO, which focuses on the design, development and productization of emerging technologies. As of December 31, 2013, MID, CRI and CTO were considered reportable segments as they met the quantitative thresholds for disclosure as a reportable segment. The results of the remaining operating segment were shown under "All Other". For additional information concerning segment reporting, see Note 7, "Segments and Major Customers," of Notes to Consolidated Financial Statements of this Form 10-K.

Our strategy is to evolve from providing primarily patent licenses to providing additional technology, products and services while creating and leveraging strategic synergies to increase revenue. We believe that the successful execution of this strategy requires an exceptional business model that relies on the skills and talent of our employees. Accordingly, we seek to hire and retain world-class scientific and engineering expertise in all of our fields of technological focus, as well as the executive management and operating personnel required to successfully execute our business strategy. In order to attract the quality of employees required for this business model, we have created an environment and culture that encourages, fosters and supports research, development and innovation in breakthrough technologies with significant opportunities for broad industry adoption. We believe we have created a compelling company for inventors and innovators who are able to work within a business model and platform that focuses on technology development to drive strong future growth.

As of December 31, 2013, our semiconductor, lighting, security and other technologies are covered by 1,837 U.S. and foreign patents. Additionally, we have 837 patent applications pending. Some of the patents and pending patent applications are derived from a common parent patent application or are foreign counterpart patent applications. We have a program to file applications for and obtain patents in the United States and in selected foreign countries where we believe filing for such protection is appropriate and would further our overall business strategy and objectives. In some instances, obtaining appropriate levels of protection may involve prosecuting continuation and counterpart patent applications based on a common parent application. We believe our patented innovations provide our customers with the ability to achieve improved performance, lower risk, greater cost-effectiveness and other benefits in their products and services.

Our inventions and technology solutions are offered to our customers through either a patent license or a solutions license. Today, our a majority of our revenues are derived from patent licenses, through which we provide our customers a license to use a portion of our broad portfolio of patented inventions. The license provides our customers with a defined right to use our innovations in the customer's own digital electronics products, systems or services, as applicable. The licenses may also define the specific field of use where our customers may use or employ our inventions in their products. License agreements are structured with fixed, variable or a hybrid of fixed and variable royalty payments over certain defined periods ranging for up to ten years. Leading consumer product, semiconductor and system companies such as AMD, Broadcom, Freescale, Fujitsu, GE, Intel, LSI, Micron, Panasonic, Renesas, Samsung, SK hynix, STMicroelectronics and Toshiba have licensed our patents for use in their own products. The majority of our intellectual property in MID was developed in-house and we intend to expand our business strategy of monetizing our MID intellectual property to include the sale of select intellectual property. As any sales executed under this expanded strategy represent a component of our ongoing major or central operations and activities, we will record the related proceeds as revenue.

We also offer our customers solutions licenses to support the implementation and adoption of our technology in their products or services. Our customers include leading companies such as Cooper Lighting, GE, IBM, Panasonic, Samsung, Sony and Toshiba. Our solutions license offerings include a range of technologies for incorporation into our customers' products and systems. We also offer a range of services as part of our solutions licenses which can include know-how and technology transfer, product design and development, system integration, and other services. These solutions license agreements may have both a fixed price (non-recurring) component and ongoing royalties. Further, under solutions licenses, our customers typically receive licenses to our patents necessary to implement these solutions in their products with specific rights and restrictions to the applicable patents elaborated in their individual contracts with us.

The remainder of our revenue is contract services revenue which includes license fees and engineering services fees. The timing and amounts invoiced to customers can vary significantly depending on specific contract terms and can therefore have a significant impact on deferred revenue or account receivables in any given period.

We intend to continue making significant expenditures associated with engineering, marketing, general and administration and expect that these costs and expenses will continue to be a significant percentage of revenue in future periods. Whether such expenses increase or decrease as a percentage of revenue will be substantially dependent upon the rate at which our revenue or expenses change.

Executive Summary

During 2013, we signed license agreements with ALi Corporation, EchoStar, LSI, Micron, SK hynix, StarChip SAS, STMicroelectronics, and Tiempo SAS and expanded our agreements with Freescale and Samsung. As a result of the patent license agreements with LSI, Micron, SK hynix and STMicroelectronics, we settled all outstanding claims with them, including resolution of past use of our patented innovations.

In 2013, we also sold a portfolio of patent assets covering display technologies to a subsidiary of Acacia Research Corporation ("Acacia"). As part of this transaction, we received an initial upfront payment and expect to receive subsequent payments when Acacia is successful in licensing that portfolio.

During 2013, we initiated a restructuring program related primarily to our LDT group as a result of the change in our business strategy to reduce our focus on the lower margin bulb products. Additionally, we curtailed our immersive media platform spending. As a result of these actions, we recorded a non-cash charge for the impairment of goodwill of $17.8 million and a restructuring charge of $3.4 million. Under generally accepted accounting principles, when indicators of potential impairment are identified, companies are required to conduct a review of the carrying amounts of goodwill and other long-lived assets to determine if impairment exists. We conducted this impairment review as a result of the change of our strategy.

Research and development continues to play a key role in our efforts to maintain product innovations. Our engineering expenses in the aggregate for the year ended December 31, 2013 decreased $17.7 million as compared to 2012 primarily due to decreased accrual of retention bonuses related to acquisitions of $11.9 million, decreased patent legal costs of $4.5 million, decreased prototyping costs of $3.0 million, decreased stock-based compensation of $2.9 million and decreased headcount related costs of $1.8 million due to lower average number of employees in 2013, partially offset by $4.6 million increase in engineering costs which are included in cost of sales due to the introduction of lighting products and $2.5 million increase in funding for our 2013 CIP which was higher than our 2012 CIP.

Marketing, general and administrative expenses in the aggregate for the year ended December 31, 2013 decreased $36.2 million as compared to 2012 primarily due to decreased litigation expenses of $15.8 million, decreased headcount related costs of $5.0 million from lower average number of employees in 2013, decreased expenses from various cost saving measures (which resulted in decreased consulting expenses of $3.9 million, decreased costs related to sales and marketing events and activities of $3.0 million and decreased facilities expenses of $1.9 million), decreased stock-based compensation expenses of $4.6 million and decreased accrual of retention bonuses of $2.4 million related to acquisitions, partially offset by $2.3 million increase in funding for our 2013 CIP which was higher than our 2012 CIP.

Trends

There are a number of trends that may have a material impact on us in the future, including but not limited to, the evolution of memory technology, adoption of LEDs in general lighting, the use and adoption of our inventions or technologies and global economic conditions with the resulting impact on sales of consumer electronic systems.

We have a high degree of revenue concentration, with our top five customers representing approximately 62%, 68% and 66% of our revenue for the years ended December 31, 2013, 2012 and 2011, respectively. As a result of renewing with Samsung in 2013 and settling with SK hynix and Micron in 2013, Samsung, SK hynix and Micron are expected to account for a significant portion of our ongoing licensing revenue. For the years ended December 31, 2013 and 2012, revenue from Samsung accounted for 10% or more of our total revenue in each year. For the year ended December 31, 2011, revenue from Elpida, NVIDIA and Samsung each accounted for 10% or more of our total revenue. We expect to continue to experience significant revenue concentration for the foreseeable future.

The particular customers which account for revenue concentration have varied from period to period as a result of the addition of new contracts, expiration of existing contracts, renewals of existing contracts, industry consolidation and the volumes and prices at which the customers have recently sold to their customers. These variations are expected to continue in the foreseeable future.

The semiconductor industry is intensely competitive and highly cyclical, limiting our visibility with respect to future sales. To the extent that macroeconomic fluctuations negatively affect our principal customers, the demand for our technology may be significantly and adversely impacted and we may experience substantial period-to-period fluctuations in our operating results.

The royalties we receive from our semiconductor customers are partly a function of the adoption of our technologies by system companies. Many system companies purchase semiconductors containing our technologies from our customers and do not have a direct contractual relationship with us. Our customers generally do not provide us with details as to the identity or volume of licensed semiconductors purchased by particular system companies. As a result, we face difficulty in analyzing the extent to which our future revenue will be dependent upon particular system companies. System companies face intense competitive pressure in their markets, which are characterized by extreme volatility, frequent new product introductions and rapidly shifting consumer preferences.

The highly fragmented general lighting industry is undergoing a fundamental shift from incandescent technology to cold cathode fluorescent lights and LED driven technology due to the need to reduce energy consumption and to comply with government mandates. LED lighting typically saves energy costs as compared to existing installed lighting. Our LDT group's patents in LED edge-lit lightguide technology can be applied in the design of next generation LED lighting products.

During 2013, we changed our business strategy to increase our focus on general lighting technologies instead of lower margin bulb products. With this shift to focus on the general lighting market, the strategy of the LDT group is to focus on providing the market with novel, patented light guide technologies and products to customers who are leading the transition to solid-state LED-based lamps and fixtures.

Another recent shift in our business strategy regarding our core display patents led us in 2013 to sell a set of patent assets to Acacia where Acacia can proceed independently with a licensing program. We have a proceeds-sharing program in place with Acacia upon their licensing of these patent assets. We retain the rights to use certain application techniques and may selectively engage with customers who need our roll-to-roll manufacturing intellectual property and capability for extra-large display panel designs.

Global demand for effective security technologies continues to increase. In particular, highly integrated devices such as smart phones and tablets are increasingly used for applications requiring security such as mobile payments, content protection, corporate information and user data. Our CRI group is primarily focused on positioning its DPA countermeasures and CryptoFirewall™ technology solutions to capitalize on these trends and growing adoption among technology partners and customers.

Our revenue from companies headquartered outside of the United States accounted for approximately 70%, 73% and 67% of our total revenue for the years ended December 31, 2013, 2012 and 2011, respectively. We expect that revenue derived from international customers will continue to represent a significant portion of our total revenue in the future. To date, all of the revenue from international customers have been denominated in U.S. dollars. However, to the extent that such customers’ sales to their customers are not denominated in U.S. dollars, any royalties that we receive as a result of such sales could be subject to fluctuations in currency exchange rates. In addition, if the effective price of licensed products sold by our foreign customers were to increase as a result of fluctuations in the exchange rate of the relevant currencies, demand for licensed products could fall, which in turn would reduce our royalties. We do not use financial instruments to hedge foreign exchange rate risk.

For additional information concerning international revenue, see Note 7, “Segments and Major Customers,” of Notes to Consolidated Financial Statements of this Form 10-K.

Engineering costs in the aggregate and as a percentage of revenue decreased in the year ended December 31, 2013 as compared to the prior year. In the near term, we expect engineering costs to be higher as we intend to continue to make investments in the infrastructure and technologies required to maintain our product innovation in semiconductor, lighting, security and other technologies.

Marketing, general and administrative expenses in the aggregate and as a percentage of revenue decreased in the year ended December 31, 2013 as compared to the prior year. In the past, our litigation expenses have been high and difficult to predict due to litigation stemming from the use of our inventions. Because we have successfully negotiated settlements and license agreements with SK hynix and Micron, we should no longer have material litigation expenses for these matters. We currently still use, and in the future may use, litigation to protect our patented technologies, which could cause us to incur material litigation expenses until such litigation is resolved. In general, our results before courts and regulatory bodies that relate to our intellectual property rights could impact the terms upon which we are able to secure new or renew existing licenses for our technology.

With respect to our non-litigation marketing, general and administrative costs, we expect a decrease due to our restructuring plans undertaken in 2012 and 2013.

Our investment in research and development projects, use of litigation and any lower revenue from our customers in the future, will negatively affect our cash from operations.

Results of Operations

The following table sets forth, for the periods indicated, the percentage of total revenue represented by certain items reflected in our consolidated statements of operations:

	Years Ended December 31,		
	2013	2012	2011
Revenue:			
Royalties	97.3 %	99.3 %	95.7 %
Contract and other revenue	2.7 %	0.7 %	4.3 %
Total revenue	100.0 %	100.0 %	100.0 %
Operating costs and expenses:			
Cost of revenue*	12.2 %	12.1 %	7.7 %
Research and development*	43.5 %	60.0 %	37.0 %
Marketing, general and administrative*	28.2 %	48.1 %	52.6 %
Restructuring charges	2.0 %	3.1 %	— %
Impairment of goodwill and long-lived assets	6.5 %	15.2 %	— %
Gain from sale of intellectual property	(0.5)%	— %	— %
Gain from settlement	(0.2)%	— %	(2.0)%
Costs of restatement and related legal activities, net	0.0 %	0.1 %	5.2 %
Total operating costs and expenses	91.7 %	138.6 %	100.5 %
Operating income (loss)	8.3 %	(38.6)%	(0.5)%
Interest income and other income, net	(0.6)%	0.0 %	0.2 %
Interest expense	(12.1)%	(11.8)%	(8.0)%
Interest and other income (expense), net	(12.7)%	(11.8)%	(7.8)%
Loss before income taxes	(4.4)%	(50.4)%	(8.3)%
Provision for income taxes	8.0 %	7.0 %	5.5 %
Net loss	(12.4)%	(57.4)%	(13.8)%

* Includes stock-based compensation:			
Cost of revenue	0.0%	0.0%	0.2%
Research and development	2.4%	4.1%	3.4%
Marketing, general and administrative	3.1%	5.5%	5.4%

Segment Results

Revenue from the MID reportable segment increased approximately $17.0 million to $232.0 million for the year ended December 31, 2013 from $215.0 million for the year ended December 31, 2012. The increase was primarily due to revenue recognized from new license agreements signed with SK hynix, Micron, STMicroelectronics and LSI Corporation during 2013. The increased revenue is partially offset by lower Samsung royalties which were allocated to the CRI reportable segment and lower royalties reported from decreased shipments related to DDR2 technologies and lower royalties from XDR ™ DRAM associated with decreased shipments of the Sony PlayStation ® 3 product.

Segment operating income from the MID reportable segment increased approximately $18.6 million to $203.8 million for the year ended December 31, 2013 from $185.2 million for the year ended December 31, 2012. The increase was primarily due to increase in revenue as discussed above and decreased headcount related costs due to fewer average number of employees in 2013.

Revenue from the CRI reportable segment increased approximately $14.8 million to $32.6 million for the year ended December 31, 2013 from $17.8 million for the year ended December 31, 2012. The increase was primarily due to the new license agreement signed with STMicroelectronics, the license agreement signed with Samsung and new evaluation and test equipment contracts during 2013.

Segment operating income from the CRI reportable segment increased approximately $1.4 million to $10.8 million for the year ended December 31, 2013 from $9.4 million for the year ended December 31, 2012. The increase was primarily due to increase in revenue as discussed above, partially offset by increased headcount related costs from additional employees to support our cryptography development efforts.

There was no revenue from the CTO reportable segment for both the year ended December 31, 2013 and 2012. Segment operating loss from the CTO reportable segment decreased approximately $2.4 million to $25.7 million for the year ended December 31, 2013 from $28.1 million for the year ended December 31, 2012. The decrease was primarily due to decreased headcount related costs due to fewer average number of employees in 2013.

Revenue from the All Other reportable segment increased approximately $5.6 million to $6.8 million for the year ended December 31, 2013 from $1.2 million for the year ended December 31, 2012. The increase was primarily due to the roll-out of products using our LED edge-lit waveguide in 2013.

Segment operating loss from the All Other reportable segment decreased approximately $4.7 million to $13.4 million for the year ended December 31, 2013 from $18.1 million for the year ended December 31, 2012. The decrease was primarily due to increase in revenue as discussed above and gain from sale of portfolio of patent assets covering lighting technologies during 2013, partially offset by increase in cost of sales due to introduction of lighting products in 2013.

Revenue from the MID reportable segment decreased approximately $77.1 million to $215.0 million for the year ended December 31, 2012 from $292.1 million for the year ended December 31, 2011. The decrease was primarily due to recognition of one-time royalty revenue during 2011 from patent license agreements signed in 2011, the absence of new technology development contracts in 2012 and lower royalties reported by certain customers in the semiconductor industry and lower royalties reported from decreased shipments related to DDR2 technologies and lower royalties from XDR ™ DRAM associated with decreased shipments of the Sony PlayStation ® 3 product. The decreased revenue was partially offset by revenue recognized from various new patent license agreements signed in 2012.

Segment operating income from the MID reportable segment decreased approximately $64.4 million to $185.2 million for the year ended December 31, 2012 from $249.6 million for the year ended December 31, 2011. The decrease was primarily due to decrease in revenue as discussed above, partially offset by decrease in funding for our 2012 CIP which was lower than our 2011 CIP.

Revenue from the CRI reportable segment increased slightly to $17.8 million for the year ended December 31, 2012 from $17.4 million for the year ended December 31, 2011, primarily due to new evaluation and test equipment contracts in 2012.

Segment operating income from the CRI reportable segment decreased approximately $4.6 million to $9.4 million for the year ended December 31, 2012 from $14.0 million for the year ended December 31, 2011. The decrease was primarily due to a full year of CRI operating expenses in 2012 as compared to 7 months in 2011 and increased headcount related costs from additional employees to support our cryptography development efforts.

There was no revenue from the CTO reportable segment for both the year ended December 31, 2012 and 2011. Segment operating loss from the CTO reportable segment increased approximately $10.3 million to $28.1 million for the year ended December 31, 2012 from $17.8 million for the year ended December 31, 2011. The increase was primarily due to increased consulting expenses and increased headcount related costs from additional employees (including employees from the Unity acquisition) to support our development efforts.

Revenue from the All Other reportable segment decreased approximately $1.7 million to $1.2 million for the year ended December 31, 2012 from $2.9 million for the year ended December 31, 2011. The decrease was primarily due to the absence of new technology development contracts in 2012. The decreased revenue was partially offset by a new license agreement signed in 2012.

Segment operating loss from the All Other reportable segment increased approximately $6.0 million to $18.1 million for the year ended December 31, 2012 from $12.1 million for the year ended December 31, 2011. The increase was primarily due to decrease in revenue as discussed above, increased consulting expenses and increased headcount related costs from additional employees to support our development efforts.

	Years Ended December 31,			2012 to 2013	2011 to 2012
	2013	2012	2011	Change	Change
	(Dollars in millions)				
Total Revenue					
Royalties	$ 264.1	$ 232.4	$ 299.0	13.7%	(22.3)%
Contract and other revenue	7.4	1.7	13.4	NM*	NM*
Total revenue	$ 271.5	$ 234.1	$ 312.4	16.0%	(25.1)%

* NM — percentage is not meaningful

Royalty Revenue

Patent Licenses

Our patent royalties increased approximately $40.4 million to $249.1 million for the year ended December 31, 2013 from $208.7 million for the same period in 2012. The increase was primarily due to revenue recognized from new license agreements signed with SK hynix, Micron, STMicroelectronics and LSI Corporation during 2013.

Our patent royalties decreased approximately $58.9 million to $208.7 million for the year ended December 31, 2012 from $267.6 million for the same period in 2011. The decrease was primarily due to recognition of one-time royalty revenue during 2011 from new patent license agreements signed in 2011 and lower royalties reported by certain customers in the semiconductor industry during 2012. The decreased revenue was partially offset by revenue recognized from various new patent license agreements signed in 2012.

We are continuously in negotiations for licenses with prospective customers. We expect patent royalties will continue to vary from period to period based on our success in adding new customers, as well as the level of variation in our customers' reported shipment volumes, sales price and mix, offset in part by the proportion of customer payments that are fixed or hybrid in nature.

Solutions Licenses

Royalties from solutions licenses decreased approximately $8.7 million to $15.0 million for the year ended December 31, 2013 from $23.7 million for the same period in 2012. The decrease was primarily due to lower royalties reported from decreased shipments related to DDR2 technologies and lower royalties from XDR ™ DRAM associated with decreased shipments of the Sony PlayStation ® 3 product.

Royalties from solutions licenses decreased approximately $7.7 million to $23.7 million for the year ended December 31, 2012 from $31.4 million for the same period in 2011. The decrease was primarily due to lower royalties reported from decreased shipments related to DDR2 technologies and lower royalties from XDR ™ DRAM associated with decreased shipments of the Sony PlayStation ® 3 product.

In the future, we expect solutions royalties will continue to vary from period to period based on our customers’ shipment volumes, sales prices, and product mix.

Royalty Revenue by Reportable Segment

Royalty revenue from the MID reportable segment, which includes patent and solutions license royalties, increased approximately $17.7 million to $231.7 million for the year ended December 31, 2013 from $214.0 million for the year ended December 31, 2012. The increase was primarily due to revenue recognized from new license agreements signed with SK hynix, Micron, STMicroelectronics and LSI Corporation during 2013. The increased revenue is partially offset by lower Samsung royalties which were allocated to the CRI reportable segment and lower royalties reported from decreased shipments related to DDR2 technologies and lower royalties from XDR ™ DRAM associated with decreased shipments of the Sony PlayStation ® 3 product.

Royalty revenue from the CRI reportable segment increased approximately $13.9 million to $31.2 million for the year ended December 31, 2013 from $17.3 million for the year ended December 31, 2012. The increase was primarily due to the new license agreement signed with STMicroelectronics and the license agreement signed with Samsung during 2013.

Royalty revenue from the All Other reportable segment increased slightly to $1.2 million for the year ended December 31, 2013 from $1.1 million for the year ended December 31, 2012.

Royalty revenue from the MID reportable segment, which includes patent and solutions license royalties, decreased approximately $67.6 million to $214.0 million for the year ended December 31, 2012 from $281.6 million for the year ended December 31, 2011. The decrease was primarily due to recognition of one-time royalty revenue during 2011 from patent license agreements signed in 2011 and lower royalties reported by certain customers in the semiconductor industry and lower royalties reported from decreased shipments related to DDR2 technologies and lower royalties from XDR ™ DRAM associated with decreased shipments of the Sony PlayStation ® 3 product. The decreased revenue was partially offset by revenue recognized from various new patent license agreements signed in 2012.

Royalty revenue from the CRI reportable segment was $17.3 million for both the year ended December 31, 2012 and the year ended December 31, 2011.

Royalty revenue from the All Other reportable segment increased approximately $1.0 million to $1.1 million for the year ended December 31, 2012 from $0.1 million for the year ended December 31, 2011. The increase was primarily due to a new license agreement signed in 2012.

Contract and Other Revenue

Contract and other revenue consists of revenue from technology development as well as sale of LED edge-lit products. Contract and other revenue increased approximately $5.7 million to $7.4 million for the year ended December 31, 2013 from $1.7 million for the year ended December 31, 2012. The increase was primarily due to increased revenue from roll-out of lighting products and services in 2013.

Contract and other revenue decreased approximately $11.7 million to $1.7 million for the year ended December 31, 2012 from $13.4 million for the year ended December 31, 2011. The decrease was primarily due to absence of new technology development contracts in 2012.

We believe that contract and other revenue will increase over time as we continue to roll out new LDT products to the market. Revenue from technology development contracts will continue to fluctuate over time based on our ongoing contractual requirements, the amount of work performed, the timing of completing engineering deliverables, and the changes to work required, as well as new technology development contracts booked in the future.

Contract and Other Revenue by Reportable Segments

Contract and other revenue from the CRI reportable segment increased approximately $0.9 million to $1.4 million for the year ended December 31, 2013 from $0.5 million for the year ended December 31, 2012, primarily due to new evaluation and test equipment contracts in 2013. Contract revenue from the All Other reportable segment increased approximately $5.5 million to $5.7 million for the year ended December 31, 2013 from $0.2 million for the year ended December 31, 2012, primarily due to the roll-out of products using our LED edge-lit waveguide in 2013. Contract revenue from the MID reportable segment decreased approximately $0.7 million to $0.3 million for the year ended December 31, 2013 from $1.0 million for the year ended December 31, 2012, primarily due to the absence of new technology development contracts in 2013.

Contract and other revenue from the MID reportable segment decreased approximately $9.4 million to $1.0 million for the year ended December 31, 2012 from $10.4 million for the year ended December 31, 2011. Contract revenue from the All Other reportable segment decreased approximately $2.7 million to $0.2 million for the year ended December 31, 2012 from $2.9 million for the year ended December 31, 2011. Both decreases were primarily due to the absence of new technology development contracts in 2012. Contract revenue from the CRI reportable segment increased approximately $0.4 million to $0.5 million for the year ended December 31, 2012 from $0.1 million for the year ended December 31, 2011, primarily due to new evaluation and test equipment contracts in 2012.

Engineering costs:

	Years Ended December 31, 2013	2012	2011	2012 to 2013 Change	2011 to 2012 Change
	(Dollars in millions)				
Engineering costs					
Cost of revenue	$ 7.3	$ 0.7	$ 4.9	NM*	(86.9)%
Amortization of intangible assets	25.9	27.7	18.6	(6.5)%	48.9 %
Stock-based compensation	0.0	0.0	0.6	0.0 %	(96.5)%
Total cost of revenue	33.2	28.4	24.1	17.1 %	17.8 %
Research and development	111.4	131.0	105.2	(14.9)%	24.5 %
Stock-based compensation	6.6	9.5	10.5	(31.0)%	(9.2)%
Total research and development	118.0	140.5	115.7	(16.0)%	21.4 %
Total engineering costs	$ 151.2	$ 168.9	$ 139.8	(10.5)%	20.8 %

* NM — percentage is not meaningful

Engineering costs are allocated between cost of revenue and research and development expenses. Cost of revenue reflects the portion of the total engineering costs which are specifically devoted to individual customer development and support services, costs of lighting products sold as well as amortization expense related to various acquired intellectual property for patent licensing. The balance of engineering costs, incurred for the development of applicable technologies, is charged to research and development. In a given period, the allocation of engineering costs between these two components is a function of the timing of the development and implementation schedules of individual customer contracts.

For the year ended December 31, 2013 as compared to the same period in 2012, total engineering costs decreased 10.5% primarily due to decreased accrual of retention bonuses related to acquisitions of $11.9 million, decreased patent legal costs of $4.5 million due to cost saving measures, decreased prototyping costs of $3.0 million due to cost saving measures, decreased stock-based compensation of $2.9 million and decreased headcount related costs of $1.8 million due to fewer average number of employees in 2013, partially offset by $4.6 million increase in engineering costs which are included in cost of sales due to the introduction of lighting products and $2.5 million increase in funding for our 2013 CIP which was higher than our 2012 CIP.

For the year ended December 31, 2012 as compared to the same period in 2011, total engineering costs increased 20.8% primarily due to increased headcount related costs of $11.4 million from additional employees to support our research and development efforts, increased amortization expense of $9.1 million related to intangible assets acquired since the second quarter of 2011, increased consulting expenses of $6.3 million and increased accrual of retention bonuses related to acquisitions of $4.9 million, offset by $4.2 million decrease in funding for our 2012 CIP which was lower than our 2011 CIP.

In the near term, we expect engineering costs to be higher as we intend to continue to make investments in the infrastructure and technologies required to maintain our product innovation in semiconductor, security and other technologies.

Marketing, general and administrative costs:

	Years Ended December 31, 2013	2012	2011	2012 to 2013 Change	2011 to 2012 Change
	(Dollars in millions)				
Marketing, general and administrative costs					
Marketing, general and administrative costs	$ 70.7	$ 86.4	$ 86.2	(18.1)%	0.2 %
Litigation expense	(2.6)	13.2	61.0	NM*	(78.3)%
Stock-based compensation	8.3	13.0	16.9	(35.6)%	(23.2)%
Total marketing, general and administrative costs	$ 76.4	$ 112.6	$ 164.1	(32.1)%	(31.4)%

* NM — percentage is not meaningful

Marketing, general and administrative expenses include expenses and costs associated with trade shows, public relations, advertising, litigation, general legal, insurance and other marketing and administrative efforts. Litigation expenses have historically been a significant portion of our marketing, general and administrative expenses and have been declining over the past three years. Consistent with our business model, our licensing and marketing activities aim to develop or strengthen relationships with potential and current customers. In addition, we work with current customers through marketing, sales and technical efforts to drive adoption of their products that use our innovations and solutions, by system companies. Due to the long business development cycles we face and the semi-fixed nature of marketing, general and administrative expenses in a given period, these expenses generally do not correlate to the level of revenue in that period or in recent or future periods.

For the year ended December 31, 2013 as compared to 2012, total marketing, general and administrative costs decreased 32.1% which included a decrease in litigation expenses related to ongoing major cases of $15.8 million (primarily due to the reversals of accrued related litigation costs of $9.0 million related to the SK hynix and Micron lawsuits) and a decrease in stock-based compensation of $4.6 million. Non-litigation and non-stock based compensation related marketing, general and administrative costs decreased 18.1% for the year ended December 31, 2013 as compared to 2012, primarily due to decreased headcount related costs of $5.0 million from the lower average number of employees in 2013, decreased expenses from various cost saving measures (which resulted in decreased consulting expenses of $3.9 million, decreased costs related to sales and marketing events and activities of $3.0 million and decreased facilities expenses of $1.9 million) and decreased accrual of retention bonuses of $2.4 million related to acquisitions, partially offset by $2.3 million increase in funding for our 2013 CIP, which was higher than our 2012 CIP.

For the year ended December 31, 2012 as compared to 2011, total marketing, general and administrative costs decreased 31.4% which included a decrease in litigation expenses related to ongoing major cases of $47.8 million. Non-litigation and non-stock based compensation related marketing, general and administrative costs remained relatively flat for the year ended December 31, 2012 as compared to 2011, primarily due to increased headcount related costs of $3.2 million from the increase in average number of employees to support our business during 2012, increased accrual of retention bonuses of $1.8 million related to acquisitions, increased amortization expense of $1.1 million related to intangible assets acquired since the second quarter of 2011 and increased costs related to sales and marketing events of $1.0 million, offset by $8.1 million decrease in funding for our 2012 CIP, which was lower than our 2011 CIP.

In the future, marketing, general and administrative costs will vary from period to period based on the trade shows, advertising, legal, acquisition and other marketing and administrative activities undertaken, and the change in sales, marketing and administrative headcount in any given period. In the near term, we expect our non-litigation marketing, general and administrative costs to decrease due to our restructuring plans undertaken in 2012 and 2013. Litigation expenses are expected to vary from period to period due to the variability of litigation activities.

Restructuring charges:

	Years Ended December 31,			2012 to 2013	2011 to 2012
	2013	2012	2011	Change	Change
	(Dollars in millions)				
Restructuring charges	$ 5.5	$ 7.3	$ —	(24.0)%	N/A*

* N/A — not applicable

During 2013, we initiated a restructuring program related primarily to our LDT group as a result of the change in our business strategy to reduce our focus on the lower margin bulb products. Additionally, we curtailed our immersive media platform spending. As a result of these actions, we recorded a restructuring charge of $3.4 million related primarily to the reduction in workforce. We expect to substantially complete our restructuring activities related to this plan by the end of 2014. Additionally, we recorded a charge of $2.1 million during 2013 related primarily to the consolidation of certain facilities and the reduction in workforce which was part of our approved 2012 plan.

During 2012, we initiated a restructuring program to reduce overall corporate expenses which was expected to improve future profitability by reducing spending on marketing, general and administrative programs and refining some of our research and development efforts. As a result of the restructuring program, we recorded a charge of $7.3 million during 2012 related primarily to the reduction in workforce, which included approximately $1.8 million in early termination payments to certain employees related to their previous retention bonus arrangements. Refer to Note 16, “Restructuring Charges,” of Notes to Consolidated Financial Statements of this Form 10-K for further discussion.

Impairment of goodwill and long-lived assets:

	Years Ended December 31,			2012 to 2013	2011 to 2012
	2013	2012	2011	Change	Change
	(Dollars in millions)				
Impairment of goodwill and long-lived assets	$ 17.8	$ 35.5	$ —	(50.0)%	N/A*

* N/A — not applicable

During 2013, we recorded a charge for the impairment of long-lived assets of $9.7 million related primarily to our LDT group as a result of the change in our business strategy to reduce our focus on the lower margin bulb products. Additionally, we recorded a charge for the impairment of goodwill of $8.1 million related to our MTD group as we curtailed our immersive media platform spending. Under generally accepted accounting principles, when indicators of potential impairment are identified, companies are required to conduct a review of the carrying amounts of goodwill and other long-lived assets to determine if impairment exists. We conducted this impairment review as a result of the change in our strategy related to the groups.

During 2012, we recorded a charge for the impairment of goodwill and long-lived assets of $35.5 million within our LDT group. We conducted this impairment review as a result of the change in our business strategy with less focus on the higher margin display technology licensing and an increased focus on general lighting technologies. Refer to Note 6, "Intangible Assets and Goodwill," of Notes to Consolidated Financial Statements of this Form 10-K for further discussion.

Gain from sale of intellectual property:

	Years Ended December 31,			2012 to 2013	2011 to 2012
	2013	2012	2011	Change	Change
	(Dollars in millions)				
Gain from sale of intellectual property	$ 1.4	$ —	$ —	N/A*	N/A*

* N/A — not applicable

During 2013, we sold portfolios of our patent assets covering lighting technologies. As part of these transactions, we received an initial upfront payment and expect to receive subsequent payments when Acacia is successful in licensing that portfolio.

Gain from settlement:

	Years Ended December 31,			2012 to 2013	2011 to 2012
	2013	2012	2011	Change	Change
	(Dollars in millions)				
Gain from settlement	$ 0.5	$ —	$ 6.2	N/A*	(100.0)%

* N/A — not applicable

The settlements with SK hynix and Micron are multiple element arrangements for accounting purposes. For a multiple element arrangement, we are required to determine the fair value of the elements. We considered several factors in determining the accounting fair value of the elements of the settlement with SK hynix and the settlement with Micron which included a third party valuation using an income approach (the "SK hynix Fair Value" and "Micron Fair Value", respectively). The total gain from settlement related to the settlements with SK hynix and Micron was $1.9 million and $3.3 million, respectively. During the year ended December 31, 2013, we recognized $0.5 million as gain from settlement, which represents the portion of the SK hynix Fair Value and Micron Fair Value of the cash consideration allocated to the resolution of the antitrust litigation settlements. Refer to Note 19, "Agreements with SK hynix and Micron," of Notes to Consolidated Financial Statements of this Form 10-K for further discussion.

Costs of restatement and related legal activities:

	Years Ended December 31,			2012 to 2013	2011 to 2012
	2013	2012	2011	Change	Change
	(Dollars in millions)				
Costs of restatement and related legal activities, net	$ 0.0	$ 0.2	$ 16.2	(92.2)%	(98.5)%

Costs of restatement and related legal activities consist primarily of settlement payments, investigation, audit, legal and other professional fees related to the 2006-2007 stock option investigation and the filing of the restated financial statements and related litigation.

For the year ended December 31, 2013, we recognized an immaterial amount of costs related to costs of restatement and related legal activities as we resolved all outstanding derivative lawsuits related to the 2006-2007 stock option investigation as of the end of 2012. For the year ended December 31, 2012, costs of restatement and related legal activities were $0.2 million primarily due to litigation expense associated with the derivative lawsuit related to the 2006-2007 stock option investigation.

Interest and other income (expense), net:

	Years Ended December 31,			2012 to 2013	2011 to 2012
	2013	2012	2011	Change	Change
	(Dollars in millions)				
Interest income and other income (expense), net	$ (1.6)	$ 0.0	$ 0.5	NM*	(89.5)%
Interest expense	(32.9)	(27.5)	(24.8)	19.5%	10.8 %
Interest and other income (expense), net	$ (34.5)	$ (27.5)	$ (24.3)	25.6%	13.1 %

* NM — percentage is not meaningful

Interest income and other income (expense), net, consists primarily of interest income generated from investments in high quality fixed income securities. Additionally, in the second quarter of 2013, during our review of the fair value of our $2.0 million investment in a non-marketable equity security of a private company, based on the information provided by the private company, we determined that there was a decrease in the security's fair value. The fair value of the non-marketable equity security was determined based on an income approach, using level 3 fair value inputs, as it was deemed to be the most indicative of the security's fair value. Accordingly, we recorded an impairment charge of $1.4 million related to our investment in the non-marketable equity security for the year ended December 31, 2013.

Interest expense consists of interest expense associated with our imputed facility lease obligations on the Sunnyvale and Ohio facilities and non-cash interest expense related to the amortization of the debt discount and issuance costs on the 5% convertible senior notes due 2014 (the “2014 Notes”) and the 1.125% convertible senior notes due 2018 (the “2018 Notes”), which were issued during the third quarter of 2013, as well as the coupon interest related to these notes. For the years ended December 31, 2013, 2012 and 2011, we recognized $4.4 million, $4.1 million and $3.3 million, respectively, of interest expense in connection with the imputed financing obligations in our statements of operations. We expect our non-cash interest expense to increase steadily as the notes reach maturity. See Note 11, “Convertible Notes,” of Notes to Consolidated Financial Statements of this Form 10-K for additional details.

Provision for income taxes:

	Years Ended December 31,			2012 to 2013	2011 to 2012
	2013	2012	2011	Change	Change
	(Dollars in millions)				
Provision for income taxes	$ 21.7	$ 16.5	$ 17.3	32.1%	(4.6)%
Effective tax rate	(180.8)%	(14.0)%	(66.9)%		

* NM — percentage is not meaningful

Our effective tax rate for the year ended December 31, 2013 was different from the U.S. statutory tax rate applied to our pretax loss primarily due to the valuation allowance on our U.S. deferred tax assets and foreign withholding and income taxes. Our effective tax rate for the years ended December 31, 2012 and December 31, 2011 were different from the U.S. statutory tax rate applied to our pretax loss primarily due to the valuation allowance on our U.S. deferred tax assets, foreign losses with no current tax benefit recorded, and foreign withholding and income taxes.

For the year ended December 31, 2013, we paid withholding taxes of $19.3 million. We recorded a provision for income taxes of $21.7 million which was primarily comprised of withholding taxes, other foreign taxes and current state taxes. For the year ended December 31, 2012, we paid withholding taxes of $15.7 million. We recorded a provision for income taxes of $16.5 million which was primarily comprised of withholding taxes, other foreign taxes and current state taxes. For the year ended December 31, 2011, we paid withholding taxes of $16.6 million. We recorded a provision for income taxes of $17.3 million which was primarily comprised of withholding taxes, other foreign taxes and current state taxes.

As of December 31, 2013, we continued to maintain a valuation allowance against our U.S. deferred tax assets. Management periodically evaluates the realizability of our deferred tax assets based on all available evidence, both positive and negative. The realization of deferred tax assets is dependent on our ability to generate sufficient future taxable income during periods prior to the expiration of tax attributes to fully utilize these assets. Based on all available evidence, we determined that it was not more likely than not that the deferred tax assets would be realized. Should we achieve sustained taxable income in the future, we would release the valuation allowance to recognize the deferred tax assets which would provide a valuable benefit to us.

Liquidity and Capital Resources

	December 31, 2013	December 31, 2012
	(In millions)	
Cash and cash equivalents	$ 338.7	$ 149.0
Marketable securities	49.0	54.3
Total cash, cash equivalents, and marketable securities	$ 387.7	$ 203.3

	Years Ended December 31,		
	2013	2012	2011
		(In millions)	
Net cash provided by (used in) operating activities	$ 51.3	$ (17.5)	$ 53.0
Net cash provided by (used in) investing activities	$ (2.3)	$ 2.6	$ (24.1)
Net cash provided by (used in) financing activities	$ 140.8	$ 1.7	$ (81.9)

Liquidity

We currently anticipate that existing cash, cash equivalents and marketable securities balances and cash flows from operations will be adequate to meet our cash needs for at least the next 12 months. Additionally, substantially all of our cash and cash equivalents are in the United States. Our cash needs for the year ended December 31, 2013 were funded primarily from cash collected from our customers.

We do not anticipate any liquidity constraints as a result of either the current credit environment, investment fair value fluctuations or the repayment of the 2014 Notes in June 2014. During 2013, we issued the 2018 Notes, in part, to provide liquidity for the repayment of the 2014 Notes. Additionally, we have the intent and ability to hold our debt investments that have unrealized losses in accumulated other comprehensive loss for a sufficient period of time to allow for recovery of the principal amounts invested. Additionally, we have no significant exposure to European sovereign debt. We continually monitor the credit risk in our portfolio and mitigate our credit risk exposures in accordance with our policies.

Operating Activities

Cash provided by operating activities of $51.3 million for the year ended December 31, 2013 was primarily attributable to cash generated from customer licensing. Changes in operating assets and liabilities for the year ended December 31, 2013 primarily included decreases in accrued litigation expenses primarily due to the one-time reversal of accrued SK hynix and Micron related litigation costs and accrued salaries and benefits and other accrued liabilities primarily due to the payment of retention bonuses, offset by decreases in prepaid expenses and other assets.

Cash used in operating activities of $17.5 million for the year ended December 31, 2012 was primarily attributable to the net loss, adjusted for certain non-cash items, of $14.4 million, which included the payment of $8.6 million for the interest related to the 2014 Notes, and changes in operating assets and liabilities. Changes in operating assets and liabilities for the year ended

December 31, 2012 primarily included decreases in prepaid expenses and other assets and accounts payable and accrued litigation due to payments of invoices, offset by increases in accrued salaries and benefits and other accrued liabilities, primarily due to our commitment to purchase intellectual property from Elpida.

Cash provided by operating activities of $53.0 million for the year ended December 31, 2011 was primarily attributable to changes in operating assets and liabilities and the net loss adjusted for non-cash items, including stock-based compensation expense, non-cash interest expense, depreciation and amortization expense. Changes in operating assets and liabilities for the year ended December 31, 2011 primarily included increases in accounts payable, accrued litigation and decreases in prepaid expenses and other assets.

Investing Activities

Cash used in investing activities of $2.3 million for the year ended December 31, 2013 primarily consisted of purchases of available-for-sale marketable securities of $125.6 million, partially offset by maturities of available-for-sale marketable securities of $119.6 million and proceeds from the sale of intellectual property of $2.3 million.

Cash provided by investing activities of $2.6 million for the year ended December 31, 2012 primarily consisted of proceeds from the maturities of available-for-sale marketable securities of $183.1 million, partially offset by cash paid for purchases of available-for-sale marketable securities of $110.7 million and the acquisition of Unity and other businesses of $46.3 million, net of cash acquired. In addition, we paid $21.8 million to acquire property, plant and equipment, primarily related to building improvements and computer equipment, and $1.7 million for intangible assets.

Cash used in investing activities of $24.1 million for the year ended December 31, 2011 primarily consisted of cash paid for the acquisition of CRI of $167.4 million, net of cash acquired, and purchases of available-for-sale marketable securities of $174.0 million, partially offset by proceeds from the maturities of available-for-sale marketable securities of $337.9 million. In addition, we paid $19.4 million to acquire property and equipment, primarily computer equipment, machinery and software.

Financing Activities

Cash provided by financing activities was $140.8 million for the year ended December 31, 2013. We received net proceeds of $134.4 million from the issuance of the 2018 Notes. Additionally, we received proceeds of $8.4 million from the issuance of common stock under our plans.

Cash provided by financing activities was $1.7 million for the year ended December 31, 2012 primarily due to proceeds of $4.1 million from issuance of common stock under equity incentive plans, partially offset by $1.9 million for payments under installment payment arrangements to acquire fixed assets and $0.5 million related to the principal payments against the lease financing obligation.

Cash used in financing activities was $81.9 million for the year ended December 31, 2011 as a result of the repurchase in August 2011 from Samsung of approximately 4.8 million shares of our common stock for an aggregate amount of $100.0 million pursuant to a put option exercised by Samsung in accordance with the terms of a stock purchase agreement with Samsung dated January 19, 2010. This was partially offset by $8.8 million received from the landlord for the tenant improvements related to the lease in Sunnyvale and $12.3 million from issuance of common stock under equity incentive plans. We also made payments of $2.5 million under an installment payment plan to acquire intangible assets and computer software and $0.5 million related to the principal payments against the lease financing obligation.

Contractual Obligations

On December 15, 2009, we entered into a lease agreement for approximately 125,000 square feet of office space located at 1050 Enterprise Way in Sunnyvale, California commencing on July 1, 2010 and expiring on June 30, 2020. The office space is used for our corporate headquarters, as well as engineering, marketing and administrative operations and activities. We have two options to extend the lease for a period of 60 months each and a one-time option to terminate the lease after 84 months in exchange for an early termination fee. Pursuant to the terms of the lease, the landlord agreed to reimburse us approximately $9.1 million , which was received by the year ended December 31, 2011. We recognized the reimbursement as an additional imputed financing obligation as such payment from the landlord is deemed to be an imputed financing obligation. On November 4, 2011, to better plan for future expansion, we entered into an amended lease for our Sunnyvale facility for approximately an additional 31,000 square feet of space commencing on March 1, 2012 and expiring on June 30, 2020. Additionally, a tenant improvement allowance to be provided by the landlord was approximately $1.7 million . On September 29, 2012, we entered into a second amended Sunnyvale lease to reduce the tenant improvement allowance to approximately $1.5 million . On January 31, 2013, we entered into a third amendment to the Sunnyvale lease to surrender the 31,000 square-foot space from the first amendment back to the landlord and recorded a total charge of $2.0 million related to the surrender of the amended lease.

On March 8, 2010, we entered into a lease agreement for approximately 25,000 square feet of office and manufacturing areas, located in Brecksville, Ohio. The office space is used for LDT's engineering activities while the manufacturing space is used for the manufacturer of prototypes. This lease was amended on September 29, 2011 to expand the facility to approximately 51,000 total square feet and the amended lease will expire on July 31, 2019. We have an option to extend the Lease for a period of 60 months .

We undertook a series of structural improvements to ready the Sunnyvale and Brecksville facilities for our use. Since certain improvements to be constructed by us were considered structural in nature and we were responsible for any cost overruns, for accounting purposes, we were treated in substance as the owner of the construction project during the construction period. At the completion of each construction, we concluded that we retained sufficient continuing involvement to preclude de-recognition of the building under the FASB authoritative guidance applicable to the sale leasebacks of real estate. As such, we continue to account for the building as owned real estate and to record an imputed financing obligation for our obligation to the legal owners.

Monthly lease payments on the facility are allocated between the land element of the lease (which is accounted for as an operating lease) and the imputed financing obligation. The imputed financing obligation is amortized using the effective interest method and the interest rate was determined in accordance with the requirements of sale leaseback accounting. For the years ended December 31, 2013 , 2012 and 2011 , we recognized in our Consolidated Statements of Operations $4.4 million , $4.1 million and $3.3 million , respectively, of interest expense in connection with the imputed financing obligation on these facilities. At December 31, 2013 and 2012 , the imputed financing obligation balance in connection with these facilities was $39.7 million and $45.9 million , respectively, which was primarily classified under long-term imputed financing obligation.

In November 2011, we entered into a lease agreement for approximately 26,000 square feet of office space in San Francisco, California to be used for CRI's office space and is treated as an operating lease. This lease has a commencement date of February 1, 2012 and a lease term of 75 months from the commencement date. The annual base rent includes certain rent abatement and increases annually over the lease term.

In connection with the June 3, 2011 acquisition of CRI, we are obligated to pay a retention bonus to certain CRI employees and contractors, subject to certain eligibility and acceleration provisions including the condition of employment, in three equal amounts of approximately $16.7 million . The first and second payments were paid in cash during the second quarter of 2012 and 2013, respectively, and the remaining payment payable on June 3, 2014 will be paid in cash or stock at our election. As of December 31, 2013 , the remaining retention bonus commitment is $16.9 million and may be forfeited in part or whole by the covered employees and contractors upon voluntary departure from employment or discontinuation of services. Any amounts forfeited will be accelerated and paid by us to a designated charity. See Note 5, "Acquisitions," of Notes to Consolidated Financial Statements of this Form 10-K for additional information regarding the acquisition of CRI.

On June 29, 2009, we entered into an Indenture with U.S. Bank, National Association, as trustee, relating to the issuance by us of $150.0 million aggregate principal amount of the 2014 Notes. On July 10, 2009, an additional $22.5 million in aggregate principal amount of 2014 Notes were issued as a result of the underwriters exercising their overallotment option. The aggregate principal amount of the 2014 Notes outstanding as of December 31, 2013 and 2012 was $172.5 million , offset by unamortized debt discount of $8.5 million and $24.9 million , respectively, in the accompanying consolidated balance sheets. The debt discount is currently being amortized over the remaining 6 months until maturity of the 2014 Notes on June 15, 2014. See Note 11, "Convertible Notes," of Notes to Consolidated Financial Statements of this Form 10-K for additional details.

On August 16, 2013, we entered into an Indenture with U.S. Bank, National Association, as trustee, relating to the issuance by us of $138.0 million aggregate principal amount of the 2018 Notes. The aggregate principal amount of the 2018 notes as of December 31, 2013 was $138.0 million , offset by unamortized debt discount of $ 28.4 million in the accompanying consolidated balance sheet. The unamortized discount related to the 2018 Notes is being amortized to interest expense using the effective interest method over the remaining 56 months until maturity of the 2018 Notes on August 15, 2018. See Note 11, "Convertible Notes," of Notes to Consolidated Financial Statements of this Form 10-K for additional details.

As of December 31, 2013 , our material contractual obligations are as follows (in thousands):

	Total	2014	2015	2016	2017	2018	Thereafter
Contractual obligations (1)							
Imputed financing obligation (2)	$ 40,260	$ 5,874	$ 6,010	$ 6,156	$ 6,302	$ 6,447	$ 9,471
Leases and other contractual obligations	8,456	3,753	2,108	1,237	1,018	340	—
Software licenses (3)	8,715	5,477	2,865	373	—	—	—
Acquisition retention bonuses (4)	18,083	18,013	70	—	—		—
Convertible notes	310,500	172,500	—	—	—	138,000	—
Interest payments related to convertible notes	12,076	5,865	1,553	1,553	1,553	1,552	—
Total	$ 398,090	$ 211,482	$ 12,606	$ 9,319	$ 8,873	$ 146,339	$ 9,471

(1) The above table does not reflect possible payments in connection with uncertain tax benefits of approximately $18.8 million including $12.6 million recorded as a reduction of long-term deferred tax assets and $6.2 million in long-term income taxes payable, as of December 31, 2013 . As noted in Note 17, “Income Taxes,” of Notes to Consolidated Financial Statements of this Form 10-K, although it is possible that some of the unrecognized tax benefits could be settled within the next 12 months , we cannot reasonably estimate the outcome at this time.

(2) With respect to the imputed financing obligation, the main components of the difference between the amount reflected in the contractual obligations table and the amount reflected on the Consolidated Balance Sheets are the interest on the imputed financing obligation and the estimated common area expenses over the future periods. Additionally, the amount includes the amended Ohio lease and the amended Sunnyvale lease.

(3) We have commitments with various software vendors for non-cancellable license agreements generally having terms longer than one year. The above table summarizes those contractual obligations as of December 31, 2013 which are also presented on our Consolidated Balance Sheet under current and other long-term liabilities.

(4) In connection with acquisitions, we are obligated to pay retention bonuses to certain employees and contractors, subject to certain eligibility and acceleration provisions including the condition of employment. The remaining $16.9 million of CRI retention bonuses payable on June 3, 2014 will be paid in cash or stock at our election.

Share Repurchase Program

In October 2001, our Board of Directors (the “Board”) approved a share repurchase program of our common stock, principally to reduce the dilutive effect of employee stock options. Under this program, the Board approved the authorization to repurchase up to 19.0 million shares of our outstanding common stock over an undefined period of time. On February 25, 2010, the Board approved a new share repurchase program authorizing the repurchase of up to an additional 12.5 million shares. Share repurchases under the program may be made through open market, established plan or privately negotiated transactions in accordance with all applicable securities laws, rules, and regulations. There is no expiration date applicable to the program. The new share repurchase program replaces the program authorized in October 2001.

On August 19, 2010, we entered into a share repurchase agreement (the “Share Repurchase Agreement”) with J.P. Morgan Securities Inc., as agent for JPMorgan Chase Bank, National Association, London Branch (“JP Morgan”) to repurchase approximately $90.0 million of our common stock, as part of our share repurchase program. Under the Share Repurchase Agreement, we pre-paid to JP Morgan the $90.0 million purchase price in the third quarter of 2010 for the common stock and JP Morgan delivered to us approximately 4.8 million shares of common stock at an average price of $18.88 at the completion of the Share Repurchase Agreement in December 2010.

For the years ended December 31, 2013 and 2012, we did not repurchase any shares of our common stock under our share repurchase program. As of December 31, 2013, we had repurchased a cumulative total of approximately 26.3 million shares of our common stock with an aggregate price of approximately $428.9 million since the commencement of the program in 2001. As of December 31, 2013, there remained an outstanding authorization to repurchase approximately 5.2 million shares of our outstanding common stock.

We record stock repurchases as a reduction to stockholders’ equity. We record a portion of the purchase price of the repurchased shares as an increase to accumulated deficit when the price of the shares repurchased exceeds the average original proceeds per share received from the issuance of common stock.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition, investments, income taxes, litigation and other contingencies. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements.

Revenue Recognition

Overview

We recognize revenue when persuasive evidence of an arrangement exists, we have delivered the product or performed the service, the fee is fixed or determinable and collection is reasonably assured. If any of these criteria are not met, we defer recognizing the revenue until such time as all criteria are met. Determination of whether or not these criteria have been met may require us to make judgments, assumptions and estimates based upon current information and historical experience.

Certain revenue contracts consist of service fees associated with integration of our solutions into our customers' products and fees associated with providing training, evaluation and test equipment to our customers. Under the accounting guidance, if the deliverables have standalone value upon delivery, we account for each deliverable separately. When multiple deliverables included in an arrangement are separated into different units of accounting, the arrangement consideration is allocated to the identified separate units based on a relative selling price hierarchy. We determine the relative selling price for a deliverable based on our best estimate of selling price ("BESP"). We have determined that vendor-specific objective evidence of selling price for each deliverable is not available as there lacks a consistent number of standalone sales and third-party evidence is not a practical alternative due to differences in our service offerings compared to other parties and the availability of relevant third-party pricing information. We determined BESP by considering our overall pricing objectives and market conditions. Significant pricing practices taken into consideration include our discounting practices, the size and volume of our transactions, the customer demographic, the geographic area where our services are sold, our price lists, our go-to-market strategy, historical standalone sales and contract prices. The determination of BESP is made through consultation with and approval by management, taking into consideration the go-to-market strategy. As our go-to-market strategies evolve, we may modify our pricing practices in the future, which could result in changes in relative selling prices. In most cases, the relative values of the undelivered components are not significant to the overall arrangement and are typically delivered within twelve months after the core product has been delivered. In such agreements, selling price is determined for each component and any difference between the total of the separate BESP and total contract consideration (i.e. discount) is allocated pro-rata across each of the components in the arrangement.

During 2013, we expanded our business strategy of monetizing our patent portfolio to include the sale of selected intellectual property. Our MID business continues to grow its patent portfolio and actively engage with various external parties to monetize the patent portfolio and explore new revenue opportunities. As the sales of such patents developed by our MID business unit under this expanded strategy represents a component of our ongoing major or central operations, we record the related proceeds as revenue. As patent sales executed under this expanded strategy represent a component of our ongoing major or central operations and activities, we will record the related proceeds as revenue. We will recognize the revenue when there is persuasive evidence of a sales arrangement, fees are fixed or determinable, delivery has occurred and collectibility is reasonably assured. These requirements are generally fulfilled upon closing of the patent sale transaction.

Our revenue consists of royalty revenue and contract and other revenue derived from MID, CRI and LDT operating segments. Royalty revenue consists of patent license and solutions license royalties. Contract and other revenue consists of fixed license fees, fixed engineering fees and service fees associated with integration of our technology solutions into our customers' products as well as sale of LED edge-lit products.

Royalty Revenue

We recognize royalty revenue upon notification by our customers and when deemed collectible. The terms of the royalty agreements generally either require customers to give us notification and to pay the royalties within a specified period or are based on a fixed royalty that is due within a specified period. Many of our customers have the right to cancel their licenses. In such arrangements, revenue is only recognized to the extent that is consistent with the cancellation provisions. Cancellation provisions within such contracts generally provide for a prospective cancellation with no refund of fees already remitted by customers for products provided and payment for services rendered prior to the date of cancellation. We have two types of royalty revenue: (1) patent license royalties and (2) solutions license royalties.

Patent licenses - We license our broad portfolio of patented inventions to companies who use these inventions in the development and manufacture of their own products. Such licensing agreements may cover the license of part, or all, of our patent portfolio. The contractual terms of the agreements generally provide for payments over an extended period of time. For the licensing agreements with fixed royalty payments, we generally recognize revenue from these arrangements as amounts become due. For the licensing agreements with variable royalty payments which can be based on either a percentage of sales or number of units sold, we earn royalties at the time that the customers' sales occur. Our customers, however, do not report and pay royalties owed for sales in any given quarter until after the conclusion of that quarter. As we are unable to estimate the customers' sales in any given quarter to determine the royalties due to us, we recognize royalty revenues based on royalties reported by customers during the quarter and when other revenue recognition criteria are met.

In addition, we may enter into certain settlements of patent infringement disputes. The amount of consideration received upon any settlement (including but not limited to past royalty payments, future royalty payments and punitive damages) is allocated to each element of the settlement based on the fair value of each element. In addition, revenues related to past royalties are recognized upon execution of the agreement by both parties, provided that the amounts are fixed or determinable, there are no significant undelivered obligations and collectability is reasonably assured. We do not recognize any revenues prior to execution of the agreement since there is no reliable basis on which we can estimate the amounts for royalties related to previous periods or assess collectability. Elements that are related to royalty revenue in nature (including but not limited to past royalty payments and future royalty payments) will be recorded as royalty revenue in the consolidated statements of operations. Elements that are not related to royalty revenue in nature (including but not limited to punitive damage and settlement) will be recorded as gain from settlement which is reflected as a separate line item within the operating expenses section in the consolidated statements of operations.

Solutions licenses - We develop proprietary and industry-standard products that we provide to our customers under solutions license agreements. These arrangements include royalties, which can be based on either a percentage of sales or number of units sold. We earn royalties on such licensed products sold worldwide by our customers at the time that the customers' sales occur. Our customers, however, do not report and pay royalties owed for sales in any given quarter until after the conclusion of that quarter. As we are unable to estimate the customers' sales in any given quarter to determine the royalties due to us, we recognize royalty revenues based on royalties reported by customers during the quarter and when other revenue recognition criteria are met.

Contract and Other Revenue

We recognize revenue from the sale of LED edge-lit products when risk of loss and title have transferred to customers provided all other revenue recognition criteria have been met. Revenue from distributors is recognized on the shipment or delivery of the related products, provided all other revenue recognition criteria have been met. Our agreements with these distributors have terms which are generally consistent with the standard terms and conditions for the sale of our products to end users, and do not provide for product rotation or pricing allowances. We accrue for sales returns and warranty based on the standard market experience, none of which are currently material.

We generally recognize revenue using percentage of completion for development contracts related to licenses of our solutions that involve significant engineering and integration services. For all license and service agreements accounted for using the percentage-of-completion method, we determine progress to completion using input measures based upon contract costs incurred. We have evaluated use of output measures versus input measures and have determined that our output is not sufficiently uniform with respect to cost, time and effort per unit of output to use output measures as a measure of progress to completion.

Goodwill

Goodwill represents the excess of the purchase price over the fair value of the net tangible and identifiable intangible assets acquired in each business combination. Goodwill is not subject to amortization, but is subject to at least an annual assessment for impairment, applying a fair-value based test. We perform our impairment analysis of goodwill on an annual basis during the fourth quarter of the year unless conditions arise that warrant a more frequent evaluation.

Goodwill is allocation to the various reporting units which generally operating segments. The goodwill impairment test involves a two-step process. In the first step, we compare the fair value of each reporting unit to its carrying value. The fair values of the reporting units are estimated using an income or discounted cash flows approach.

Under the income approach, we measure fair value of the reporting unit based on a projected cash flow method using a discount rate determined by our management which is commensurate with the risk inherent in our current business model. Our discounted cash flow projections are based on our annual financial forecasts developed internally by management for use in managing our business. If the fair value of the reporting unit exceeds its carrying value, goodwill is not impaired and no further testing is required. If the fair value of the reporting unit is less than the carrying value, we must perform the second step of the impairment test to measure the amount of impairment loss. In the second step, the reporting unit's fair value is allocated to all of the assets and liabilities of the reporting unit, including any unrecognized intangible assets, in a hypothetical analysis that calculates the implied fair value of goodwill in the same manner as if the reporting unit was being acquired by a market participant in a business combination. If the implied fair value of the reporting unit's goodwill is less than the carrying value, the difference is recorded as an impairment loss.

Given the current economic environment and the uncertainties regarding the impact on our business, there can be no assurance that the estimates and assumptions made for purposes of our goodwill impairment testing in the fourth quarter of 2013 will prove to be accurate predictions of the future. If our assumptions regarding forecasted revenues or operating margin rates are not achieved, we may be required to record goodwill impairment charges in future periods, whether in connection with the next annual impairment testing or prior to that if any change constitutes a triggering event outside of the period when the annual goodwill impairment test is performed. It is not possible at this time to determine if any such future impairment charge would result or, if it does, whether such charge would be material. We believe that the assumptions and rates used in our impairment test are reasonable. However, they are judgmental, and variations in any of the assumptions or rates could result in materially different calculations of impairment amounts.

Intangible Assets

Intangible assets are comprised of existing technology, customer contracts and contractual relationships, and other intangible assets. Identifiable intangible assets resulting from the acquisitions of entities accounted for using the purchase method of accounting are estimated by management based on the fair value of assets received. Identifiable intangible assets are being amortized over the period of estimated benefit using the straight-line method and estimated useful lives ranging from 1 to 10 years.

We amortize long-lived assets over their estimated useful lives. We evaluate long-lived assets for impairment whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable. The carrying value is not recoverable if it exceeds the undiscounted cash flows resulting from the use of the asset and its eventual disposition. Our estimates of future cash flows attributable to our long-lived assets require significant judgment based on our historical and anticipated results and are subject to many factors. Factors we consider important which could trigger an impairment review include significant negative industry or economic trends, significant loss of clients, and significant changes in the manner of our use of the acquired assets or the strategy for our overall business.

When we determine that the carrying value of the long-lived assets may not be recoverable based upon the existence of one or more of the above indicators of impairment, we measure the potential impairment based on a projected discounted cash flow method using a discount rate determined by our management to be commensurate with the risk inherent in our current business model. An impairment loss is recognized only if the carrying amount of the long-lived asset is not recoverable and exceeds its fair value. Different assumptions and judgments could materially affect the calculation of the fair value of our long-lived assets.

2013 Impairment of Long-Lived Assets

During the fourth quarter of 2013, as a result of the change in business strategy for our LDT reporting unit to reduce its focus on the lower margin bulb products, we revised our projected cash flows for LDT, triggering an impairment analysis for long-lived assets.

As a result of the impairment analysis, we concluded that our LDT asset group was not able to recover the carrying amount of its assets. Determining the fair value of an asset group unit is judgmental in nature and requires the use of significant estimates and assumptions, considered to be Level 3 fair value inputs, including current replacement costs, revenue growth rates and operating margins, and discount rates, among others. Accordingly, we were required to make various estimates in determining the fair values of the LDT asset group. Due to the highly customized nature of the LDT manufacturing equipment, we primarily utilized the cost approach to estimate the fair value of its property, plant and equipment. To determine the estimated fair value of its property, plant and equipment, adjustment factors, including cost trend factors, were applied to each individual asset's original cost in order to estimate current replacement cost. The current replacement cost was then adjusted for estimated deductions to recognize the effects of deterioration and obsolescence from all causes, as well as indirect costs such as installation. Where appropriate, we utilized a market approach to estimate the fair value of the property, plant and equipment. This approach included the identification of market prices in actual transactions for similar assets based on asking prices for assets currently available for sale, as well as obtaining and reviewing certain direct market values based quoted prices with manufacturers and secondary market participants for similar equipment. Upon completion of this analysis, we recorded an impairment charge of $3.5 million , $0.5 million and $0.2 million for building and related improvements, machinery and equipment, and software in our LDT asset group, respectively.

The estimated fair value of the LDT acquired existing technology intangible assets was determined based on the income approach, using Level 3 fair value inputs, as it was deemed to be the most indicative of the fair value in an orderly transaction between market participants.

Under the income approach we determined fair value based on the estimated future cash flows resulting from the licensing of the technology underlying the intangible assets. The estimated cash flows in the income approach were discounted by an estimated weighted-average cost of capital which reflects the overall level of inherent risk of the reporting unit and the rate of return an outside investor would expect to earn. Upon completion of this analysis, we recorded an impairment charge of $4.0 million in the fourth quarter of 2013 related to the acquired intangible assets.

Also, during the fourth quarter of 2013, as a result of changes in one customer's business, we recorded a $1.5 million impairment charge related to our CRI favorable contracts due to a decline in the projected discrete cash flows from the customer.

The long-lived asset impairment charges for LDT and CRI aggregating to $9.7 million were included in "Impairment of goodwill and long-lived assets" in the Consolidated Statements of Operations. As of December 31, 2013, we had $12.9 million and $99.4 million of long-lived assets remaining in our LDT and CRI asset groups, respecitvely.

2013 Impairment of Goodwill

During the third quarter of 2013, we curtailed our immersive media platform spending. We conducted an impairment review as a result of the change of our strategy related to the immersive media platform. As a result of this impairment review, we recorded a charge of $8.1 million to fully impair goodwill related to the MTD reporting unit which was part of the Chief Technology Office ("CTO") reportable segment. The goodwill impairment charge was reflected in "Impairment of goodwill and long-lived assets" in the Consolidated Statements of Operations. We estimated the fair value of the MTD reporting unit using the income approach which was determined using Level 3 fair value inputs. The utilization of the income approach to determine fair value requires estimates of future operating results and cash flows discounted using an estimated discount rate. Cash flow projections are based on management's estimates of revenue growth rates and operating margins, taking into consideration industry and market conditions. The discount rate used of 36% is based on a weighted average cost of capital adjusted for the relevant risk associated with the characteristics of the business and the projected cash flows.

In the fourth quarter of 2013, we performed our annual goodwill impairment analysis for the MID and CRI reporting units, which are the only reporting units with goodwill.

As of December 31, 2013, the fair value of the MID reporting unit, with $19.9 million of goodwill, exceeded the carrying value of its net assets by approximately 480%; the fair value of the CRI reporting unit, with $97.0 million of goodwill, exceeded the carrying value of its net assets by approximately 44%. To arrive at the cash flow projections utilized in the income approach, we used the reporting unit’s forecast of estimated operating results based on assumptions such as long-term revenue growth rates, costs and estimates of future anticipated changes in operating margins based on economic and market information. Key assumptions used to determine the fair value of the MID and CRI reporting units at December 31, 2013, were the revenue growth rates for the forecast period and terminal year, terminal growth rates and discount rates. Certain estimates used in the income approach involve information for new product lines with limited financial history and developing revenue models which increase the risk of differences between the projected and actual performance. The discount rate of 14% for MID and 21% for CRI is based on the reporting units’ overall risk profile relative to other guideline companies, the reporting units’ respective industry as well as the visibility of future expected cash flows. The terminal growth rate applied to determine fair value for both reporting units was 3%, which was based on historical experience as well as anticipated economic conditions, industry data and long term outlook for the business. These assumptions are inherently uncertain. We hypothetically assumed, while holding all other assumptions constant, a combination of a one percentage point increase in the discount rate and a one percentage point decrease in the terminal growth rate used, both of which would result in lower estimates of fair value, and concluded that the estimated fair value of the reporting unit would exceed the carrying value by 413% for MID and 26% for CRI.

It is reasonably possible that the businesses could perform significantly below our expectations or a deterioration of market and economic conditions could occur. This would adversely impact our ability to meet our projected results, which could cause the goodwill in any of our reporting units or long-lived assets in any of our asset groups to become impaired. Significant differences between these estimates and actual cash flows could materially affect our future financial results. If the reporting units are not successful in commercializing new business arrangements, if the businesses are unsuccessful in signing new license agreements or renewing its existing license agreements, or if we are unsuccessful in managing our costs, the revenue and income for these reporting units could adversely and materially deviate from their historical trends and could cause goodwill or long-lived assets to become impaired. If we determine that our goodwill or long-lived assets are impaired, we would be required to record a non-cash charge that could have a material adverse effect on its results of operations and financial position.

Income Taxes

As part of preparing our consolidated financial statements, we are required to calculate the income tax expense or benefit which relates to the pretax income or loss for the period. In addition, we are required to assess the realization of the deferred tax asset or liability to be included on the consolidated balance sheet as of the reporting dates.

As of December 31, 2013, our consolidated balance sheet included net deferred tax assets, before valuation allowance, of approximately $195.3 million, which consists of net operating loss carryovers, tax credit carryovers, amortization, employee stock-based compensation expenses and certain liabilities, partially reduced by deferred tax liabilities associated with the convertible debt instruments. As of December 31, 2013, a valuation allowance of $192.8 million reduced net deferred tax assets to $2.5 million. Management periodically evaluates the realizability of our net deferred tax assets based on all available evidence, both positive and negative. The realization of net deferred tax assets is dependent on our ability to generate sufficient future taxable income during periods prior to the expiration of tax statutes to fully utilize these assets. Our forecasted future operating results are highly influenced by, among other factors, assumptions regarding (1) our ability to achieve our forecasted revenue, (2) our ability to effectively manage our expenses in line with our forecasted revenue and (3) general trends in the industries in which we operate.

We periodically evaluate the realizability of our net deferred tax assets based on all available evidence, both positive and negative. The realization of net deferred tax assets is dependent on our ability to generate sufficient future taxable income during periods prior to the expiration of tax statutes to fully utilize these assets. We weighed both positive and negative evidence and determined that there is a continued need for a valuation allowance. As of December 31, 2013, we were in a cumulative loss position over the previous three years, which we considered significant negative evidence. A sustained period of profitability in our operations is required before we would change our judgment regarding the need for a full valuation allowance against our net deferred tax assets. Although the weight of negative evidence related to cumulative losses is decreasing as the uncertainty around litigation settlement is reducing, we believe that this objectively-measured negative evidence outweighs the subjectively-determined positive evidence of future profitability and, as such, we have not changed our judgment regarding the need for a full valuation allowance on our deferred tax assets in the United States in 2013. However, continued improvement in our operating results, conditioned on our MID, LDT or CRI reporting units successfully commercializing new business arrangements, signing new or renewing existing license agreements and managing costs, could lead to reversal of almost all of our valuation allowance as early as 2014. Until such time, consumption of tax attributes to offset profits will reduce the overall level of deferred tax assets subject to valuation allowance. Should we determine that we would be able to realize our remaining deferred tax assets in the foreseeable future, an adjustment to our remaining deferred tax assets would cause a material increase to income in the period such determination is made.

Significant management judgment is required in determining the period in which the reversal of a valuation allowance should occur. We consider all available evidence, both positive and negative, such as historical levels of income and future forecasts of taxable income amongst other items in determining whether a full or partial release of a valuation allowance is required. In addition, our assessments sometimes require us to schedule future taxable income in accordance with FASB Accounting Standards Codification (“ASC”) 740 Income Taxes, to assess the appropriateness of a valuation allowance which further requires the exercise of significant management judgment. We will continue to evaluate the ability to realize, by jurisdiction, our deferred tax assets and related valuation allowances on a quarterly basis based on our cumulative income position and income trend as well as our future projections of sustained profitability and whether this profitability trend constitutes sufficient positive evidence to support a reversal of our valuation allowance (in full or in part).

Tax attributes related to stock option windfall deductions are not to be recognized until they result in a reduction of cash taxes payable. The benefit of these excess tax benefits will be recorded to equity when they reduce cash taxes payable. We will only recognize a tax benefit from stock-based awards in additional paid-in capital if an incremental tax benefit is realized after all other tax attributes currently available have been utilized. In addition, we have elected to account for the indirect effects of stock-based awards on other tax attributes, such as the research tax credits, through the consolidated statement of operations as part of the tax effect of stock-based compensation.

The calculation of our tax liabilities involves uncertainties in the application of complex tax law and regulations in a multitude of jurisdictions. Although ASC 740 Income Taxes, provides further clarification on the accounting for uncertainty in income taxes, significant judgment is required by management. If the ultimate resolution of tax uncertainties is different from what is currently estimated, it could materially affect income tax expense.

Stock-Based Compensation

We maintained stock plans covering a broad range of potential equity grants including stock options, nonvested equity stock and equity stock units and performance based instruments. In addition, we sponsor an Employee Stock Purchase Plan ("ESPP"), whereby eligible employees are entitled to purchase Common Stock semi-annually, by means of limited payroll deductions, at a 15% discount from the fair market value of the Common Stock as of specific dates.

The accounting guidance for share-based payments requires the measurement and recognition of compensation expense in our statement of operations for all share-based payment awards made to our employees, directors and consultants including employee stock options, nonvested equity stock and equity stock units, and employee stock purchase grants. Stock-based compensation expense is measured at grant date, based on the estimated fair value of the award, reduced by an estimate of the annualized rate of expected forfeitures, and is recognized as expense over the employees' expected requisite service period, generally using the straight-line method. In addition, the accounting guidance for share-based payments requires the benefits of tax deductions in excess of recognized compensation expense to be reported as a financing cash flow, rather than as an operating cash flow as prescribed under previous accounting rules. Our forfeiture rate represents the historical rate at which our stock-based awards were surrendered prior to vesting. The accounting guidance for share-based payments requires forfeitures to be estimated at the time of grant and revised on a cumulative basis, if necessary, in subsequent periods if actual forfeitures differ from those estimates. See Note 13, "Equity Incentive Plans and Stock-Based Compensation," of Notes to Consolidated Financial Statements of this Form 10-K for more information regarding the valuation of stock-based compensation.

Recent Accounting Pronouncements

See Note 3, "Recent Accounting Pronouncement," of Notes to Consolidated Financial Statements of this Form 10-K for a full description of recent accounting pronouncements including the respective expected dates of adoption.

Item 7A. *Quantitative and Qualitative Disclosures About Market Risk*

We are exposed to financial market risks, primarily arising from the effect of interest rate fluctuations on our investment portfolio. Interest rate fluctuation may arise from changes in the market's view of the quality of the security issuer, the overall economic outlook, and the time to maturity of our portfolio. We mitigate this risk by investing only in high quality, highly liquid instruments. Securities with original maturities of one year or less must be rated by two of the three industry standard rating agencies as follows: A1 by Standard & Poor's, P1 by Moody's and/or F-1 by Fitch. Securities with original maturities of greater than one year must be rated by two of the following industry standard rating agencies as follows: AA- by Standard & Poor's, Aa3 by Moody's and/or AA- by Fitch. By corporate investment policy, we limit the amount of exposure to $15.0 million or 10% of the portfolio, whichever is lower, for any single non-U.S. Government issuer. A single U.S. Agency can represent up to 25% of the portfolio. No more than 20% of the total portfolio may be invested in the securities of an industry sector, with money market fund investments evaluated separately. Our policy requires that at least 10% of the portfolio be in securities with a maturity of 90 days or less. We may make investments in U.S. Treasuries, U.S. Agencies, corporate bonds and municipal bonds and notes with maturities up to 36 months. However, the bias of our investment portfolio is shorter maturities. All investments must be U.S. dollar denominated. Additionally, we have no significant exposure to European sovereign debt.

We invest our cash equivalents and marketable securities in a variety of U.S. dollar financial instruments such as U.S. Treasuries, U.S. Government Agencies, commercial paper and corporate notes. Our policy specifically prohibits trading securities for the sole purposes of realizing trading profits. However, we may liquidate a portion of our portfolio if we experience unforeseen liquidity requirements. In such a case, if the environment has been one of rising interest rates we may experience a realized loss, similarly, if the environment has been one of declining interest rates we may experience a realized gain. As of December 31, 2013, we had an investment portfolio of fixed income marketable securities of $359.1 million including cash equivalents. If market interest rates were to increase immediately and uniformly by 1.0% from the levels as of December 31, 2013, the fair value of the portfolio would decline by approximately $0.1 million. Actual results may differ materially from this sensitivity analysis.

The fair value of our convertible notes is subject to interest rate risk, market risk and other factors due to the convertible feature. The fair value of the convertible notes will generally increase as interest rates fall and decrease as interest rates rise. In addition, the fair value of the convertible notes will generally increase as our common stock price increases and will generally decrease as our common stock price declines in value. The interest and market value changes affect the fair value of our convertible notes but do not impact our financial position, cash flows or results of operations due to the fixed nature of the debt obligation.

We invoice our customers in U.S. dollars. Although the fluctuation of currency exchange rates may impact our customers, and thus indirectly impact us, we do not attempt to hedge this indirect and speculative risk. Our overseas operations consist primarily of a design center in India and small business development offices in Japan, Korea and Taiwan. We monitor our foreign currency exposure; however, as of December 31, 2013, we believe our foreign currency exposure is not material enough to warrant foreign currency hedging.

Item 8. *Financial Statements and Supplementary Data*

See Item 15 "Exhibits and Financial Statement Schedules" of this Form 10-K for required financial statements and supplementary data.

Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure*

None.

Item 9A. *Controls and Procedures*

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures designed to ensure that information required to be disclosed in the reports we file or submit pursuant to the Securities and Exchange Act of 1934 as amended ("Exchange Act") is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Management, with the participation of the Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act as of the end of the period covered by this report. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2013, our disclosure controls and procedures were effective.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is the process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer, and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, and includes those policies and procedures that:

(i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect our transactions and dispositions of assets;

(ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with the authorization of our management and directors; and

(iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2013. In making this assessment, our management used the criteria set forth in *Internal Control — Integrated Framework of 1992* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on the results of this assessment, management has concluded that, as of December 31, 2013, our internal control over financial reporting was effective based on the criteria in *Internal Control — Integrated Framework* issued by the COSO.

The effectiveness of our internal control over financial reporting as of December 31, 2013 has been audited by PricewaterhouseCoopers, LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Changes in Internal Control Over Financial Reporting

There was no change in internal control over financial reporting during the last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. ***Other Information***

None.

PART III

Item 10. *Directors, Executive Officers and Corporate Governance*

The information responsive to this item is incorporated herein by reference to our Proxy Statement for our 2014 annual meeting of stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K. The information under the heading "Our Executive Officers" in Part I, Item 1 of this Annual Report on Form 10-K is also incorporated herein by reference.

We have a Code of Business Conduct and Ethics for all of our directors, officers and employees. Our Code of Business Conduct and Ethics is available on our website at http://investor.rambus.com/documentdisplay.cfm?DocumentID=8379. To date, there have been no waivers under our Code of Business Conduct and Ethics. We will post any amendments or waivers, if and when granted, of our Code of Business Conduct and Ethics on our website.

Item 11. *Executive Compensation*

The information responsive to this item is incorporated herein by reference to our Proxy Statement for our 2014 annual meeting of stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

The information responsive to this item is incorporated herein by reference to our Proxy Statement for our 2014 annual meeting of stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 13. *Certain Relationships and Related Transactions, and Director Independence*

The information responsive to this item is incorporated herein by reference to our Proxy Statement for our 2014 annual meeting of stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 14. *Principal Accountant Fees and Services*

The information responsive to this item is incorporated herein by reference to our Proxy Statement for our 2014 annual meeting of stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

PART IV

Item 15. ***Exhibits and Financial Statement Schedules***

(a) (1) Financial Statements

The following consolidated financial statements of the Registrant and Report of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm, are included herewith:

(a) (2) Financial Statement Schedule

All schedules are omitted because they are not applicable or the required information is shown in the Financial Statements or the notes thereto.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Rambus Inc.:

In our opinion, the accompanying consolidated financial statements listed in the index appearing under Item 15(a)(1) present fairly, in all material respects, the financial position of Rambus Inc. and its subsidiaries at December 31, 2013 and December 31, 2012, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2013 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on criteria established in *Internal Control - Integrated Framework* (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

San Jose, California
February 21, 2014

RAMBUS INC.

CONSOLIDATED BALANCE SHEETS

	December 31, 2013	December 31, 2012
	(In thousands, except shares and per share amounts)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 338,696	$ 148,984
Marketable securities	48,966	54,346
Accounts receivable	2,251	529
Prepaids and other current assets	8,253	10,529
Deferred taxes	205	788
Total current assets	398,371	215,176
Intangible assets, net	117,172	153,173
Goodwill	116,899	124,969
Property, plant and equipment, net	72,642	86,905
Deferred taxes, long term	4,797	4,458
Other assets	3,498	3,131
Total assets	$ 713,379	$ 587,812
LIABILITIES & STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 7,001	$ 7,918
Accrued salaries and benefits	33,448	23,992
Accrued litigation expenses	498	9,822
Convertible notes, short-term	164,047	—
Other accrued liabilities	7,848	12,402
Total current liabilities	212,842	54,134
Convertible notes, long-term	109,629	147,556
Long-term imputed financing obligation	39,349	45,919
Long-term income taxes payable	6,561	6,533
Other long-term liabilities	4,769	12,076
Total liabilities	373,150	266,218
Commitments and contingencies (Notes 12 and 18)		
Stockholders' equity:		
Convertible preferred stock, $.001 par value:		
Authorized: 5,000,000 shares; Issued and outstanding: no shares at December 31, 2013 and December 31, 2012	—	—
Common Stock, $.001 par value:		
Authorized: 500,000,000 shares; Issued and outstanding: 113,459,390 shares at December 31, 2013 and 111,525,021 shares at December 31, 2012	113	112
Additional paid in capital	1,128,148	1,075,761
Accumulated deficit	(787,727)	(753,979)
Accumulated other comprehensive loss	(305)	(300)
Total stockholders' equity	340,229	321,594
Total liabilities and stockholders' equity	$ 713,379	$ 587,812

See Notes to Consolidated Financial Statements

RAMBUS INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2013	**2012**	**2011**
	(In thousands, except per share amounts)		
Revenue:			
Royalties	$ 264,111	$ 232,385	$ 299,004
Contract and other revenue	7,390	1,666	13,359
Total revenue	271,501	234,051	312,363
Operating costs and expenses:			
Cost of revenue*	33,215	28,372	24,085
Research and development*	117,981	140,503	115,696
Marketing, general and administrative*	76,448	112,594	164,131
Restructuring charges	5,546	7,301	—
Impairment of goodwill and long-lived assets	17,751	35,471	—
Gain from sale of intellectual property	(1,388)	—	—
Gain from settlement	(535)	—	(6,200)
Costs of restatement and related legal activities, net	19	244	16,187
Total operating costs and expenses	249,037	324,485	313,899
Operating income (loss)	22,464	(90,434)	(1,536)
Interest income and other income (expense), net	(1,596)	59	563
Interest expense	(32,885)	(27,510)	(24,828)
Interest and other income (expense), net	(34,481)	(27,451)	(24,265)
Loss before income taxes	(12,017)	(117,885)	(25,801)
Provision for income taxes	21,731	16,451	17,252
Net loss	$ (33,748)	$ (134,336)	$ (43,053)
Net loss per share:			
Basic	$ (0.30)	$ (1.21)	$ (0.39)
Diluted	$ (0.30)	$ (1.21)	$ (0.39)
Weighted average shares used in per share calculations:			
Basic	112,415	110,769	110,041
Diluted	112,415	110,769	110,041

* Includes stock-based compensation:			
Cost of revenue	$ 19	$ 20	$ 575
Research and development	$ 6,597	$ 9,546	$ 10,519
Marketing, general and administrative	$ 8,365	$ 12,980	$ 16,902

See Notes to Consolidated Financial Statements

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Years Ended December 31,		
	2013	2012	2011
		(In thousands)	
Net loss	$ (33,748)	$ (134,336)	$ (43,053)
Other comprehensive income (loss):			
Unrealized gain (loss) on marketable securities, net of tax	(5)	89	(27)
Total comprehensive loss	$ (33,753)	$ (134,247)	$ (43,080)

See Notes to Consolidated Financial Statements

RAMBUS INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Common Stock				Accumulated Other	
	Shares	Amount	Additional Paid-in Capital	Accumulated Deficit	Comprehensive Gain (Loss)	Total
			(In thousands)			
Balances at December 31, 2010	102,676	$ 103	$ 911,632	$ (576,590)	$ (362)	$ 334,783
Net loss	—	—	—	(43,053)	—	(43,053)
Unrealized loss on marketable securities, net of tax	—	—	—	—	(27)	(27)
Issuance of common stock upon exercise of options, equity stock and employee stock purchase plan	1,371	1	10,093	—	—	10,094
Net issuance of common stock due to CRI acquisition	6,220	6	86,137	—	—	86,143
Settlement of Samsung's option related to the contingently redeemable common stock	—	—	13,500	—	—	13,500
Stock-based compensation	—	—	28,354	—	—	28,354
Balances at December 31, 2011	110,267	110	1,049,716	(619,643)	(389)	429,794
Net loss	—	—	—	(134,336)	—	(134,336)
Unrealized gain on marketable securities, net of tax	—	—	—	—	89	89
Issuance of common stock upon exercise of options, equity stock and employee stock purchase plan	1,258	2	3,499	—	—	3,501
Stock-based compensation	—	—	22,546	—	—	22,546
Balances at December 31, 2012	111,525	112	1,075,761	(753,979)	(300)	321,594
Net loss	—	—	—	(33,748)		(33,748)
Unrealized loss on marketable securities, net of tax	—	—	—	—	(5)	(5)
Issuance of common stock upon exercise of options, equity stock and employee stock purchase plan	1,934	1	7,864	—	—	7,865
Stock-based compensation	—	—	14,981	—	—	14,981
Equity component of 1.125% convertible senior notes due 2018	—	—	29,542	—	—	29,542
Balances at December 31, 2013	113,459	$ 113	$ 1,128,148	$ (787,727)	$ (305)	$ 340,229

See Notes to Consolidated Financial Statements

RAMBUS INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2013	2012	2011
		(In thousands)	
Cash flows from operating activities:			
Net loss	$ (33,748)	$ (134,336)	$ (43,053)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Stock-based compensation	14,981	22,546	27,996
Depreciation	15,451	13,190	11,894
Amortization of intangible assets	28,909	30,345	20,191
Non-cash interest expense and amortization of convertible debt issuance costs	19,296	14,695	12,622
Impairment of goodwill and long-lived assets	17,751	35,471	—
Impairment of investment in non-marketable equity security	1,400	—	—
Deferred tax (benefit) provision	1,919	3,728	(246)
Non-cash restructuring	653	—	—
Loss on disposal of property, plant and equipment	364	8	—
Gain from sale of intellectual property	(1,388)	—	—
Non-cash acquisition of patents	—	—	(3,000)
Change in operating assets and liabilities, net of effects of acquisitions:			
Accounts receivable	(1,722)	497	2,714
Prepaids and other assets	6,174	8,379	8,810
Accounts payable	(1,544)	(9,664)	10,452
Accrued salaries and benefits and other accrued liabilities	(7,114)	1,847	(741)
Accrued litigation expenses	(9,324)	(680)	6,442
Income taxes payable	(716)	(3,522)	(1,047)
Net cash provided by (used in) operating activities	51,342	(17,496)	53,034
Cash flows from investing activities:			
Purchases of property, plant and equipment	(6,938)	(21,809)	(19,431)
Acquisition of intangible assets	(2,656)	(1,700)	(1,210)
Purchases of marketable securities	(125,554)	(110,716)	(173,996)
Maturities of marketable securities	119,600	183,086	337,880
Proceeds from sale of marketable securities	11,020	—	33
Proceeds from sale of intellectual property and property, plant and equipment	2,255	—	—
Acquisition of businesses, net of cash acquired	—	(46,278)	(167,381)
Net cash provided by (used in) investing activities	(2,273)	2,583	(24,105)
Cash flows from financing activities:			
Proceeds from issuance of convertible senior notes	138,000	—	—
Issuance costs related to issuance of convertible senior notes	(3,603)	—	—
Proceeds received from issuance of common stock under employee stock plans	8,391	4,103	12,282
Payments under installment payment arrangement	(1,829)	(1,923)	(2,531)
Principal payments against financing lease obligation	(178)	(522)	(456)
Payment to redeem contingently redeemable common stock pursuant to the settlement agreement with Samsung	—	—	(100,000)
Proceeds from landlord for tenant improvements	—	—	8,800
Net cash provided by (used in) financing activities	140,781	1,658	(81,905)
Effect of exchange rate changes on cash and cash equivalents	(138)	(5)	(42)
Net increase (decrease) in cash and cash equivalents	189,712	(13,260)	(53,018)
Cash and cash equivalents at beginning of year	148,984	162,244	215,262
Cash and cash equivalents at end of year	$ 338,696	$ 148,984	$ 162,244

Supplemental disclosure of cash flow information:						
Cash paid during the period for:						
Interest	$	8,625	$	8,625	$	8,625
Income taxes, net of refunds	$	18,720	$	16,384	$	16,254
Non-cash investing and financing activities:						
Non-cash obligation for property, plant and equipment	$	—	$	2,512	$	7,409
Property, plant and equipment received and accrued in accounts payable and other accrued liabilities	$	5,909	$	1,709	$	3,093
Common stock, net, issued pursuant to acquisition	$	—	$	—	$	86,143

See Notes to Consolidated Financial Statements

RAMBUS INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Formation and Business of the Company

Rambus Inc. (the "Company" or "Rambus"), the innovative technology solutions company that brings invention to market, was incorporated in California in March 1990 and reincorporated in Delaware in March 1997. In addition to licensing, the Company is creating new business opportunities through offering products and services where its goal is to perpetuate strong company operating performance and long-term stockholder value. The Company generates revenue by licensing its inventions and solutions, whether in the form of patent licensing, solutions licensing, services or products, to market-leading companies.

While the Company has historically focused its efforts on the development of technologies for electronics memory and chip interfaces, the Company has been expanding its portfolio of inventions and solutions to address additional markets in chip and system security as well as LED-based lighting. The Company also is exploring new areas within the semiconductor space such as computational sensing and imaging. The Company intends to continue to identify disruptions and opportunities in both traditional and new technology fields, consistent with its goal of creating great value through its innovations and to make those technologies available through both its licensing and non-licensing business models. Key to the Company's efforts, both in its current businesses and in any new area of diversification, will be hiring and retaining world-class inventors, scientists and engineers to lead the development of inventions and technology solutions for these fields of focus, and the management and business support personnel necessary to execute its plans and strategies.

2. Summary of Significant Accounting Policies

Financial Statement Presentation

The accompanying consolidated financial statements include the accounts of Rambus and its wholly owned subsidiaries, Rambus K.K., located in Tokyo, Japan, Cryptography Research, Inc., located in California, U.S.A., Unity Semiconductor Corporation, located in California, U.S.A., Mozaik Multimedia, Inc., located in California, U.S.A., and Rambus Ltd., located in George Town, Grand Cayman Islands, British West Indies, which includes Rambus Chip Technologies (India) Private Limited, Rambus Deutschland GmbH, located in Pforzheim, Germany, Kamiyacho IP Holdings, Rambus Korea, Inc., located in Seoul, Korea and Rambus France, located in Paris, France. In addition, Rambus International Ltd. and Rambus Delaware LLC are also subsidiaries. All intercompany accounts and transactions have been eliminated in the accompanying consolidated financial statements. Investments in entities with less than 20% ownership by Rambus and in which Rambus does not have the ability to significantly influence the operations of the investee are accounted for using the cost method and are included in other assets.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Reclassifications

Certain prior year balances were reclassified to conform to the current year's presentation. None of these reclassifications had an impact on reported net income (loss) or cash flows for any of the periods presented.

Revenue Recognition

Overview

Rambus recognizes revenue when persuasive evidence of an arrangement exists, Rambus has delivered the product or performed the service, the fee is fixed or determinable and collection is reasonably assured. If any of these criteria are not met, Rambus defers recognizing the revenue until such time as all criteria are met. Determination of whether or not these criteria have been met may require the Company to make judgments, assumptions and estimates based upon current information and historical experience.

Certain revenue contracts consist of service fees associated with integration of Rambus' solutions into its customers' products and fees associated with providing training, evaluation and test equipment to its customers. Under the accounting guidance, if the deliverables have standalone value upon delivery, Rambus accounts for each deliverable separately. When multiple deliverables included in an arrangement are separated into different units of accounting, the arrangement consideration is allocated to the identified separate units based on a relative selling price hierarchy. Rambus determines the relative selling price for a deliverable based on its best estimate of selling price (“BESP”). Rambus has determined that vendor-specific objective evidence of selling price for each deliverable is not available as there lacks a consistent number of standalone sales and third-party evidence is not a practical alternative due to differences in its service offerings compared to other parties and the availability of relevant third-party pricing information. Rambus determined BESP by considering its overall pricing objectives and market conditions. Significant pricing practices taken into consideration include discounting practices, the size and volume of transactions, the customer demographic, the geographic area where services are sold, price lists, go-to-market strategy, historical standalone sales and contract prices. The determination of BESP is made through consultation with and approval by management, taking into consideration the go-to-market strategy. As the go-to-market strategies evolve, Rambus may modify its pricing practices in the future, which could result in changes in relative selling prices. In most cases, the relative values of the undelivered components are not material to the overall arrangement and are typically delivered within twelve months after the core product has been delivered. In such agreements, selling price is determined for each component and any difference between the total of the separate BESP and total contract consideration (i.e. discount) is allocated pro-rata across each of the components in the arrangement.

During 2013, the Company expanded its business strategy of monetizing its patent portfolio to include the sale of selected intellectual property. The Company's Memory and Interface Division ("MID") business continues to grow its patent portfolio and actively engage with various external parties to monetize the patent portfolio and explore new revenue opportunities. As the sales of such patents developed by the MID business unit under this expanded strategy represents a component of the Company's ongoing major or central operations, the Company records the related proceeds as revenue. As patent sales executed under this expanded strategy represent a component of the Company's ongoing major or central operations and activities, it will record the related proceeds as revenue. The Company will recognize the revenue when there is persuasive evidence of a sales arrangement, fees are fixed or determinable, delivery has occurred and collectibility is reasonably assured. These requirements are generally fulfilled upon closing of the patent sale transaction.

Rambus’ revenue consists of royalty revenue and contract and other revenue derived from MID, Cryptography Research Inc. ("CRI") and Lighting and Display Technologies ("LDT") operating segments. Royalty revenue consists of patent license and solutions license royalties. Contract and other revenue consists of fixed license fees, fixed engineering fees and service fees associated with integration of Rambus’ technology solutions into its customers’ products as well as sale of LED edge-lit products.

Royalty Revenue

Rambus recognizes royalty revenue upon notification by its customers and when deemed collectible. The terms of the royalty agreements generally either require customers to give Rambus notification and to pay the royalties within a specified period or are based on a fixed royalty that is due within a specified period. Many of Rambus’ customers have the right to cancel their licenses. In such arrangements, revenue is only recognized to the extent that is consistent with the cancellation provisions. Cancellation provisions within such contracts generally provide for a prospective cancellation with no refund of fees already remitted by customers for products provided and payment for services rendered prior to the date of cancellation. Rambus has two types of royalty revenue: (1) patent license royalties and (2) solutions license royalties.

Patent licenses - Rambus licenses its broad portfolio of patented inventions to companies who use these inventions in the development and manufacture of their own products. Such licensing agreements may cover the license of part, or all, of Rambus' patent portfolio. The contractual terms of the agreements generally provide for payments over an extended period of time. For the licensing agreements with fixed royalty payments, Rambus generally recognizes revenue from these arrangements as amounts become due. For the licensing agreements with variable royalty payments which can be based on either a percentage of sales or number of units sold, Rambus earns royalties at the time that the customers’ sales occur. Rambus’ customers, however, do not report and pay royalties owed for sales in any given quarter until after the conclusion of that quarter. As Rambus is unable to estimate the customers’ sales in any given quarter to determine the royalties due to Rambus, it recognizes royalty revenues based on royalties reported by customers during the quarter and when other revenue recognition criteria are met.

In addition, Rambus may enter into certain settlements of patent infringement disputes. The amount of consideration received upon any settlement (including but not limited to past royalty payments, future royalty payments and punitive damages) is allocated to each element of the settlement based on the fair value of each element. In addition, revenues related to past royalties are recognized upon execution of the agreement by both parties, provided that the amounts are fixed or determinable, there are no significant undelivered obligations and collectability is reasonably assured. Rambus does not recognize any revenues prior to execution of the agreement since there is no reliable basis on which it can estimate the amounts for royalties related to previous periods or assess collectability. Elements that are related to royalty revenue in nature (including but not limited to past royalty payments and future royalty payments) will be recorded as royalty revenue in the consolidated statements of operations. Elements that are not related to royalty revenue in nature (including but not limited to punitive damage and settlement) will be recorded as gain from settlement which is reflected as a separate line item within the operating expenses section in the consolidated statements of operations.

Solutions licenses - Rambus develops proprietary and industry-standard products that it provides to its customers under solutions license agreements. These arrangements include royalties, which can be based on either a percentage of sales or number of units sold. Rambus earns royalties on such licensed products sold worldwide by its customers at the time that the customers' sales occur. Rambus' customers, however, do not report and pay royalties owed for sales in any given quarter until after the conclusion of that quarter. As Rambus is unable to estimate the customers' sales in any given quarter to determine the royalties due to Rambus, it recognizes royalty revenues based on royalties reported by customers during the quarter and when other revenue recognition criteria are met.

Contract and Other Revenue

Rambus recognizes revenue from the sale of LED edge-lit products when risk of loss and title have transferred to customers, provided all other revenue recognition criteria have been met. Revenue from distributors is recognized on the shipment or delivery of the related products, provided all other revenue recognition criteria have been met. The Company's agreements with these distributors have terms which are generally consistent with the standard terms and conditions for the sale of the Company's products to end users, and do not provide for product rotation or pricing allowances. The Company accrues for sales returns and warranty based on the standard market experience, none of which are currently material.

Rambus generally recognizes revenue using percentage of completion for development contracts related to licenses of its solutions that involve significant engineering and integration services. For agreements accounted for using the percentage-of-completion method, Rambus determines progress to completion using input measures based upon contract costs incurred.

Goodwill

Goodwill represents the excess of the purchase price over the fair value of the net tangible and identifiable intangible assets acquired in each business combination. Goodwill is not subject to amortization, but is subject to at least an annual assessment for impairment, applying a fair-value based test. The Company performs its impairment analysis of goodwill on an annual basis during the fourth quarter of the year unless conditions arise that warrant a more frequent evaluation.

Goodwill is allocated to the various reporting units which are generally operating segments. The goodwill impairment test involves a two-step process. In the first step, the Company compares the fair value of each reporting unit to its carrying value. The fair values of the reporting units are estimated using an income or discounted cash flows approach.

Under the income approach, the Company measures fair value of the reporting unit based on a projected cash flow method using a discount rate determined by its management which is commensurate with the risk inherent in its current business model. The Company's discounted cash flow projections are based on its annual financial forecasts developed internally by management for use in managing its business. If the fair value of the reporting unit exceeds its carrying value, goodwill is not impaired and no further testing is required. If the fair value of the reporting unit is less than the carrying value, the Company must perform the second step of the impairment test to measure the amount of impairment loss. In the second step, the reporting unit's fair value is allocated to all of the assets and liabilities of the reporting unit, including any unrecognized intangible assets, in a hypothetical analysis that calculates the implied fair value of goodwill in the same manner as if the reporting unit was being acquired by a market participant in a business combination. If the implied fair value of the reporting unit's goodwill is less than the carrying value, the difference is recorded as an impairment loss.

In the third quarter of 2013, the Company performed an interim goodwill impairment analysis due to the curtailment of operations for its Mobile Technology Division ("MTD") reporting unit which resulted in an impairment of all of the MTD reporting unit's goodwill. See Note 6, "Intangible Assets and Goodwill" for further details. The Company also performed its annual goodwill impairment analysis as of December 31, 2013 and determined that the fair value of the reporting units with goodwill exceeded their carrying values.

Intangible Assets

Intangible assets are comprised of existing technology, customer contracts and contractual relationships, and other intangible assets. Identifiable intangible assets resulting from the acquisitions of entities accounted for using the purchase method of accounting are estimated by management based on the fair value of assets received. Identifiable intangible assets are being amortized over the period of estimated benefit using the straight-line method and estimated useful lives ranging from 1 to 10 years .

Property, Plant and Equipment

Property, plant and equipment includes computer equipment, computer software, machinery, leasehold improvements, furniture and fixtures and buildings. Computer equipment, computer software, machinery and furniture and fixtures are stated at cost and generally depreciated on a straight-line basis over an estimated useful life of 3 , 3 to 5 , 7 and 3 years , respectively. The Company undertook a series of structural improvements to ready the Sunnyvale and Brecksville facilities for its use. The Company concluded that its requirement to fund construction costs and responsibility for cost overruns resulted in the Company being considered the owner of the buildings during the construction period for accounting purposes. Upon completion of construction, the Company concluded that it retained sufficient continuing involvement to preclude de-recognition of the buildings under the Financial Accounting Standards Board ("FASB") authoritative guidance applicable to sale leaseback for real estate. As such, the Company continues to account for the buildings as owned real estate and to record an imputed financing obligation for its obligation to the legal owners. The buildings will be depreciated on a straight-line basis over an estimated useful life of approximately 39 years . See Note 10, “Balance Sheet Details,” and Note 12, “Commitments and Contingencies,” for additional details. Leasehold improvements are amortized on a straight-line basis over the shorter of their estimated useful lives or the initial terms of the leases. Upon disposal, assets and related accumulated depreciation are removed from the accounts and the related gain or loss is included in the results from operations.

Long-lived Asset Impairment

The Company evaluates long-lived assets (including property, plant and equipment and intangible assets) for impairment whenever events or changes in circumstances indicate the carrying value of an asset group may not be recoverable. The carrying value is not recoverable if it exceeds the undiscounted cash flows resulting from the use of the asset group and its eventual disposition. The Company’s estimates of future cash flows attributable to its long-lived asset groups require significant judgment based on its historical and anticipated results and are subject to many factors. Factors that the Company considers important which could trigger an impairment review include significant negative industry or economic trends, significant loss of clients, and significant changes in the manner of its use of the acquired assets or the strategy for its overall business.

When the Company determines that the carrying value of the long-lived asset groups may not be recoverable based upon the existence of one or more of the above indicators of impairment, the Company measures the potential impairment based on a projected discounted cash flow method using a discount rate determined by the Company to be commensurate with the risk inherent in the Company’s current business model. An impairment loss is recognized only if the carrying amount of the long-lived asset group is not recoverable and exceeds its fair value. The impairment charge is recorded to reduce the pre-impairment carrying amount of the long-lived assets based on the relative carrying amount of those assets, though not to reduce the carrying amount of an asset below its fair value. Different assumptions and judgments could materially affect the calculation of the fair value of the long-lived assets. During 2013 , the Company recognized an impairment of its long-lived assets related to its LDT asset group and CRI favorable contract asset group. During 2012 , the Company recognized an impairment of its long-lived and intangible assets related to its LDT asset group. See Note 6, "Intangible Assets and Goodwill" for further details. During 2011 , Rambus did not recognize any impairment of its long-lived assets.

Litigation

Rambus is involved in certain legal proceedings. Based upon consultation with outside counsel handling its defense in these matters and an analysis of potential results, if Rambus believes that a loss arising from such matters is probable and can be reasonably estimated, Rambus records the estimated liability in its consolidated financial statements. If only a range of estimated losses can be determined, Rambus records an amount within the range that, in its judgment, reflects the most likely outcome; if none of the estimates within that range is a better estimate than any other amount, Rambus records the low end of the range. Any such accrual would be charged to expense in the appropriate period. Rambus recognizes litigation expenses in the period in which the litigation services were provided.

Income Taxes

Income taxes are accounted for using an asset and liability approach, which requires the recognition of deferred tax assets and liabilities for expected future tax events that have been recognized differently in Rambus' consolidated financial statements and tax returns. The measurement of current and deferred tax assets and liabilities is based on provisions of the enacted tax law and the effects of future changes in tax laws or rates are not anticipated. A valuation allowance is established when necessary to reduce deferred tax assets to amounts expected to be realized based on available evidence.

In addition, the calculation of the Company's tax liabilities involves dealing with uncertainties in the application of complex tax regulations. As a result, the Company reports a liability for unrecognized tax benefits resulting from uncertain tax positions taken or expected to be taken in its tax return. The Company considers many factors when evaluating and estimating its tax positions and tax benefits, which may require periodic adjustments and which may not accurately anticipate actual outcomes.

Stock-Based Compensation and Equity Incentive Plans

The Company maintained stock plans covering a broad range of equity grants including stock options, nonvested equity stock and equity stock units and performance based instruments. In addition, the Company sponsors an Employee Stock Purchase Plan (“ESPP”), whereby eligible employees are entitled to purchase Common Stock semi-annually, by means of limited payroll deductions, at a 15% discount from the fair market value of the Common Stock as of specific dates.

The Company determines compensation expense associated with restricted stock units based on the fair value of its common stock on the date of grant. The Company determines compensation expense associated with stock options based on the estimated grant date fair value method using the Black-Scholes Merton valuation model. The Company generally recognizes compensation expense using a straight-line amortization method over the respective vesting period for awards that are ultimately expected to vest. Accordingly, stock-based compensation expense for 2013, 2012 and 2011 has been reduced for estimated forfeitures. When estimating forfeitures, the Company considers voluntary termination behaviors as well as trends of actual option forfeitures. The Company will only recognize a tax benefit from stock-based awards in additional paid-in capital if an incremental tax benefit is realized after all other tax attributes currently available have been utilized. In addition, the Company has elected to account for the indirect effects of stock-based awards on other tax attributes, such as the research tax credits, through the consolidated statement of operations as part of the tax effect of stock-based compensation.

Cash and Cash Equivalents

Cash equivalents are highly liquid investments with original maturity of three months or less at the date of purchase. The Company maintains its cash balances with high quality financial institutions. Cash equivalents are invested in highly-rated and highly-liquid money market securities and certain U.S. government sponsored obligations.

Marketable Securities

Available-for-sale securities are carried at fair value, based on quoted market prices, with the unrealized gains or losses reported, net of tax, in stockholders’ equity as part of accumulated other comprehensive income (loss). The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, both of which are included in interest and other income, net. Realized gains and losses are recorded on the specific identification method and are included in interest and other income, net. The Company reviews its investments in marketable securities for possible other than temporary impairments on a regular basis. If any loss on investment is believed to be a credit loss, a charge will be recognized in operations. In evaluating whether a credit loss on a debt security has occurred, the Company considers the following factors: 1) the Company’s intent to sell the security, 2) if the Company intends to hold the security, whether or not it is more likely than not that the Company will be required to sell the security before recovery of the security’s amortized cost basis and 3) even if the Company intends to hold the security, whether or not the Company expects the security to recover the entire amortized cost basis. Due to the high credit quality and short term nature of the Company’s investments, there have been no credit losses recorded to date. The classification of funds between short-term and long-term is based on whether the securities are available for use in operations or other purposes.

Non-Marketable Securities

The Company has an investment in a non-marketable security of a private company which is carried at cost. The Company monitors the investment for other-than-temporary impairment and records appropriate reductions in carrying value when necessary. The non-marketable security is classified within other assets in the consolidated balance sheets.

Fair Value of Financial Instruments

The carrying value of cash equivalents, accounts receivable and accounts payable approximate their fair values due to their relatively short maturities as of December 31, 2013 and 2012 . Marketable securities are comprised of available-for-sale securities that are reported at fair value with the related unrealized gains and losses included in accumulated other comprehensive income (loss), a component of stockholders’ equity, net of tax. Fair value of the marketable securities is determined based on quoted market prices. The fair market value of the Company's convertible notes fluctuates with interest rates and with the market price of the stock, but does not affect the carrying value of the debt on the balance sheet.

Research and Development

Costs incurred in research and development, which include engineering expenses, such as salaries and related benefits, stock-based compensation, depreciation, professional services and overhead expenses related to the general development of Rambus' products, are expensed as incurred. Software development costs are capitalized beginning when a product's technological feasibility has been established and ending when a product is available for general release to customers. Rambus has not capitalized any software development costs since the period between establishing technological feasibility and general customer release is relatively short and as such, these costs have not been material.

Computation of Earnings (Loss) Per Share

Basic earnings (loss) per share is calculated by dividing the net income (loss) by the weighted average number of common shares outstanding during the period. Diluted earnings (loss) per share is calculated by dividing the earnings (loss) by the weighted average number of common shares and potentially dilutive securities outstanding during the period. Potentially dilutive common shares consist of incremental common shares issuable upon exercise of stock options, employee stock purchases, restricted stock and restricted stock units, and shares issuable upon the conversion of convertible notes. The dilutive effect of outstanding shares is reflected in diluted earnings per share by application of the treasury stock method. This method includes consideration of the amounts to be paid by the employees, the amount of excess tax benefits that would be recognized in equity if the instrument was exercised and the amount of unrecognized stock-based compensation related to future services. No potential dilutive common shares are included in the computation of any diluted per share amount when a net loss is reported. The Company reported approximately 4.8 million shares issued to Samsung as contingently redeemable common stock due to the contractual put rights associated with those shares. As such, the Company used the two-class method for reporting earnings per share for those periods where the contingently redeemable common stock was outstanding (until August 2011) prior to Samsung's redemption of the shares.

Comprehensive Income (Loss)

Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources, including foreign currency translation adjustments and unrealized gains and losses on marketable securities. Other comprehensive income (loss), net of tax, is presented in the consolidated statements of comprehensive income (loss).

Credit Concentration

As of December 31, 2013 and 2012 , the Company's cash, cash equivalents and marketable securities were invested with various financial institutions in the form of corporate notes, bonds and commercial paper, money market funds, U.S. government bonds and notes, and municipal bonds and notes. The Company's exposure to market risk for changes in interest rates relates primarily to its investment portfolio. The Company places its investments with high credit issuers and, by investment policy, attempts to limit the amount of credit exposure to any one issuer. As stated in the Company's investment policy, it will ensure the safety and preservation of the Company's invested funds by limiting default risk and market risk. The Company has no investments denominated in foreign country currencies and therefore is not subject to foreign exchange risk from these assets.

The Company mitigates default risk by investing in high credit quality securities and by positioning its portfolio to respond appropriately to a significant reduction in a credit rating of any investment issuer or guarantor. The portfolio includes only marketable securities with active secondary or resale markets to enable portfolio liquidity.

The Company's accounts receivable are derived from revenue earned from customers located in the U.S. and internationally. As of December 31, 2013, one customer accounted for approximately 73% of the total $2.3 million of accounts receivable. The Company's accounts receivable balance as of December 31, 2012 was not material.

Foreign Currency Remeasurement

The Company's foreign subsidiaries currently use the U.S. dollar as the functional currency. Remeasurement adjustments for non-functional currency monetary assets and liabilities are translated into U.S. dollars at the exchange rate in effect at the balance sheet date. Revenue, expenses, gains or losses are translated at the average exchange rate for the period, and non-monetary assets and liabilities are translated at historical rates. The remeasurement gains and losses of these foreign subsidiaries as well as gains and losses from foreign currency transactions are included in other expense, net in the consolidated statements of operations, and are not material for any periods presented.

3. Recent Accounting Pronouncement

In July 2013, the FASB issued Accounting Standards Update (“ASU”) No. 2013-11 “Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists.” ASU No. 2013-11 is a new accounting standards update related to the financial statement presentation of unrecognized tax benefits. The new accounting standards update provides that a liability related to an unrecognized tax benefit would be presented as a reduction of a deferred tax asset for a net operating loss carryforward, a similar tax loss or a tax credit carryforward if such settlement is required or expected in the event the uncertain tax position is disallowed. The new accounting standards update becomes effective for the Company on January 1, 2014 and it should be applied prospectively to unrecognized tax benefits that exist at the effective date with retrospective application permitted. The Company anticipates the adoption may result in equal reductions to both deferred tax assets and long term taxes payable of approximately $4.7 million .

In February 2013, the FASB issued ASU No. 2013-02 “Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income.” ASU No. 2013-02 requires an entity to disaggregate the total change of each component of other comprehensive income either on the face of the income statement or as a separate disclosure in the notes. The new accounting standards update became effective for the Company's interim period ended March 31, 2013. The Company adopted this new accounting standards update and the adoption did not have any impact on its financial position, results of operations or cash flows as the amounts reclassified out of accumulated other comprehensive loss were de minimis.

4. Earnings (Loss) Per Share

The following table sets forth the computation of basic and diluted loss per share:

	Years Ended December 31,					
	2013		2012		2011	
	(In thousands, except per share amounts)					
	CRCS*	Other CS**	CRCS*	Other CS**	CRCS*	Other CS**
Basic net loss per share:						
Numerator:						
Allocation of undistributed earnings	$ —	$ (33,748)	$ —	$ (134,336)	$ (1,180)	$ (41,873)
Denominator:						
Weighted-average common shares outstanding	—	112,415	—	110,769	4,788	107,024
Basic net loss per share	$ —	$ (0.30)	$ —	$ (1.21)	$ (0.25)	$ (0.39)
Diluted net loss per share:						
Numerator:						
Allocation of undistributed earnings for basic computation	$ —	$ (33,748)	$ —	$ (134,336)	$ (1,180)	$ (41,873)
Reallocation of undistributed earnings	—	—	—	—	—	—
Allocation of undistributed earnings for diluted computation	$ —	$ (33,748)	$ —	$ (134,336)	$ (1,180)	$ (41,873)
Denominator:						
Number of shares used in basic computation	—	112,415	—	110,769	4,788	107,024
Dilutive potential shares from stock options, ESPP, convertible notes, CRI retention bonuses and nonvested equity stock and stock units	—	—	—	—	—	—
Number of shares used in diluted computation	—	112,415	—	110,769	4,788	107,024
Diluted net loss per share	$ —	$ (0.30)	$ —	$ (1.21)	$ (0.25)	$ (0.39)

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* CRCS — Contingently Redeemable Common Stock

** Other CS — Common Stock other than CRCS

For the years ended December 31, 2013 , 2012 and 2011 , options to purchase approximately 7.3 million , 12.2 million and 12.0 million shares, respectively, were excluded from the calculation because they were anti-dilutive after considering proceeds from exercise, taxes and related unrecognized stock-based compensation expense. For the years ended December 31, 2013 , 2012 and 2011 , an additional 3.3 million , 6.8 million and 4.1 million potentially dilutive shares, respectively, have been excluded from the weighted average dilutive shares because there was a net loss for the periods. These shares do not include the Company's 5% convertible senior notes due 2014 (the "2014 Notes") and 1.125% convertible senior notes due 2018 (the "2018 Notes"). The par amount of convertible notes is payable in cash equal to the principal amount of the notes plus any accrued and unpaid interest and then the "in-the-money" conversion benefit feature at the conversion price above $19.31 and $12.07 , respectively, per share is payable in cash, shares of the Company's common stock or a combination of both. Refer to Note 11, "Convertible Notes" for more details.

5. Acquisitions

Unity Semiconductor Corporation

On February 3, 2012, the Company completed its acquisition of a privately-held company, Unity Semiconductor Corporation ("Unity"), by acquiring all issued and outstanding shares of capital stock of Unity. Under the terms of the merger agreement, the purchase price was $35.0 million subject to certain post-closing adjustments to the purchase price which were applied as of the end of the second quarter of 2012. In addition to the purchase consideration, the Company agreed to pay an aggregate of $5.0 million in retention bonuses to certain Unity employees over three years . The retention bonus payouts were subject to the condition of employment, and therefore, were treated as compensation and expensed as incurred on a graded attribution basis. The Company acquired Unity's technology and a portfolio of non-volatile solid state memory patents. The solid state memory technology is a potential successor to the current NAND flash technology, or could be otherwise deployed in the growing non-volatile memory market. Devices using this technology are expected to achieve higher density, faster performance, lower manufacturing costs and greater data reliability than NAND Flash. Unity is part of the MID reportable segment. The Company incurred approximately $0.6 million in direct acquisition costs in connection with the acquisition which were expensed as incurred.

The purchase price allocation for the business acquired is based on management's estimate of the fair value for purchase accounting purposes at the date of acquisition. The fair value of the assets acquired has been determined primarily by using valuation methods that discount the expected future cash flows to present value using estimates and assumptions determined by management, which is a level three fair value measurement. The Company performed a valuation of the net assets acquired as of the February 3, 2012 closing date. The purchase price from the business combination was allocated as follows:

	Total
	(in thousands)
Cash	$ 182
Property and equipment	51
Other tangible assets	36
Identified intangible assets	19,280
Goodwill	15,451
Total	$ 35,000

The goodwill arising from the acquisition is primarily attributed to synergies related to the combination of new and complementary technologies of the Company and the assembled workforce of Unity. This goodwill is not expected to be deductible for tax purposes. The identified intangible assets assumed in the acquisition of Unity were recognized as existing technology based upon their fair values as of the acquisition date. The acquired intangible assets have an estimated average useful life of 10 years from the date of acquisition.

Other Acquisition Activities

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

For the year ended December 31, 2012, the Company entered into one additional business combination and two patent and technology acquisitions for $13.2 million to expand the Company's existing technology, which resulted in approximately $8.1 million of goodwill, $4.1 million of intangible assets (weighted average useful life of 6 years) and $1.0 million of other assets. The business combination was part of the Chief Technology Office ("CTO") reportable segment.

The consolidated financial statements include the operating results of these businesses from the date of acquisition. The acquired assets did not generate any revenue during the reported periods. Pro forma results of operations for the 2012 business combinations have not been presented because their effects were not material to the Company’s consolidated financial statements.

2011 Acquisition Activity: During the year ended December 31, 2011 , the Company acquired CRI for a total purchase price of $257.2 million which consisted of cash of $168.8 million and approximately 6.4 million of the Company's common stock. The Company expensed the related transaction costs amounting to approximately $3.9 million . The acquisition of CRI expands the Company's technologies available for licensing with complementary technologies from CRI that include patented innovations and solutions for content protection, network security and anti-counterfeiting. As part of the acquisition, the Company agreed to pay $50.0 million to certain CRI employees and contractors in cash or the Company's common stock, at the Company's option, over three years following June 3, 2011. The purchase price from the business combination was allocated as follows:

	Total (in thousands)
Cash	$ 1,424
Accounts receivable	1,140
Identified intangible assets	159,200
Property and equipment	965
Other assets	133
Goodwill	96,994
Liabilities	(2,613)
Total	$ 257,243

Of the identified intangible assets, $12.2 million was recognized as favorable contracts which are acquired patent licensing agreements where the Company has no performance obligations. Cash received from these acquired favorable contracts will reduce the favorable contract intangible asset over the estimated useful life which is based on the expected payment dates related to the underlying favorable contracts.

6. Intangible Assets and Goodwill

2013 Impairment of Long-Lived Assets

During the fourth quarter of 2013, as a result of the change in business strategy for the LDT reporting unit to reduce its focus on the lower margin bulb products, the Company revised its projected cash flows for LDT, triggering an impairment analysis for long-lived assets.

As a result of the impairment analysis, the Company concluded that its LDT asset group was not able to recover the carrying amount of its assets. Determining the fair value of an asset group unit is judgmental in nature and requires the use of significant estimates and assumptions, considered to be Level 3 fair value inputs, including current replacement costs, revenue growth rates and operating margins, and discount rates, among others. Accordingly, the Company was required to make various estimates in determining the fair values of the LDT asset group. Due to the highly customized nature of the LDT manufacturing equipment, the Company primarily utilized the cost approach to estimate the fair value of its property, plant and equipment. To determine the estimated fair value of its property, plant and equipment, adjustment factors, including cost trend factors, were applied to each individual asset's original cost in order to estimate current replacement cost. The current replacement cost was then adjusted for estimated deductions to recognize the effects of deterioration and obsolescence from all causes, as well as indirect costs such as installation. Where appropriate, the Company utilized a market approach to estimate the fair value of its property, plant and equipment. This approach included the identification of market prices in actual transactions for similar assets based on asking prices for assets currently available for sale, as well as obtaining and reviewing certain direct market values based quoted prices with manufacturers and secondary market participants for similar equipment. Upon completion of this analysis, the Company recorded an impairment charge of $3.5 million , $0.5 million and $0.2 million for building and related improvements, machinery and equipment, and software in its LDT asset group, respectively.

The estimated fair value of the LDT acquired existing technology intangible assets was determined based on the income approach, using Level 3 fair value inputs, as it was deemed to be the most indicative of the fair value in an orderly transaction between market participants.

Under the income approach the Company determined fair value based on the estimated future cash flows resulting from the licensing of the technology underlying the intangible assets. The estimated cash flows in the income approach were discounted by an estimated weighted-average cost of capital which reflects the overall level of inherent risk of the reporting unit and the rate of return an outside investor would expect to earn. Upon completion of this analysis, the Company recorded an impairment charge of $4.0 million in the fourth quarter of 2013 related to the acquired intangible assets.

Also, during the fourth quarter of 2013, as a result of changes in one customer's business, the Company recorded a $1.5 million impairment charge related to its CRI favorable contracts (refer to "Intangible Assets" table below for further discussion on favorable contracts) due to a decline in the projected cash flows from the customer.

The long-lived asset impairment charges for LDT and CRI aggregating to $9.7 million were included in "Impairment of goodwill and long-lived assets" in the Consolidated Statements of Operations. As of December 31, 2013, the Company had $12.9 million and $99.4 million of long-lived assets remaining in its LDT and CRI asset groups, respectively.

2013 Impairment of Goodwill

During the third quarter of 2013, the Company curtailed its immersive media platform spending. The Company conducted an impairment review as a result of the change of its strategy related to the immersive media platform. As a result of this impairment review, the Company recorded a charge of $8.1 million to fully impair the goodwill related to the MTD reporting unit which was part of the CTO reportable segment. The goodwill impairment charge was reflected in "Impairment of goodwill and long-lived assets" in the Consolidated Statements of Operations. The Company estimated the fair value of the MTD reporting unit using the income approach which was determined using Level 3 fair value inputs. The utilization of the income approach to determine fair value requires estimates of future operating results and cash flows discounted using an estimated discount rate. Cash flow projections are based on management's estimates of revenue growth rates and operating margins, taking into consideration industry and market conditions. The discount rate used of 36% is based on a weighted average cost of capital adjusted for the relevant risk associated with the characteristics of the business and the projected cash flows.

In the fourth quarter of 2013, the Company performed its annual goodwill impairment analysis for the MID and CRI reporting units, which are the only reporting units with goodwill.

As of December 31, 2013, the fair value of the MID reporting unit, with $19.9 million of goodwill, exceeded the carrying value of its net assets by approximately 480% ; the fair value of the CRI reporting unit, with $97.0 million of goodwill, exceeded the carrying value of its net assets by approximately 44% . To arrive at the cash flow projections utilized in the income approach, the Company used the reporting unit’s forecast of estimated operating results based on assumptions such as long-term revenue growth rates, costs and estimates of future anticipated changes in operating margins based on economic and market information. Key assumptions used to determine the fair value of the MID and CRI reporting units at December 31, 2013, were the revenue growth rates for the forecast period and terminal year, terminal growth rates and discount rates. Certain estimates used in the income approach involve information for new product lines with limited financial history and developing revenue models which increase the risk of differences between the projected and actual performance. The discount rate of 14% for MID and 21% for CRI is based on the reporting units’ overall risk profile relative to other guideline companies, the reporting units’ respective industry as well as the visibility of future expected cash flows. The terminal growth rate applied to determine fair value for both reporting units was 3% , which was based on historical experience as well as anticipated economic conditions, industry data and long term outlook for the business. These assumptions are inherently uncertain.

It is reasonably possible that the businesses could perform significantly below the Company's expectations or a deterioration of market and economic conditions could occur. This would adversely impact the Company's ability to meet its projected results, which could cause the goodwill in any of its reporting units or long-lived assets in any of its asset groups to become impaired. Significant differences between these estimates and actual cash flows could materially affect the Company's future financial results. If the reporting units are not successful in commercializing new business arrangements, if the businesses are unsuccessful in signing new license agreements or renewing its existing license agreements, or if the Company is unsuccessful in managing its costs, the revenue and income for these reporting units could adversely and materially deviate from their historical trends and could cause goodwill or long-lived assets to become impaired. If the Company determines that its goodwill or long-lived assets are impaired, it would be required to record a non-cash charge that could have a material adverse effect on its results of operations and financial position.

2012 Impairment of Long-Lived Assets

In August 2012, as a result of the change in business strategy for the LDT reporting unit, the Company revised its projected cash flows for LDT, triggering an interim impairment analysis of goodwill and long-lived assets. The decline in the projected cash flows for LDT resulted from a change in business strategy with less focus on the higher margin display technology licensing and an increased focus on its general lighting technologies.

As noted above, the Company tested for impairment its long-lived assets in LDT as of August 31, 2012. The Company determined its long-lived asset group to be its LDT reporting unit comprised primarily of finite-lived intangible assets and property, plant and equipment.

As a result of the interim impairment analysis, the Company concluded that its LDT asset group was not able to recover the carrying amount of its LDT assets. Determining the fair value of an asset group unit is judgmental in nature and requires the use of significant estimates and assumptions, considered to be Level 3 fair value inputs, including current replacement costs, revenue growth rates and operating margins, and discount rates, among others. Accordingly, the Company was required to make various estimates in determining the fair values of the LDT asset group. Due to the highly customized nature of the LDT manufacturing equipment, the Company primarily utilized the cost approach to estimate the fair value of its property, plant and equipment. To determine the estimated fair value of its property, plant and equipment, adjustment factors, including cost trend factors, were applied to each individual asset's original cost in order to estimate current replacement cost. The current replacement cost was then adjusted for estimated deductions to recognize the effects of deterioration and obsolescence from all causes, as well as indirect costs such as installation. Where appropriate, the Company utilized a market approach to estimate the fair value of its property, plant and equipment. This approach included the identification of market prices in actual transactions for similar assets based on asking prices for assets currently available for sale, as well as obtaining and reviewing certain direct market values based quoted prices with manufacturers and secondary market participants for similar equipment. Upon completion of this analysis, the Company recorded an impairment charge of $5.8 million and $0.6 million for building and related improvements and software in its LDT asset group, respectively.

The estimated fair value of the LDT intangible assets was determined based on the income approach, using Level 3 fair value inputs, as it was deemed to be the most indicative of the Company's fair value in an orderly transaction between market participants. Under the income approach the Company determined fair value based on the estimated future cash flows resulting from the licensing of the technology underlying the intangible assets. The estimated cash flows in the income approach were discounted by an estimated weighted-average cost of capital which reflects the overall level of inherent risk of the reporting unit and the rate of return an outside investor would expect to earn. Upon completion of this analysis, the Company recorded an impairment charge of $15.4 million in the third quarter of 2012 related to the LDT intangible assets.

Accordingly a long-lived asset impairment charge aggregating to $21.8 million was included in "Impairment of goodwill and long-lived assets" in the accompanying Consolidated Statements of Operations.

2012 Impairment of Goodwill

In addition to the annual goodwill impairment analysis, the Company performed an event-driven interim impairment analysis of goodwill as of August 31, 2012 as noted above.

The fair value of each of the reporting units was determined using the income approach as discussed above. One of the key assumptions used in applying the income approach includes discount rates which ranged from 20% to 35% depending on the reporting units' overall risk profile relative to other guideline companies, the reporting units' respective industry as well as the visibility of future expected cash flows.

Upon the completion of the goodwill impairment analysis as of August 31, 2012, the Company recorded a non-cash goodwill impairment charge of $13.7 million relating to the LDT reporting unit. The goodwill impairment charge is included in “Impairment of goodwill and long-lived assets” in the accompanying Consolidated Statements of Operations.

Goodwill

The following tables present goodwill information for each of the reportable segments for the years ended December 31, 2013 and December 31, 2012 :

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Reportable Segment:	December 31, 2012	Addition to Goodwill	Impairment Charge of Goodwill (1)	December 31, 2013
		(In thousands)		
MID	$ 19,905	$ —	$ —	$ 19,905
CTO	8,070	—	(8,070)	—
CRI	96,994	—	—	96,994
Total	$ 124,969	$ —	$ (8,070)	$ 116,899

(1) The Company recorded a non-cash goodwill impairment charge of $8.1 million related to the MTD reporting unit as discussed above.

Reportable Segment:	As of December 31, 2013		
	Gross Carrying Amount	Accumulated Impairment Losses	Net Carrying Amount
		(In thousands)	
MID	$ 19,905	$ —	$ 19,905
CTO	8,070	(8,070)	—
CRI	96,994	—	96,994
All Other	13,700	(13,700)	—
Total	$ 138,669	$ (21,770)	$ 116,899

Reportable Segment:	December 31, 2011	Addition to Goodwill (1)	Impairment Charge of Goodwill (2)	December 31, 2012
MID	$ 4,454	$ 15,451	$ —	$ 19,905
CTO	—	8,070	—	8,070
CRI	96,994	—	—	96,994
All Other	13,700	—	(13,700)	—
Total	$ 115,148	$ 23,521	$ (13,700)	$ 124,969

(1) The addition to goodwill resulted from two business combinations in the first quarter of 2012. See Note 5, “Acquisitions” for further details.
(2) The Company recorded a non-cash goodwill impairment charge of $13.7 million related to the LDT reporting unit as discussed above.

Reportable Segment:	As of December 31, 2012		
	Gross Carrying Amount	Accumulated Impairment Losses	Net Carrying Amount
MID	$ 19,905	$ —	$ 19,905
CTO	8,070	—	8,070
CRI	96,994	—	96,994
All Other	13,700	(13,700)	—
Total	$ 138,669	$ (13,700)	$ 124,969

Intangible Assets

The components of the Company’s intangible assets as of December 31, 2013 and December 31, 2012 were as follows:

		As of December 31, 2013		
	Useful Life	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
			(In thousands)	
Existing technology (1)	3 to 10 years	$ 186,202	$ (80,961)	$ 105,241
Customer contracts and contractual relationships (2)	1 to 10 years	31,093	(19,204)	11,889
Non-compete agreements	3 years	300	(258)	42
Total intangible assets		$ 217,595	$ (100,423)	$ 117,172

(1) The Company recorded a non-cash intangible impairment charge of $4.0 million related to the LDT group which has been netted from the gross carrying amount and accumulated amortization for existing technology.

(2) The Company recorded a non-cash intangible impairment charge of $1.5 million related to a favorable contract which has been netted from the gross carrying amount and accumulated amortization for customer contracts and contractual relationships.

		As of December 31, 2012		
	Useful Life	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
			(In thousands)	
Existing technology (1)	3 to 10 years	$ 191,815	$ (57,240)	$ 134,575
Customer contracts and contractual relationships	1 to 10 years	32,650	(14,194)	18,456
Non-compete agreements	3 years	300	(158)	142
Total intangible assets		$ 224,765	$ (71,592)	$ 153,173

(1) The Company recorded a non-cash intangible impairment charge of $15.4 million related to the LDT group as discussed above which has been netted from the gross carrying amount and accumulated amortization for existing technology.

The favorable contracts (included in customer contracts and contractual relationships) are acquired patent licensing agreements where the Company has no performance obligations. Cash received from these acquired favorable contracts reduce the favorable contract intangible asset. During 2013 and 2012 , the Company received $2.3 million and $5.1 million related to the favorable contracts, respectively. As of December 31, 2013 and 2012 , the net balance of the favorable contract intangible assets was $1.0 million and $4.8 million , respectively. The estimated useful life is based on expected payment dates related to the favorable contracts. The group of acquired intangible assets had an original estimated weighted average useful life of approximately 7 years from the date of acquisition. Refer to Note 5, “Acquisitions” for additional details.

As of December 31, 2013, as part of the Company's business strategy of monetizing its patent portfolio to include the sale of selected intellectual property, the Company had $2.3 million of intangible assets classified as held for sale primarily in the MID reportable segment which the Company expects to sell by the middle of 2014.

In addition to the business acquisitions discussed in Note 5, "Acquisitions", the Company acquired other patents in 2013, 2012 and 2011 aggregating $2.5 million , $1.7 million , $4.2 million (only $1.2 million was paid in cash), respectively.

Amortization expense for intangible assets for the years ended December 31, 2013 , 2012 , and 2011 was $28.9 million , $30.3 million and $20.2 million , respectively. The estimated future amortization expense of intangible assets as of December 31, 2013 was as follows (amounts in thousands):

Years Ending December 31:		Amount
2014	$	27,487
2015		25,348
2016		24,356
2017		23,734
2018		10,827
Thereafter		5,420
	$	117,172

7. Segments and Major Customers

Operating segments are based upon Rambus' internal organization structure, the manner in which its operations are managed, the criteria used by its Chief Operating Decision Maker ("CODM") to evaluate segment performance and availability of separate financial information regularly reviewed for resource allocation and performance assessment. Since the fourth quarter of 2012, the Company has four operating segments: (1) MID, which focuses on the design, development and licensing of technology that is related to memory and interfaces; (2) CRI, which focuses on the design, development and licensing of technologies for chip and system security and anti-counterfeiting; (3) LDT, which focuses on the design, development and licensing of technologies for lighting; and (4) CTO, which focuses on the design, development and productization of emerging technologies. For the year ended December 31, 2013 , MID, CRI and CTO were considered reportable segments as they met the quantitative thresholds for disclosure as reportable segments. The results of the remaining operating segment are shown under “All Other”. The presentation of the 2012 and 2011 segment data has been updated accordingly to conform with the 2013 segment presentation.

The Company evaluates the performance of its segments based on segment operating income (loss), which is defined as customer licensing income ("CLI") minus segment operating expenses. Segment operating expenses are comprised of direct operating expenses and the allocation of certain engineering expenses.

CLI includes the Company's measure of the total cash royalties received from its customers under its licensing agreements with them and any product sales. In 2011, the Company bifurcated royalty payments that it received from Samsung between revenue and gain from settlement, which was reflected as reducing operating expenses. In 2013, the Company bifurcated royalty payments that it received from SK hynix and Micron between revenue and gain from settlement, which was reflected as reducing operating expenses. The Company has combined revenue from its customers, including Samsung, SK hynix and Micron, and the gain from the Samsung, SK hynix and Micron settlement as customer licensing income to reflect the total amounts received from all of its customers for the periods presented. In addition, customer licensing income includes other patent royalties received but not recognized as revenue and proceeds from sale of intellectual property. In certain periods presented, certain patent royalties received from a customer was not recognized as revenue as not all revenue recognition criteria were met. Additionally, since the third quarter of 2011, the Company has received patent royalty payments from certain patent license agreements assumed in the acquisition of CRI which were treated as favorable contracts. Cash received from these acquired favorable contracts reduced the favorable contract intangible asset on the Company's balance sheet. The Company has combined these cash royalty payments as CLI to reflect the total amounts received from its customers.

Segment operating expenses do not include gain from settlement discussed above, marketing, general and administrative expenses and the allocation of certain expenses managed at the corporate level, such as stock-based compensation, amortization, and certain bonus and acquisition costs. The “Reconciling Items” category includes these unallocated marketing, general and administrative expenses as well as corporate level expenses. The presentation of the 2012 and 2011 segment data has been updated accordingly to conform with the 2013 segment operating income (loss) definition.

The tables below present reported segment operating income (loss) for the years ended December 31, 2013 , 2012 and 2011 :

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	For the Year Ended December 31, 2013				
	MID	CRI	CTO	All Other	Total
	(In thousands)				
Revenue	$ 232,040	$ 32,625	$ —	$ 6,836	$ 271,501
Gain from settlement	535	—	—	—	535
Other adjustment from revenue to CLI	5,000	2,304	—	2,250	9,554
Customer licensing income	$ 237,575	$ 34,929	$ —	$ 9,086	$ 281,590
Segment operating expenses	33,764	24,149	25,703	22,502	106,118
Segment operating income (loss)	$ 203,811	$ 10,780	$ (25,703)	$ (13,416)	$ 175,472
Reconciling items					(153,008)
Operating income					$ 22,464
Interest and other income (expense), net					(34,481)
Loss before income taxes					$ (12,017)

	For the Year Ended December 31, 2012				
	MID	CRI	CTO	All Other	Total
	(In thousands)				
Revenue	$ 215,047	$ 17,808	$ —	$ 1,196	$ 234,051
Gain from settlement	—	—	—	—	—
Other adjustment from revenue to CLI	7,500	5,165	—	—	12,665
Customer licensing income	$ 222,547	$ 22,973	$ —	$ 1,196	$ 246,716
Segment operating expenses	37,353	13,611	28,106	19,330	98,400
Segment operating income (loss)	$ 185,194	$ 9,362	$ (28,106)	$ (18,134)	$ 148,316
Reconciling items					(238,750)
Operating loss					$ (90,434)
Interest and other income (expense), net					(27,451)
Loss before income taxes					$ (117,885)

	For the Year Ended December 31, 2011				
	MID	CRI	CTO	All Other	Total
	(In thousands)				
Revenue	$ 292,074	$ 17,353	$ —	$ 2,936	$ 312,363
Gain from settlement	6,200	—	—	—	6,200
Other adjustment from revenue to CLI	(3,000)	2,250	—	—	(750)
Customer licensing income	$ 295,274	$ 19,603	$ —	$ 2,936	$ 317,813
Segment operating expenses	45,670	5,606	17,771	15,025	84,072
Segment operating income (loss)	$ 249,604	$ 13,997	$ (17,771)	$ (12,089)	$ 233,741
Reconciling items					(235,277)
Operating loss					$ (1,536)
Interest and other income (expense), net					(24,265)
Loss before income taxes					$ (25,801)

The Company’s CODM does not review information regarding assets on an operating segment basis. Additionally, the Company does not record intersegment revenue or expense.

Revenue from the Company’s major customers representing 10% or more of total revenue for the years ended December 31, 2013 , 2012 and 2011 were as follows:

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	Years Ended December 31,		
	2013	2012	2011
Customer A (MID and CRI reportable segments)	33%	38%	30%
Customer B (MID reportable segment)	*	*	11%
Customer C (MID reportable segment)	*	*	10%

* Customer accounted for less than 10% of total revenue in the period

Revenue from customers in the geographic regions based on the location of customers' headquarters is as follows:

	Years Ended December 31,		
	2013	2012	2011
		(In thousands)	
South Korea	$ 112,806	$ 88,971	$ 94,197
USA	80,652	63,398	103,367
Japan	51,156	63,686	97,726
Europe	15,985	5,236	1,992
Canada	7,896	7,759	14,750
Asia-Other	3,006	5,001	331
Total	$ 271,501	$ 234,051	$ 312,363

At December 31, 2013 , of the $72.6 million of total property, plant and equipment, approximately $71.8 million were located in the United States, $0.7 million were located in India and $0.1 million were located in other foreign locations. At December 31, 2012 , of the $86.9 million of total property, plant and equipment, approximately $85.8 million were located in the United States, $1.0 million were located in India and $0.1 million were located in other foreign locations.

8. Marketable Securities

Rambus invests its excess cash and cash equivalents primarily in U.S. government sponsored obligations, commercial paper, corporate notes and bonds, money market funds and municipal notes and bonds that mature within three years. As of December 31, 2013 and 2012 , all of the Company’s cash equivalents and marketable securities have a remaining maturity of less than one year.

All cash equivalents and marketable securities are classified as available-for-sale. Total cash, cash equivalents and marketable securities are summarized as follows:

	As of December 31, 2013				
(Dollars in thousands)	Fair Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Weighted Rate of Return
Money market funds	$ 300,605	$ 300,605	$ —	$ —	0.01%
Corporate notes, bonds and commercial paper	58,492	58,507	—	(15)	0.15%
Total cash equivalents and marketable securities	359,097	359,112	—	(15)	
Cash	28,565	28,565	—	—	
Total cash, cash equivalents and marketable securities	$ 387,662	$ 387,677	$ —	$ (15)	

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	As of December 31, 2012				
(Dollars in thousands)	Fair Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Weighted Rate of Return
Money market funds	$ 126,570	$ 126,570	$ —	$ —	0.01%
Corporate notes, bonds and commercial paper	57,345	57,356	4	(15)	0.17%
Total cash equivalents and marketable securities	183,915	183,926	4	(15)	
Cash	19,415	19,415	—	—	
Total cash, cash equivalents and marketable securities	$ 203,330	$ 203,341	$ 4	$ (15)	

Available-for-sale securities are reported at fair value on the balance sheets and classified as follows:

	As of	
	December 31, 2013	December 31, 2012
	(Dollars in thousands)	
Cash equivalents	$ 310,131	$ 129,569
Short term marketable securities	48,966	54,346
Total cash equivalents and marketable securities	359,097	183,915
Cash	28,565	19,415
Total cash, cash equivalents and marketable securities	$ 387,662	$ 203,330

The Company continues to invest in highly rated quality, highly liquid debt securities. As of December 31, 2013 , these securities have a remaining maturity of less than one year. The Company holds all of its marketable securities as available-for-sale, marks them to market, and regularly reviews its portfolio to ensure adherence to its investment policy and to monitor individual investments for risk analysis, proper valuation, and unrealized losses that may be other than temporary.

The estimated fair value of cash equivalents and marketable securities classified by the length of time that the securities have been in a continuous unrealized loss position at December 31, 2013 and 2012 are as follows:

	Fair Value		Gross Unrealized Loss	
	December 31, 2013	December 31, 2012	December 31, 2013	December 31, 2012
	(In thousands)			
Less than one year				
Corporate notes, bonds and commercial paper	$ 53,491	$ 51,819	$ (15)	$ (15)

The gross unrealized loss at December 31, 2013 and 2012 was not material in relation to the Company's total available-for-sale portfolio. The gross unrealized loss can be primarily attributed to a combination of market conditions as well as the demand for and duration of the corporate notes and bonds. The Company has no intent to sell, there is no requirement to sell and the Company believes that it can recover the amortized cost of these investments. The Company has found no evidence of impairment due to credit losses in its portfolio. Therefore, these unrealized losses were recorded in other comprehensive income (loss). However, the Company cannot provide any assurance that its portfolio of cash, cash equivalents and marketable securities will not be impacted by adverse conditions in the financial markets, which may require the Company in the future to record an impairment charge for credit losses which could adversely impact its financial results.

See Note 9, "Fair Value of Financial Instruments," for discussion regarding the fair value of the Company's cash equivalents and marketable securities.

9. Fair Value of Financial Instruments

The fair value measurement statement defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining fair value, the Company considers the principal or most advantageous market in which the Company would transact, and the Company considers assumptions that market participants would use when pricing the asset or liability, such as inherent risk, transfer restrictions, and risk of non-performance.

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company's financial instruments are measured and recorded at fair value, except for cost method investments and convertible notes. The Company's non-financial assets, such as goodwill, intangible assets, and property, plant and equipment, are measured at fair value when there is an indicator of impairment and recorded at fair value only when an impairment charge is recognized.

Fair Value Hierarchy

The fair value measurement statement requires disclosure that establishes a framework for measuring fair value and expands disclosure about fair value measurements. The statement requires fair value measurement be classified and disclosed in one of the following three categories:

Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

The Company uses unadjusted quotes to determine fair value. The financial assets in Level 1 include money market funds.

Level 2: Quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability.

The Company uses observable pricing inputs including benchmark yields, reported trades, and broker/dealer quotes. The financial assets in Level 2 include U.S. government bonds and notes, corporate notes, commercial paper and municipal bonds and notes.

Level 3: Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e., supported by little or no market activity).

The financial assets in Level 3 include a cost investment whose value is determined using inputs that are both unobservable and significant to the fair value measurements.

The Company reviews the pricing inputs by obtaining prices from a different source for the same security on a sample of its portfolio. The Company has not adjusted the pricing inputs it has obtained. The following table presents the financial instruments that are carried at fair value and summarizes the valuation of its cash equivalents and marketable securities by the above pricing levels as of December 31, 2013 and 2012 :

	As of December 31, 2013			
	Total	**Quoted Market Prices in Active Markets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
	(In thousands)			
Money market funds	$ 300,605	$ 300,605	$ —	$ —
Corporate notes, bonds and commercial paper	58,492	—	58,492	—
Total available-for-sale securities	$ 359,097	$ 300,605	$ 58,492	$ —

	As of December 31, 2012			
	Total	**Quoted Market Prices in Active Markets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
	(In thousands)			
Money market funds	$ 126,570	$ 126,570	$ —	$ —
Corporate notes, bonds and commercial paper	57,345	—	57,345	—
Total available-for-sale securities	$ 183,915	$ 126,570	$ 57,345	$ —

The Company monitors its investments for other-than-temporary impairment and records appropriate reductions in carrying value when necessary. The Company monitors its investments for other-than-temporary losses by considering current factors, including the economic environment, market conditions, operational performance and other specific factors relating to the business underlying the investment, reductions in carrying values when necessary and the Company's ability and intent to hold the investment for a period of time which may be sufficient for anticipated recovery in the market. Any other-than-temporary loss is reported under "Interest and other income (expense), net" in the consolidated statement of operations. For the year ended December 31, 2013 , the Company recorded an impairment charge related to its non-marketable equity security of a private company as described below. For the year ended December 31, 2012 , the Company did not incur any impairment loss on its investments.

The Company made an investment of $2.0 million in a non-marketable equity security of a private company during 2009. Prior to the second quarter of 2013, the Company had not recorded any impairment charges related to this investment as there had been no events that caused a decrease in its fair value below the carrying cost. During the second quarter of 2013, as part of its periodic evaluation of the fair value of the investment in the non-marketable equity security, and based on the information provided by the private company at that time, the Company determined that there was a decrease in the security's fair value. The fair value of the non-marketable equity security was determined based on an income approach, using level 3 fair value inputs, as it was deemed to be the most indicative of the security's fair value. Accordingly, the Company recorded an impairment charge of $1.4 million within interest income and other income (expense), net, in the consolidated statements of operations for the second quarter of 2013. The Company evaluated the fair value of the investment in the non-marketable security as of December 31, 2013 and determined that there were no additional circumstances that caused a further decrease in its fair value below the carrying cost. Additionally, the Company cannot provide any assurance that its non-marketable equity security will not be further impacted by adverse changes in the general market conditions or deterioration in business prospects of the investee, which may require the Company in the future to record additional impairment charges which could adversely impact its financial results.

The following table presents the financial instruments that are measured and carried at cost on a nonrecurring basis as of December 31, 2013 and 2012 :

	As of December 31, 2013				
(in thousands)	Carrying Value	Quoted market prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Impairment charges for the year ended December 31, 2013
Investment in non-marketable security	$ 600	$ —	$ —	$ 600	$ 1,400

	As of December 31, 2012				
(in thousands)	Carrying Value	Quoted market prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Impairment charges for the year ended December 31, 2012
Investment in non-marketable security	$ 2,000	$ —	$ —	$ 2,000	$ —

In 2013 and 2012 , there were no transfers of financial instruments between different categories of fair value.

The following table presents the financial instruments that are not carried at fair value but which require fair value disclosure as of December 31, 2013 and 2012 :

	As of December 31, 2013			As of December 31, 2012		
(in thousands)	Face Value	Carrying Value	Fair Value	Face Value	Carrying Value	Fair Value
5% Convertible Senior Notes due 2014	$ 172,500	$ 164,047	$ 175,821	$ 172,500	$ 147,556	$ 172,716
1.125% Convertible Senior Notes due 2018	138,000	109,629	142,427	—	—	—

The fair value of the convertible notes at each balance sheet date is determined based on recent quoted market prices for these notes which is a level two measurement. As discussed in Note 11, "Convertible Notes," as of December 31, 2013 , the convertible notes are carried at their face value of $172.5 million and $138.0 million , respectively, less any unamortized debt discount. The carrying value of other financial instruments, including accounts receivable, accounts payable and other payables, approximates fair value due to their short maturities.

Information regarding the Company's goodwill and long-lived assets balances are disclosed in Note 6, "Intangible Assets and Goodwill".

10. Balance Sheet Details

Property, Plant and Equipment, net

Property, plant and equipment, net is comprised of the following:

	As of December 31,	
	2013	2012
	(In thousands)	
Building	$ 40,320	$ 42,129
Computer software	22,068	36,349
Computer equipment	29,869	29,371
Furniture and fixtures	12,360	12,708
Leasehold improvements	7,024	9,731
Machinery	11,533	13,501
Construction in progress	282	9,559
	123,456	153,348
Less accumulated depreciation and amortization	(50,814)	(66,443)
	$ 72,642	$ 86,905

As a result of the impairment analysis in the fourth quarter of 2013, the Company concluded that its LDT asset group was not able to recover the carrying amount of its LDT assets. Upon completion of this analysis, the Company recorded an impairment charge of $3.5 million , $0.5 million and $0.2 million primarily for building improvements, machinery and equipment, and software in its LDT asset group, respectively, which have been netted from the gross carrying amount and accumulated depreciation. As a result of the interim impairment analysis in the third quarter of 2012, the Company concluded that its LDT asset group was not able to recover the carrying amount of its LDT assets. Upon completion of this analysis, the Company recorded an impairment charge of $5.8 million and $0.6 million for building improvements and software in its LDT asset group, respectively, which have been netted from the gross carrying amount and accumulated depreciation. See Note 6, "Intangible Assets and Goodwill" for additional details.

As the Company undertook a series of structural improvements to ready the Sunnyvale and Brecksville facilities for its use and retained sufficient continuing involvement to preclude de-recognition of the buildings under the FASB authoritative guidance applicable to sale leaseback for real estate, the Company accounts for the buildings as owned real estate. On January 31, 2013, the Company entered into a third amendment to the Sunnyvale lease to surrender the 31,000 square-foot space from the first amendment back to the landlord and recorded a total charge of $2.0 million related to the surrender of the 31,000 square-foot space.

As of December 31, 2013 and 2012 , for the Sunnyvale and Brecksville facilities, the Company capitalized $40.3 million and $42.1 million in building based on the estimated fair value of the portion of the unfinished spaces, capitalized interest on the unfinished spaces and construction costs related to the build-out of the facilities. As of December 31, 2012 , the Company capitalized $6.7 million in construction in progress based on the estimated fair value of the portion of the unfinished spaces and capitalized interest on the unfinished spaces. See Note 12, "Commitments and Contingencies" for additional details.

Depreciation expense for the years ended December 31, 2013 , 2012 and 2011 was $15.5 million , $13.2 million and $11.9 million , respectively.

Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss is comprised of the following:

	As of December 31,	
	2013	2012
	(In thousands)	
Foreign currency translation adjustments, net of tax	$ 86	$ 86
Unrealized loss on available-for-sale securities, net of tax	(391)	(386)
Total	$ (305)	$ (300)

11. Convertible Notes

The Company’s convertible notes are shown in the following table.

(Dollars in thousands)	As of December 31, 2013	As of December 31, 2012
1.125% Convertible Senior Notes due 2018	$ 138,000	$ —
5% Convertible Senior Notes due 2014	172,500	172,500
Total principal amount of convertible notes	310,500	172,500
Unamortized discount - 2018 Notes	(28,371)	—
Unamortized discount - 2014 Notes	(8,453)	(24,944)
Total unamortized discount	$ (36,824)	$ (24,944)
Total convertible notes	$ 273,676	$ 147,556
Less current portion	164,047	—
Total long-term convertible notes	$ 109,629	$ 147,556

During the second quarter of 2013, the 2014 Notes were reclassified from a long-term liability to a short-term liability as they will be due on June 15, 2014.

1.125% Convertible Senior Notes due 2018. On August 16, 2013, the Company issued $138.0 million aggregate principal amount of 1.125% convertible senior notes pursuant to an indenture (the "Indenture") by and between the Company and U.S. Bank, National Association as the trustee. The 2018 Notes will mature on August 15, 2018 (the "Maturity Date"), subject to earlier repurchase or conversion. In accounting for the 2018 Notes at issuance, the Company separated the 2018 Notes into liability and equity components pursuant to the accounting standards for convertible debt instruments that may be fully or partially settled in cash upon conversion. As of the date of issuance, the Company determined that the liability component of the 2018 Notes was $107.7 million and the equity component of the 2018 Notes was $30.3 million . The fair value of the liability component was estimated using an interest rate for a similar instrument without a conversion feature. The unamortized discount related to the 2018 Notes is being amortized to interest expense using the effective interest method over five years through August 2018.

The Company will pay cash interest at an annual rate of 1.125% of the principal amount at issuance, payable semi-annually in arrears on February 15 and August 15 of each year, commencing on February 15, 2014. The Company incurred transaction costs of approximately $3.6 million related to the issuance of 2018 Notes. In accounting for these costs, the Company allocated the costs to the liability and equity components in proportion to the allocation of proceeds from the issuance of the 2018 Notes to such components. Transaction costs allocated to the liability component of $2.8 million were recorded as deferred offering costs in other assets and are being amortized to interest expense using the effective interest method over five years (the expected term of the debt). The transaction costs allocated to the equity component of $0.8 million were recorded as additional paid-in capital. The 2018 Notes are the Company's general unsecured obligations, ranking equally in right of payment to all of Rambus’ existing and future senior unsecured indebtedness, including the 2014 Notes, and senior in right of payment to any of the Company’s future indebtedness that is expressly subordinated to the 2018 Notes.

The 2018 Notes are convertible into shares of the Company’s common stock at an initial conversion rate of 82.8329 shares of common stock per $1,000 principal amount of 2018 Notes, subject to adjustment in certain events. This is equivalent to an initial conversion price of approximately $12.07 per share of common stock. Holders may surrender their 2018 Notes for conversion prior to the close of business day immediately preceding May 15, 2018 only under the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on December 31, 2013 (and only during such calendar quarter), if the closing sale price of the common stock for 20 days or more trading days (whether or not consecutive) during a period of 30 days consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is more than 130% of the conversion price per share of common stock on the last trading day of the preceding calendar quarter; (2) during the five business day period after any five consecutive trading day period (the ‘‘measurement period’’) in which the trading price (as defined below) per $1,000 principal amount of notes for each trading day of the measurement period was less than 98% of the product of the closing sale price of the Company's common stock and the conversion rate on each such trading day; (3) upon the occurrence of specified distributions to holders of the Company's common stock; or (4) upon the occurrence of specified corporate events. On or after May 15, 2018 until the close of business on the second scheduled trading day immediately preceding the Maturity Date, holders may convert their notes at any time, regardless of the foregoing circumstances. If a holder elects to convert its 2018 Notes in connection with certain fundamental changes, as that term is defined in the Indenture, that occur prior to the Maturity Date, the Company will, in certain circumstances, increase the conversion rate for 2018 Notes converted in connection with such fundamental changes by a specified number of shares of common stock.

Upon conversion of the 2018 Notes, the Company will pay cash up to the aggregate principal amount of the notes to be converted and pay or deliver, as the case may be, cash, shares of the Company's common stock or a combination of cash and shares of the Company's common stock, at the Company's election, in respect of the remainder, if any, of the Company's conversion obligation in excess of the aggregate principal amount of the notes being converted, as specified in the Indenture.

The Company may not redeem the 2018 Notes at its option prior to the Maturity Date, and no sinking fund is provided for the 2018 Notes.

Upon the occurrence of a fundamental change, holders may require the Company to repurchase for cash all or any portion of their notes at a repurchase price equal to 100% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

The following events are considered events of default under the Indenture which may result in the acceleration of the maturity of the 2018 Notes:

(1) default in the payment when due of any principal of any of the notes at maturity, upon redemption or upon exercise of a repurchase right or otherwise;

(2) default in the payment of any interest, including additional interest, if any, on any of the notes, when the interest becomes due and payable, and continuance of such default for a period of 30 days;

(3) the Company's failure to deliver cash or cash and shares of the Company's common stock (including any additional shares deliverable as a result of a conversion in connection with a make-whole fundamental change, as defined in the Indenture) when required by the Indenture;

(4) default in the Company's obligation to provide notice of the occurrence of a fundamental change, make-whole fundamental change or distribution to holders of the Company's common stock when required by the Indenture;

(5) the Company's failure to comply with any of the Company's other agreements in the notes or the Indenture (other than those referred to in clauses (1) through (4) above) for 60 days after the Company's receipt of written notice to the Company of such default from the trustee or to the Company and the trustee of such default from holders of not less than 25% in aggregate principal amount of the 2018 Notes then outstanding;

(6) the Company's failure to pay when due the principal of, or acceleration of, any indebtedness for money borrowed by the Company or any of the Company's material subsidiaries in excess of $40 million principal amount, if such indebtedness is not discharged, or such acceleration is not annulled, for a period of 30 days after written notice thereof is delivered to the Company by the trustee or to the Company and the trustee by the holders of 25% or more in aggregate principal amount of the notes then outstanding without such failure to pay having been cured or waived, such acceleration having been rescinded or annulled (if applicable) and such indebtedness not having been paid or discharged; and

(7) certain events of bankruptcy, insolvency or reorganization relating to the Company or any of the Company's material subsidiaries (as defined in the Indenture).

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

If an event of default, other than an event of default described in clause (7) above with respect to the Company, occurs and is continuing, either the trustee or the holders of at least 25% in aggregate principal amount of the notes then outstanding may declare the principal amount of, and accrued and unpaid interest, including additional interest, if any, on the notes then outstanding to be immediately due and payable. If an event of default described in clause (7) above occurs with respect to the Company, the principal amount of and accrued and unpaid interest, including additional interest, if any, on the notes will automatically become immediately due and payable.

5% Convertible Senior Notes due 2014. On June 29, 2009, the Company issued $150.0 million aggregate principal amount of 5% convertible senior notes due June 15, 2014. As of the date of issuance, the Company determined that the liability component of the 2014 Notes was approximately $92.4 million and the equity component was approximately $57.6 million . On July 10, 2009, an additional $22.5 million of the 2014 Notes were issued as a result of the underwriters exercising their overallotment option. As of the date of issuance of the $22.5 million 2014 Notes, the Company determined that the liability component was approximately $14.3 million , and the equity component was approximately $8.2 million . The unamortized discount related to the 2014 Notes is being amortized to interest expense using the effective interest method over five years through June 2014.

The Company will pay cash interest at an annual rate of 5% of the principal amount at issuance, payable semi-annually in arrears on June 15 and December 15 of each year, beginning on December 15, 2009. During 2013 , 2012 and 2011 , the Company paid approximately $8.6 million of interest related to the 2014 Notes in each year. Issuance costs were approximately $5.1 million of which $3.2 million is related to the liability portion, which is being amortized to interest expense over five years (the expected term of the debt), and $1.9 million is related to the equity portion. The 2014 Notes are the Company's general unsecured obligation, ranking equal in right of payment to all of the Company's existing and future senior indebtedness and are senior in right of payment to any of the Company's future indebtedness that is expressly subordinated to the 2014 Notes.

The 2014 Notes are convertible into shares of the Company's Common Stock at an initial conversion rate of 51.8 shares of Common Stock per $1,000 principal amount of 2014 Notes. This is equivalent to an initial conversion price of approximately $19.31 per share of common stock. Holders may surrender their 2014 Notes for conversion prior to March 15, 2014 only under the following circumstances: (i) during any calendar quarter beginning after the calendar quarter ending September 30, 2009, and only during such calendar quarter, if the closing sale price of the Common Stock for 20 days or more trading days in the period of 30 days consecutive trading days ending on the last trading day of the immediately preceding calendar quarter exceeds 130% of the conversion price in effect on the last trading day of the immediately preceding calendar quarter, (ii) during the five business day period after any 10 days consecutive trading day period in which the trading price per $1,000 principal amount of 2014 Notes for each trading day of such 10 days consecutive trading day period was less than 98% of the product of the closing sale price of the Common Stock for such trading day and the applicable conversion rate, (iii) upon the occurrence of specified distributions to holders of the Common Stock, (iv) upon a fundamental change of the Company as specified in the Indenture governing the 2014 Notes, or (v) if the Company calls any or all of the 2014 Notes for redemption, at any time prior to the close of business on the business day immediately preceding the redemption date. On and after March 15, 2014, holders may convert their 2014 Notes at any time until the close of business on the third business day prior to the maturity date, regardless of the foregoing circumstances.

Upon conversion of the 2014 Notes, the Company will pay (i) cash equal to the lesser of the aggregate principal amount and the conversion value of the 2014 Notes and (ii) shares of the Company's Common Stock for the remainder, if any, of the Company's conversion obligation, in each case based on a daily conversion value calculated on a proportionate basis for each trading day in the 20 days trading day conversion reference period as further specified in the Indenture.

The Company may not redeem the 2014 Notes at its option prior to June 15, 2012. At any time on or after June 15, 2012, the Company will have the right, at its option, to redeem the 2014 Notes in whole or in part for cash in an amount equal to 100% of the principal amount of the 2014 Notes to be redeemed, together with accrued and unpaid interest, if any, if the closing sale price of the Common Stock for at least 20 days of the 30 days consecutive trading days immediately prior to any date the Company gives a notice of redemption is greater than 130% of the conversion price on the date of such notice.

Upon the occurrence of a fundamental change, holders may require the Company to repurchase some or all of their 2014 Notes for cash at a price equal to 100% of the principal amount of the 2014 Notes being repurchased, plus accrued and unpaid interest, if any. In addition, upon the occurrence of certain fundamental changes, as that term is defined in the Indenture, the Company will, in certain circumstances, increase the conversion rate for 2014 Notes converted in connection with such fundamental changes by a specified number of shares of Common Stock, not to exceed 15.5401 per $1,000 principal amount of the 2014 Notes.

The following events are considered “Events of Default” under the Indenture which may result in the acceleration of the maturity of the 2014 Notes:

(1) default in the payment when due of any principal of any of the 2014 Notes at maturity, upon redemption or upon exercise of a repurchase right or otherwise;

(2) default in the payment of any interest, including additional interest, if any, on any of the 2014 Notes, when the interest becomes due and payable, and continuance of such default for a period of 30 days ;

(3) the Company’s failure to deliver cash or cash and shares of Common Stock (including any additional shares deliverable as a result of a conversion in connection with a make-whole fundamental change) when required to be delivered upon the conversion of any 2014 Note;

(4) default in the Company’s obligation to provide notice of the occurrence of a fundamental change when required by the Indenture;

(5) the Company’s failure to comply with any of its other agreements in the 2014 Notes or the Indenture (other than those referred to in clauses (1) through (4) above) for 60 days after the Company’s receipt of written notice to the Company of such default from the trustee or to the Company and the trustee of such default from holders of not less than 25% in aggregate principal amount of the 2014 Notes then outstanding;

(6) the Company’s failure to pay when due the principal of, or acceleration of, any indebtedness for money borrowed by the Company or any of its subsidiaries in excess of $30 million principal amount, if such indebtedness is not discharged, or such acceleration is not annulled, by the end of a period of ten days after written notice to the Company by the trustee or to the Company and the trustee by the holders of at least 25% in aggregate principal amount of the 2014 Notes then outstanding; and

(7) certain events of bankruptcy, insolvency or reorganization relating to the Company or any of its material subsidiaries (as defined in the Indenture).

If an event of default, other than an event of default in clause (7) above with respect to the Company occurs and is continuing, either the trustee or the holders of at least 25% in aggregate principal amount of the 2014 Notes then outstanding may declare the principal amount of, and accrued and unpaid interest, including additional interest, if any, on the 2014 Notes then outstanding to be immediately due and payable. If an event of default described in clause (7) above occurs with respect to the Company the principal amount of and accrued and unpaid interest, including additional interest, if any, on the 2014 Notes will automatically become immediately due and payable.

Additional paid-in capital at December 31, 2013 and December 31, 2012 includes $93.4 million and $63.9 million , respectively, related to the equity component of the 2018 and 2014 Notes.

As of December 31, 2013 , none of the conversion conditions were met related to the 2018 Notes or the 2014 Notes. Therefore, the classification of the entire equity component for the 2018 Notes and the 2014 Notes in permanent equity is appropriate as of December 31, 2013 .

Interest expense related to the notes for the years ended December 31, 2013 , 2012 and 2011 was as follows:

	Years Ended December 31,		
	2013	2012	2011
		(in thousands)	
2018 Notes coupon interest at a rate of 1.125%	$ 582	$ —	$ —
2018 Notes amortization of discount and debt issuance cost at an additional effective interest rate of 5.5%	$ 2,171	—	—
2014 Notes coupon interest at a rate of 5%	8,625	8,625	8,625
2014 Notes amortization of discount at an additional effective interest rate of 11.7%	17,126	14,695	12,622
Total interest expense on convertible notes	$ 28,504	$ 23,320	$ 21,247

12. Commitments and Contingencies

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

On December 15, 2009, the Company entered into a lease agreement for approximately 125,000 square feet of office space located at 1050 Enterprise Way in Sunnyvale, California commencing on July 1, 2010 and expiring on June 30, 2020. The office space is used for the Company’s corporate headquarters, as well as engineering, marketing and administrative operations and activities. The annual base rent for these leases includes certain rent abatement and increases annually over the lease term. The Company has two options to extend the lease for a period of 60 months each and a one-time option to terminate the lease after 84 months in exchange for an early termination fee. Pursuant to the terms of the lease, the landlord agreed to reimburse the Company approximately $9.1 million , which was received by the year ended December 31, 2011 . The Company recognized the reimbursement as an additional imputed financing obligation as such payment from the landlord is deemed to be an imputed financing obligation. On November 4, 2011, to better plan for future expansion, the Company entered into an amended lease for its Sunnyvale facility for approximately an additional 31,000 -square-foot space commencing on March 1, 2012 and expiring on June 30, 2020. Additionally, a tenant improvement allowance to be provided by the landlord was approximately $1.7 million . On September 29, 2012, the Company entered into a second amended Sunnyvale lease to reduce the tenant improvement allowance to approximately $1.5 million . On January 31, 2013, the Company entered into a third amendment to the Sunnyvale lease to surrender the 31,000 square-foot space from the first amendment back to the landlord and recorded a total charge of $2.0 million related to the surrender of the amended lease.

On March 8, 2010, the Company entered into a lease agreement for approximately 25,000 square feet of office and manufacturing areas, located in Brecksville, Ohio. The office area is used for the LDT group’s engineering activities while the manufacturing area is used for the manufacture of prototypes. This lease was amended on September 29, 2011 to expand the facility to approximately 51,000 total square feet and the amended lease will expire on July 31, 2019. The Company has an option to extend the lease for a period of 60 months .

The Company undertook a series of structural improvements to ready the Sunnyvale and Brecksville facilities for its use. Since these improvements were considered structural in nature and the Company was responsible for any cost overruns, for accounting purposes, the Company was treated in substance as the owner of each construction project during the construction period. At the completion of each construction, the Company concluded that it retained sufficient continuing involvement to preclude de-recognition of the building under the FASB authoritative guidance applicable to the sale leasebacks of real estate. As such, the Company continues to account for the buildings as owned real estate and to record an imputed financing obligation for its obligations to the legal owners.

Monthly lease payments on these facilities are allocated between the land element of the lease (which is accounted for as an operating lease) and the imputed financing obligation. The imputed financing obligation is amortized using the effective interest method and the interest rate was determined in accordance with the requirements of sale leaseback accounting. For the years ended December 31, 2013 , 2012 and 2011 , the Company recognized in its Consolidated Statements of Operations $4.4 million , $4.1 million , and $3.3 million , respectively, of interest expense in connection with the imputed financing obligation on these facilities. At December 31, 2013 and 2012 , the imputed financing obligation balance in connection with these facilities was $39.7 million and $45.9 million , respectively, which was primarily classified under long-term imputed financing obligation.

As of December 31, 2013 and 2012 , the Company capitalized $40.3 million and $48.8 million in property, plant and equipment based on the estimated fair value of the portion of the pre-construction shell, construction costs related to the build-out of the facilities and capitalized interest during construction period. At the end of the initial lease term, should the Company decide not to renew the lease, the Company would reverse the equal amounts of the net book value of the building and the corresponding imputed financing obligation.

In November 2011, the Company entered into a lease agreement for approximately 26,000 square feet of office space in San Francisco, California to be used for CRI's office space and is treated as an operating lease. This lease has a commencement date of February 1, 2012 and a lease term of 75 months from the commencement date. The annual base rent includes certain rent abatement and increases annually over the lease term.

In connection with the June 3, 2011 acquisition of CRI, the Company is obligated to pay a retention bonus to certain CRI employees and contractors, subject to certain eligibility and acceleration provisions including the condition of employment, in three equal amounts of approximately $16.7 million . The first and second payments were paid in cash during the second quarter of 2012 and 2013, respectively, and the remaining payment payable on June 3, 2014 will be paid in cash or stock at the Company’s election. As of December 31, 2013 , the remaining retention bonus commitment is $16.9 million and may be forfeited in part or whole by the covered employees and contractors upon voluntary departure from employment or discontinuation of services. Any amounts forfeited will be accelerated and paid by the Company to a designated charity. See Note 5, “Acquisitions,” for additional information regarding the acquisition of CRI.

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

On June 29, 2009, the Company entered into an Indenture with U.S. Bank, National Association, as trustee, relating to the issuance by the Company of $150.0 million aggregate principal amount of the 2014 Notes. On July 10, 2009, an additional $22.5 million in aggregate principal amount of 2014 Notes were issued as a result of the underwriters exercising their overallotment option. The aggregate principal amount of the 2014 Notes outstanding as of December 31, 2013 and 2012 was $172.5 million , offset by unamortized debt discount of $8.5 million and $24.9 million , respectively, in the accompanying consolidated balance sheets. The debt discount is currently being amortized over the remaining 6 months until maturity of the 2014 Notes on June 15, 2014. See Note 11, "Convertible Notes," for additional details.

On August 16, 2013, the Company entered into an Indenture with U.S. Bank, National Association, as trustee, relating to the issuance by the Company of $138.0 million aggregate principal amount of the 2018 Notes. The aggregate principal amount of the 2018 notes as of December 31, 2013 was $138.0 million , offset by unamortized debt discount of $ 28.4 million in the accompanying consolidated balance sheet. The unamortized discount related to the 2018 Notes is being amortized to interest expense using the effective interest method over the remaining 56 months until maturity of the 2018 Notes on August 15, 2018. See Note 11, "Convertible Notes," for additional details.

As of December 31, 2013 , the Company's material contractual obligations are as follows (in thousands):

	Total	2014	2015	2016	2017	2018	Thereafter
Contractual obligations (1)							
Imputed financing obligation (2)	$ 40,260	$ 5,874	$ 6,010	$ 6,156	$ 6,302	$ 6,447	$ 9,471
Leases and other contractual obligations	8,456	3,753	2,108	1,237	1,018	340	—
Software licenses (3)	8,715	5,477	2,865	373	—	—	—
Acquisition retention bonuses (4)	18,083	18,013	70	—	—		—
Convertible notes	310,500	172,500	—	—	—	138,000	—
Interest payments related to convertible notes	12,076	5,865	1,553	1,553	1,553	1,552	—
Total	$ 398,090	$ 211,482	$ 12,606	$ 9,319	$ 8,873	$ 146,339	$ 9,471

(1) The above table does not reflect possible payments in connection with uncertain tax benefits of approximately $18.8 million including $12.6 million recorded as a reduction of long-term deferred tax assets and $6.2 million in long-term income taxes payable, as of December 31, 2013 . As noted below in Note 17, "Income Taxes," although it is possible that some of the unrecognized tax benefits could be settled within the next 12 months , the Company cannot reasonably estimate the outcome at this time.

(2) With respect to the imputed financing obligation, the main components of the difference between the amount reflected in the contractual obligations table and the amount reflected on the Consolidated Balance Sheets are the interest on the imputed financing obligation and the estimated common area expenses over the future periods. Additionally, the amount includes the amended Ohio lease and the amended Sunnyvale lease.

(3) The Company has commitments with various software vendors for non-cancellable license agreements generally having terms longer than one year. The above table summarizes those contractual obligations as of December 31, 2013 which are also presented on the Company's Consolidated Balance Sheet under current and other long-term liabilities.

(4) In connection with acquisitions, the Company is obligated to pay retention bonuses to certain employees and contractors, subject to certain eligibility and acceleration provisions including the condition of employment. The remaining $16.9 million of CRI retention bonuses payable on June 3, 2014 will be paid in cash or stock at the Company's election.

Rent expense was approximately $3.1 million , $4.1 million and $2.7 million for the years ended December 31, 2013 , 2012 and 2011 , respectively.

Indemnifications

The Company enters into standard license agreements in the ordinary course of business. Although the Company does not indemnify most of its customers, there are times when an indemnification is a necessary means of doing business.

Indemnifications cover customers for losses suffered or incurred by them as a result of any patent, copyright, or other intellectual property infringement claim by any third party arising as result of the applicable agreement with the Company. The Company generally attempts to limit the maximum amount of indemnification that the Company could be required to make under these agreements, to the amount of fees received by the Company.

Several securities fraud class actions, private lawsuits and shareholder derivative actions were filed in state and federal courts against certain of the Company's current and former officers and directors related to the stock option granting actions. As permitted under Delaware law, the Company has agreements whereby its officers and directors are indemnified for certain events or occurrences while the officer or director is, or was serving, at the Company's request in such capacity. The term of the indemnification period is for the officer's or director's term in such capacity. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited. The Company has a director and officer insurance policy that reduces the Company's exposure and enables the Company to recover a portion of future amounts to be paid. As a result of these indemnification agreements, the Company continues to make payments on behalf of primarily former officers and some current officers. As of December 31, 2013 and 2012 , the Company had made cumulative payments of approximately $32.2 million and $32.2 million , respectively, on their behalf. These payments were recorded under costs of restatement and related legal activities in the consolidated statements of operations. Also, in 2011, the Company reached a settlement agreement that resolved the matter captioned *Stuart J. Steele, et al. v. Rambus Inc., et al.* , where the Company agreed to settle the claims against it and the individual defendants for approximately $10.9 million which was recorded under costs of restatement and related legal activities in the consolidated statements of operations. As of December 31, 2013 , the Company has cumulatively received $12.3 million from insurance settlements related to the defense of the Company, its directors and its officers which were recorded under costs of restatement and related legal activities in the consolidated statements of operations. During the year ended December 31, 2013 , no insurance settlements were received.

13. Equity Incentive Plans and Stock-Based Compensation

Stock Option Plans

The Company has three stock option plans under which grants are currently outstanding: the 1997 Stock Option Plan (the "1997 Plan"), the 1999 Non-statutory Stock Option Plan (the "1999 Plan") and the 2006 Equity Incentive Plan (the "2006 Plan"). Grants under all plans typically have a requisite service period of 60 months or 48 months , have straight-line or graded vesting schedules (the 1997 and 1999 plans only) and expire not more than 10 years from date of grant. Effective with stockholder approval of the 2006 Plan in May 2006, no further awards are being made under the 1997 Plan and the 1999 Plan but the plans will continue to govern awards previously granted under those plans.

The 2006 Plan was approved by the stockholders in May 2006. The 2006 Plan, as amended, provides for the issuance of the following types of incentive awards: (i) stock options; (ii) stock appreciation rights; (iii) restricted stock; (iv) restricted stock units; (v) performance shares and performance units; and (vi) other stock or cash awards. This plan provides for the granting of awards at less than fair market value of the common stock on the date of grant, but such grants would be counted against the numerical limits of available shares at a ratio of 1.5 to 1.0 . The Board of Directors reserved 8,400,000 and shares in March 2006 for issuance under this plan, subject to stockholder approval. Upon stockholder approval of this Plan on May 10, 2006, the 1997 Plan was replaced and the 1999 Plan was terminated. On April 30, 2009 and April 26, 2012, stockholders approved an additional 6,500,000 shares on each date for issuance under the 2006 Plan. Those who will be eligible for awards under the 2006 Plan include employees, directors and consultants who provide services to the Company and its affiliates. These options typically have a requisite service period of 60 months or 48 months , have straight-line vesting schedules, and expire ten years from date of grant. The Board will periodically review actual share consumption under the 2006 Plan and may make a request for additional shares as needed.

As of December 31, 2013 , 2,527,428 shares of the 21,400,000 shares approved under the 2006 Plan remain available for grant. The 2006 Plan is now the Company's only plan for providing stock-based incentive compensation to eligible employees, directors and consultants.

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

A summary of shares available for grant under the Company's plans is as follows:

	Shares Available for Grant
Shares available as of December 31, 2010	5,348,162
Stock options granted	(2,357,001)
Stock options forfeited	865,097
Stock options expired under former plans	(503,526)
Nonvested equity stock and stock units granted (1)	(562,257)
Nonvested equity stock and stock units forfeited (1)	22,401
Total shares available for grant as of December 31, 2011	2,812,876
Increase in shares approved for issuance	6,500,000
Stock options granted (2)	(7,789,220)
Stock options forfeited (3)	2,610,812
Stock options expired under former plans	(576,763)
Nonvested equity stock and stock units granted (1)	(1,113,014)
Nonvested equity stock and stock units forfeited (1)	284,468
Total shares available for grant as of December 31, 2012	2,729,159
Stock options granted	(2,084,276)
Stock options forfeited	3,318,022
Stock options expired under former plans	(1,157,419)
Nonvested equity stock and stock units granted (1)	(709,611)
Nonvested equity stock and stock units forfeited (1)	431,553
Total shares available for grant as of December 31, 2013	2,527,428

(1) For purposes of determining the number of shares available for grant under the 2006 Plan against the maximum number of shares authorized, each restricted stock granted reduces the number of shares available for grant by 1.5 shares and each restricted stock forfeited increases shares available for grant by 1.5 shares.

(2) Amount includes 2,840,986 shares that were granted from the stock option exchange program (discussed below).

(3) Amount excludes 6,449,255 shares that were surrendered from the stock option exchange program (discussed below) as the shares are no longer available for grant.

Stock Option Exchange Program

On April 26, 2012, the Company launched a one-time stock option exchange program ("option exchange") pursuant to which eligible employees were able to exchange certain outstanding stock options for a fewer number of shares having an exercise price equal to the fair market value of the Company's common stock on June 22, 2012. The Company's named executive officers, senior vice presidents and members of its Board of Directors were not eligible to participate in the Program. Pursuant to the terms and conditions of the option exchange, the Company accepted for exchange, 6,449,255 options. All surrendered options were canceled effective as of the expiration of the option exchange, and immediately thereafter, in exchange thereof, the Company granted new options with an exercise price of $5.63 per share (representing the closing price of its common stock on June 22, 2012, as reported on the NASDAQ Global Select Market) to purchase an aggregate of 2,840,986 shares of common stock under the 2006 Plan. New options have a new contractual term of the longer of the original remaining contractual term of the surrendered options or five years, and generally will vest over a three -year period from the date of grant, with one-third of the shares vesting on the first year anniversary of the grant date and the remaining shares vesting monthly thereafter. As a result of the option exchange, the total incremental compensation cost of the new options was approximately $1.0 million . The total remaining unrecognized compensation cost related to the original options of $19.9 million and the incremental compensation cost of the new options granted of $1.0 million will be recognized over the three years requisite service period.

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

General Stock Option Information

The following table summarizes stock option activity under the 1997, 1999 and 2006 Plans for the years ended December 31, 2013 , 2012 and 2011 and information regarding stock options outstanding, exercisable, and vested and expected to vest as of December 31, 2013 .

	Options Outstanding			Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
	Number of Shares		Weighted Average Exercise Price per Share		
	(Dollars in thousands, except per share amounts)				
Outstanding as of December 31, 2010	13,969,383	$	18.85		
Options granted	2,357,001	$	18.83		
Options exercised	(873,691)	$	8.46		
Options forfeited	(865,097)	$	14.53		
Outstanding as of December 31, 2011	14,587,596	$	19.73		
Options granted	7,789,220	$	5.81		
Options exercised	(221,934)	$	4.44		
Options forfeited	(2,610,812)	$	10.91		
Options surrendered in stock option exchange program	(6,449,255)	$	21.11		
Outstanding as of December 31, 2012	13,094,815	$	12.79		
Options granted	2,084,276	$	6.09		
Options exercised	(483,923)	$	6.72		
Options forfeited	(3,318,022)	$	14.51		
Outstanding as of December 31, 2013	11,377,146	$	11.32	5.7	$ 24,540
Vested or expected to vest at December 31, 2013	10,685,898	$	11.64	5.5	$ 22,113
Options exercisable at December 31, 2013	6,242,733	$	15.35	3.7	$ 6,779

During the years ended December 31, 2013 and 2011, no stock options that contain a market condition were granted. During the year ended December 31, 2012, 1,795,000 stock options that contain a market condition were granted. These options vest in three years if specified stock prices are achieved. The fair values of the options granted with a market condition were calculated using a binomial valuation model, which estimates the potential outcome of reaching the market condition based on simulated future stock prices. As of December 31, 2013 and 2012 , there were 1,315,000 and 1,535,000 stock options outstanding, respectively, that require the Company to achieve minimum market conditions in order for the options to become exercisable.

The aggregate intrinsic value in the table above represents the total pre-tax intrinsic value for in-the-money options at December 31, 2013 , based on the $9.47 closing stock price of Rambus’ Common Stock on December 31, 2013 on the NASDAQ Global Select Market, which would have been received by the option holders had all option holders exercised their options as of that date. The total number of in-the-money options outstanding and exercisable as of December 31, 2013 was 7,167,696 and 2,453,877 , respectively.

The following table summarizes the information about stock options outstanding and exercisable as of December 31, 2013 :

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
$4.13 – $5.39	1,087,176	8.6	$ 4.45	93,470	$ 4.80
$5.46 – $5.46	1,306,654	9.0	$ 5.46	240,292	$ 5.46
$5.49 – $5.49	36,918	9.1	$ 5.49	5,734	$ 5.49
$5.63 – $5.63	1,511,307	5.3	$ 5.63	724,285	$ 5.63
$5.76– $5.76	1,246,839	8.5	$ 5.76	219,246	$ 5.76
$6.39– $7.97	1,138,049	7.3	$ 7.27	531,824	$ 7.27
$8.11 – $13.30	1,177,647	5.7	$ 9.21	784,077	$ 9.15
$13.31 – $18.69	1,250,463	2.8	$ 16.92	1,138,570	$ 17.15
$19.13 – $21.51	1,318,182	2.5	$ 20.15	1,237,247	$ 20.10
$21.95 – $40.80	1,303,911	2.0	$ 26.12	1,267,988	$ 26.21
$4.13 – $40.80	11,377,146	5.7	$ 11.32	6,242,733	$ 15.35

Employee Stock Purchase Plans

During the three year period ended December 31, 2013 , the Company had one employee stock purchase plan, the 2006 Employee Stock Purchase Plan.

In March 2006, the Company adopted the 2006 Employee Stock Purchase Plan, as amended (the “2006 Purchase Plan” or "ESPP") and reserved 1,600,000 shares, subject to stockholder approval which was received on May 10, 2006. On April 26, 2012, an additional 1,500,000 shares were approved by stockholders. On September 27, 2013, the Company filed a Registration Statement on Form S-8, registering 1,500,000 additional shares under the ESPP in connection with the commencement of the next subscription period under the ESPP. Issuance of these additional shares will be subject to shareholder approval amending the ESPP to increase the number of shares reserved for issuance by 1,500,000 shares at the Company’s next annual meeting of shareholders in April 2014. Employees generally will be eligible to participate in this plan if they are employed by Rambus for more than 20 hours per week and more than five months in a fiscal year. The 2006 Purchase Plan provides for six month offering periods, with a new offering period commencing on the first trading day on or after May 1 and November 1 of each year. Under this plan, employees may purchase stock at the lower of 85% of the beginning of the offering period (the enrollment date), or the end of each offering period (the purchase date). Employees generally may not purchase more than the number of shares having a value greater than $25,000 in any calendar year, as measured at the purchase date.

The Company issued 1,063,283 shares at a weighted average price of $4.87 per share during the year ended December 31, 2013 . The Company issued 731,449 shares at a weighted average price of $4.21 per share during the year ended December 31, 2012 . The Company issued 271,804 shares at a weighted average price of $15.62 per share during the year ended December 31, 2011 . As of December 31, 2013 , 19,232 shares under the ESPP remain available for issuance.

Stock-Based Compensation

Stock Options

During the years ended December 31, 2013 , 2012 and 2011 , Rambus granted 2,084,276 , 7,789,220 (including options granted in the stock option exchange program and options granted that contain a market condition) and 2,357,001 stock options, respectively, with an estimated total grant-date fair value of $5.4 million , $32.7 million and $24.2 million , respectively. During the years ended December 31, 2013 , 2012 and 2011 , Rambus recorded stock-based compensation related to stock options of $10.4 million , $15.0 million and $19.6 million , respectively.

As of December 31, 2013 , there was $16.9 million of total unrecognized compensation cost, net of expected forfeitures, related to unvested stock-based compensation arrangements granted under the stock option plans. This cost is expected to be recognized over a weighted-average period of 2.3 years . The total fair value of options vested for the years ended December 31, 2013 , 2012 and 2011 was $64.3 million , $80.0 million and $144.8 million , respectively.

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The total intrinsic value of options exercised was $1.3 million , $0.2 million and $6.2 million for the years ended December 31, 2013 , 2012 and 2011 , respectively. Intrinsic value is the total value of exercised shares based on the price of the Company's Common Stock at the time of exercise less the proceeds received from the employees to exercise the options.

During the years ended December 31, 2013 , 2012 and 2011 , proceeds from employee stock option exercises totaled approximately $3.3 million , $1.0 million and $7.4 million , respectively.

Employee Stock Purchase Plans

During the years ended December 31, 2013 , 2012 and 2011 , Rambus recorded stock-based compensation related to the ESPP of $1.5 million , $2.2 million and $1.7 million , respectively. As of December 31, 2013 , there was an immaterial amount of unrecognized compensation cost related to share-based compensation arrangements granted under the ESPP. That cost is expected to be recognized over four months.

There were no tax benefits realized as a result of employee stock option exercises, stock purchase plan purchases, and vesting of equity stock and stock units for the years ended December 31, 2013 , 2012 and 2011 .

Valuation Assumptions

Rambus estimates the fair value of stock options using the Black-Scholes-Merton model ("BSM"). The BSM model determines the fair value of stock-based compensation and is affected by Rambus' stock price on the date of the grant as well as assumptions regarding a number of highly complex and subjective variables. These variables include expected volatility, expected life of the award, expected dividend rate, and expected risk-free rate of return. The assumptions for expected volatility and expected life are the two assumptions that significantly affect the grant date fair value. If actual results differ significantly from these estimates, stock-based compensation expense and Rambus' results of operations could be materially impacted.

The fair value of stock awards is estimated as of the grant date using the BSM option-pricing model assuming a dividend yield of 0% and the additional weighted-average assumptions as listed in the following tables:

The following table presents the weighted-average assumptions used to estimate the fair value of stock options granted that contain only service conditions in the periods presented. The assumptions used to estimate the fair value of stock options granted under the stock option exchange program are excluded from the following:

	Stock Option Plans for Years Ended December 31,		
	2013	2012	2011
Stock Option Plans			
Expected stock price volatility	45%-47%	57%-68%	50%-75%
Risk free interest rate	0.8%-1.5%	0.6%-0.9%	1.4%-2.8%
Expected term (in years)	5.4-5.5	5.5-5.7	6.0-6.1
Weighted-average fair value of stock options granted	$2.60	$3.57	$10.27

During the year ended December 31, 2012, the Company granted 1,795,000 stock options that contain a market condition. The fair values of the options granted with a market condition were calculated using a binomial valuation model, which estimates the potential outcome of reaching the market condition based on simulated future stock prices. The weighted average fair value associated with these market condition options was immaterial.

	Employee Stock Purchase Plan for Years Ended December 31,		
	2013	2012	2011
Employee Stock Purchase Plan			
Expected stock price volatility	44%-48%	56%-63%	56%-78%
Risk free interest rate	0.1%	0.2%	0.1%
Expected term (in years)	0.5	0.5	0.5
Weighted-average fair value of purchase rights granted under the purchase plan	$1.96	$1.58	$6.16

Expected Stock Price Volatility: Given the volume of market activity in its market traded options, Rambus determined that it would use the implied volatility of its nearest-to-the-money traded options. The Company believes that the use of implied volatility is more reflective of market conditions and a better indicator of expected volatility than historical volatility. If there is not sufficient volume in its market traded options, the Company will use an equally weighted blend of historical and implied volatility.

Risk-free Interest Rate: Rambus bases the risk-free interest rate used in the BSM valuation method on implied yield currently available on the U.S. Treasury zero-coupon issues with an equivalent term. Where the expected terms of Rambus' stock-based awards do not correspond with the terms for which interest rates are quoted, Rambus uses an approximation based on rates on the closest term currently available.

Expected Term: The expected term of options granted represents the period of time that options granted are expected to be outstanding. The expected term was determined based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards, vesting schedules and expectations of future employee behavior. The expected term of ESPP grants is based upon the length of each respective purchase period.

Nonvested Equity Stock and Stock Units

The Company grants nonvested equity stock units to officers, directors and employees. For the year ended December 31, 2013 , 2012 and 2011 , the Company granted nonvested equity stock units totaling 473,074 , 742,009 and 374,838 shares, respectively, under the 2006 Plan. These awards have a service condition, generally a service period of four years, except in the case of grants to directors, for which the service period is one year. The nonvested equity stock units were valued at the date of grant giving them a fair value of approximately $3.3 million , $4.8 million and $6.7 million , respectively. The Company occasionally grants nonvested equity stock units to its employees with vesting subject to the achievement of certain performance conditions. During the years ended December 31, 2013 , 2012 and 2011 , the achievement of certain performance conditions was considered probable, and as a result, the Company recognized an immaterial amount of stock-based compensation expense related to these performance stock units for all three years.

For the years ended December 31, 2013 , 2012 and 2011 , the Company recorded stock-based compensation expense of approximately $3.1 million , $5.3 million and $6.7 million , respectively, related to all outstanding equity stock grants. Unrecognized stock-based compensation related to all nonvested equity stock grants, net of an estimate of forfeitures, was approximately $3.7 million at December 31, 2013 . This cost is expected to be recognized over a weighted average period of 2.3 years .

The following table reflects the activity related to nonvested equity stock and stock units for the three years ended December 31, 2013 :

Nonvested Equity Stock and Stock Units	Shares	Weighted-Average Grant-Date Fair Value
Nonvested at December 31, 2010	718,007	$ 18.23
Granted	374,838	$ 17.86
Vested	(314,401)	$ 18.15
Forfeited	(14,934)	$ 21.76
Nonvested at December 31, 2011	763,510	$ 18.02
Granted	742,009	$ 6.43
Vested	(393,383)	$ 17.38
Forfeited	(189,645)	$ 11.77
Nonvested at December 31, 2012	922,491	$ 10.24
Granted	473,074	$ 6.92
Vested	(478,214)	$ 9.81
Forfeited	(287,702)	$ 9.18
Nonvested at December 31, 2013	629,649	$ 8.56

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

14. Stockholders' Equity

During the second quarter of 2011, the Company acquired CRI. As part of the acquisition, the Company issued approximately 6.4 million shares of the Company's common stock, of which approximately 161 thousand shares were used to satisfy tax withholding obligations for certain former CRI employees and consultants. See Note 5, "Acquisitions," for additional information regarding the acquisition of CRI.

Share Repurchase Program

In October 2001, the Company's Board of Directors (the "Board") approved a share repurchase program of its common stock, principally to reduce the dilutive effect of employee stock options. To date, the Board has approved the authorization to repurchase up to 19.0 million shares of the Company's outstanding common stock over an undefined period of time. On February 25, 2010, the Board approved a new share repurchase program authorizing the repurchase of up to an additional 12.5 million shares. Share repurchases under the program may be made through open market, established plan or privately negotiated transactions in accordance with all applicable securities laws, rules, and regulations. There is no expiration date applicable to the program. The new share repurchase program replaces the program authorized in October 2001.

On August 19, 2010, the Company entered into a share repurchase agreement (the "Share Repurchase Agreement") with J.P. Morgan Securities Inc., as agent for JPMorgan Chase Bank, National Association, London Branch ("JP Morgan") to repurchase approximately $90.0 million of its common stock, as part of its share repurchase program. Under the Share Repurchase Agreement, the Company pre-paid to J.P. Morgan the $90 million purchase price in the third quarter of 2010 for the common stock and J.P. Morgan delivered to the Company approximately 4.8 million shares of common stock at an average price of $18.88 at the completion of the Share Repurchase Agreement in December 2010.

For the years ended December 31, 2013 and 2012 , the Company did not repurchase any shares of its common stock under its share repurchase program. As of December 31, 2013 , the Company had repurchased a cumulative total of approximately 26.3 million shares of its common stock with an aggregate price of approximately $428.9 million since the commencement of the program in 2001. As of December 31, 2013 , there remained an outstanding authorization to repurchase approximately 5.2 million shares of the Company's outstanding common stock.

The Company records stock repurchases as a reduction to stockholders' equity. The Company records a portion of the purchase price of the repurchased shares as an increase to accumulated deficit when the price of the shares repurchased exceeds the average original proceeds per share received from the issuance of common stock.

15. Benefit Plans

Rambus has a 401(k) Profit Sharing Plan (the "401(k) Plan") qualified under Section 401(k) of the Internal Revenue Code of 1986. Each eligible employee may elect to contribute up to 60% of the employee's annual compensation to the 401(k) Plan, up to the Internal Revenue Service limit. Rambus, at the discretion of its Board of Directors, may match employee contributions to the 401(k) Plan. The Company matches 50% of eligible employee's contribution, up to the first 6% of an eligible employee's qualified earnings. For the years ended December 31, 2013 , 2012 and 2011 , Rambus made matching contributions totaling approximately $1.8 million , $2.1 million and $1.6 million , respectively.

16. Restructuring Charges

The 2012 Plan

During 2012, the Company initiated a restructuring program to reduce overall corporate expenses which is expected to improve future profitability by reducing spending on marketing, general and administrative programs and refining some of the Company's research and development efforts (the "2012 Plan"). In connection with this restructuring program, the Company estimates that it will incur aggregate costs of approximately $10.0 million . During the year ended December 31, 2013 , the Company incurred restructuring charges of $2.1 million related primarily to the consolidation of certain facilities and the reduction in workforce, of which a majority was related to corporate support functions. During the year ended December 31, 2012 , the Company incurred restructuring charges of $7.3 million related primarily to the reduction in workforce, of which $3.4 million was related to the CTO reportable segment; $0.7 million was related to the MID reportable segment; $0.1 million was related to the All Other reportable segment; and $3.1 million was related to corporate support functions that impacted each of the Company's operating segments. There were no restructuring charges in 2011. Since the inception of the program, the Company has incurred $9.4 million in restructuring related charges. The Company expects to substantially complete its restructuring activities in 2014.

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table summarizes the 2012 Plan restructuring activities during the years ended December 31, 2013 and 2012:

	Employee Severance and Related Benefits	Facilities	Total
		(in thousands)	
Balance at December 31, 2011	$ —	$ —	$ —
Charges	7,301	—	7,301
Payments	(6,395)	—	(6,395)
Balance at December 31, 2012	$ 906	$ —	$ 906
Charges	136	1,960	2,096
Payments	(958)	(1,307)	(2,265)
Non-cash settlements	—	(653) *	(653)
Balance at December 31, 2013	$ 84	—	$ 84

*The non-cash charge of $653 thousand is related to the termination of the Company's financing obligation associated with abandoning a construction asset at one of its facilities.

The 2013 Plan

During 2013, the Company initiated a restructuring program related primarily to its LDT group as a result of the change in its business strategy to reduce its focus on the lower margin bulb products. Additionally, the Company curtailed its immersive media platform spending (the “2013 Plan”). In connection with this restructuring program, the Company estimates that it will incur aggregate costs of approximately $3.0 million to $4.0 million . During the year ended December 31, 2013 , the Company incurred restructuring charges of $3.4 million related primarily to the reduction in workforce, of which $2.4 million was related to the CTO reportable segment, $0.1 million was related to the MID reportable segment and $0.9 million was related to the All Other reportable segment. The Company expects to substantially complete its restructuring activities related to this plan by the end of 2014.

The following table summarizes the 2013 Plan restructuring activities during the year ended December 31, 2013 :

	Employee Severance and Related Benefits	Facilities	Total
		(In thousands)	
Balance at December 31, 2012	$ —	$ —	$ —
Charges	3,255	195	3,450
Payments	(1,523)	(62)	(1,585)
Non-cash settlements	—	—	—
Balance at December 31, 2013	$ 1,732	133	$ 1,865

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

17. Income Taxes

Income before taxes consisted of the following:

	Years Ended December 31,		
	2013	2012	2011
	(In thousands)		
Domestic	$ (12,535)	$ (61,036)	$ (3,586)
Foreign	518	(56,849)	(22,215)
	$ (12,017)	$ (117,885)	$ (25,801)

The provision for income taxes is comprised of:

	Years Ended December 31,		
	2013	2012	2011
	(In thousands)		
Federal:			
Current	$ 19,319	$ 15,048	$ 16,595
Deferred	2,200	587	(255)
State:			
Current	47	(2,868)	17
Deferred	(501)	2,934	—
Foreign:			
Current	446	543	886
Deferred	220	207	9
	$ 21,731	$ 16,451	$ 17,252

The differences between Rambus' effective tax rate and the U.S. federal statutory regular tax rate are as follows:

	Years Ended December 31,		
	2013	2012	2011
Expense (benefit) at U.S. federal statutory rate	(35.0)%	(35.0)%	(35.0)%
Expense (benefit) at state statutory rate	(3.3)	0.1	(0.1)
Withholding tax	160.4	13.3	64.2
Foreign rate differential	4.1	17.4	33.0
Research and development ("R&D") credit	(36.7)	—	(1.0)
Executive compensation	0.8	0.3	2.0
Non-deductible stock-based compensation	2.5	0.7	2.8
Foreign tax credit	(163.3)	(13.3)	(197.7)
Capitalized merger and acquisition costs	—	0.3	5.9
Other	(1.0)	(2.2)	0.5
Valuation allowance	252.3	32.4	192.3
	180.8 %	14.0 %	66.9 %

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The components of the net deferred tax assets are as follows:

	As of December 31,	
	2013	2012
	(In thousands)	
Deferred tax assets:		
Depreciation and amortization	$ 28,093	$ 20,230
Other liabilities and reserves	18,578	19,624
Deferred equity compensation	33,837	42,546
Net operating loss carryovers	27,416	38,133
Tax credits	100,052	76,826
Total gross deferred tax assets	207,976	197,359
Convertible debt	(12,664)	(8,019)
Total net deferred tax assets	195,312	189,340
Valuation allowance	(192,823)	(184,817)
Net deferred tax assets	$ 2,489	$ 4,523

	As of December 31,	
	2013	2012
	(In thousands)	
Reported as:		
Current deferred tax assets	$ 205	$ 788
Current deferred tax liabilities	(791)	—
Non-current deferred tax assets	4,797	4,458
Non-current deferred tax liabilities	(1,722)	(723)
Net deferred tax assets	$ 2,489	$ 4,523

During the quarter ended December 31, 2013 , the Company identified a prior period error which resulted in an overstatement of the gross deferred tax asset related to the deferred equity compensation balance and its related valuation allowance in the Income Taxes footnote disclosures as reported on Form 10-K for the year ended December 31, 2012 . As the Company recorded a full valuation allowance for this asset, the error did not have any effect on the Company’s financial results and position. The Company has made the correction of the error in the periods in which they originated and reflected the correction in the Income Taxes footnote on Form 10-K for the year ended December 31, 2013 .

Management periodically evaluates the realizability of the Company's net deferred tax assets based on all available evidence, both positive and negative. The realization of net deferred tax assets is dependent on the Company's ability to generate sufficient future taxable income during periods prior to the expiration of tax attributes to fully utilize these assets. The Company weighed both positive and negative evidence and determined that there is a continued need for a valuation allowance as the Company is in a cumulative loss position over the previous three years, which is considered significant negative evidence. A sustained period of profitability in the Company's operations is required before the Company would change its judgment regarding the need for a full valuation allowance against its net deferred tax assets. Although the weight of negative evidence related to cumulative losses is decreasing as the uncertainty around litigation settlement is reducing, the Company believes that this objectively measured negative evidence outweighs the subjectively determined positive evidence of future profitability and, as such, the Company has not changed its judgment regarding the need for a full valuation allowance on its deferred tax assets in the United States in 2013. However, continued improvement in the Company's operating results, conditioned on its MID, LDT or CRI reporting units successfully commercializing new business arrangements, signing new or renewing existing license agreements and managing costs, could lead to reversal of almost all of the Company's valuation allowance as early as 2014. Until such time, consumption of tax attributes to offset profits will reduce the overall level of deferred tax assets subject to valuation allowance. Should the Company determine that it would be able to realize its remaining deferred tax assets in the foreseeable future, an adjustment to its remaining deferred tax assets would cause a material increase to income in the period such determination is made.

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table presents the tax valuation allowance information for the years ended December 31, 2013 , December 31, 2012 and December 31, 2011 :

	Balance at Beginning of Period	Charged (Credited) to Operations	Charged to Other Account*	Utilized	Balance at End of Period
Tax Valuation Allowance					
Year ended December 31, 2011	$ 66,395	—	64,153	—	$ 130,548
Year ended December 31, 2012	$ 130,548	—	54,269	—	$ 184,817
Year ended December 31, 2013	$ 184,817	—	8,006	—	$ 192,823

* Amounts not charged to operations are charged to other comprehensive income or deferred tax assets (liabilities).

As of December 31, 2013 , Rambus has federal and California net operating loss carryforwards of $46.2 million and $302.2 million , respectively. As of December 31, 2013 , Rambus has federal research and development tax credit carryforwards of $30.7 million , alternative minimum tax credits of $2.5 million , and foreign tax credits of $102.0 million . As of December 31, 2013 , Rambus has California research and development tax credit carryforwards of $14.9 million . These carryforward amounts include $35.6 million of federal tax credits, $1.5 million of federal net operating losses, and $97.3 million of California net operating losses for which no deferred tax asset has been recognized because they relate to excess tax benefits from stock option tax deductions. The excess tax benefits will be recorded to additional paid-in capital when they reduce cash taxes payable. The federal net operating loss begins to expire in 2031. The federal foreign tax credits and research and development credits begin to expire in 2016 and 2018, respectively. Approximately $55 million of federal foreign tax credits expire in 2020. The California net operating losses begin to expire in 2018. The federal alternative minimum tax credits and the California research and development credits carry forward indefinitely.

In the event of a change in ownership, as defined under federal and state tax laws, Rambus' net operating loss and tax credit carryforwards could be subject to annual limitations. The annual limitations could result in the expiration of the net operating loss and tax credit carryforwards prior to utilization.

As of December 31, 2013 , the Company had $18.8 million of unrecognized tax benefits including $12.6 million recorded as a reduction of long-term deferred tax assets and $6.2 million recorded in long term income taxes payable. If recognized, $1.6 million would be recorded as an income tax benefit in the consolidated statements of operations. As of December 31, 2012 , the Company had $16.8 million of unrecognized tax benefits including $10.6 million recorded as a reduction of long-term deferred tax assets and $6.2 million recorded in long term income taxes payable. If recognized, $2.0 million would be recorded as an income tax benefit in the consolidated statements of operations. It is reasonably possible that a reduction of up to $2.0 million of existing unrecognized tax benefits could occur in the next 12 months .

A reconciliation of the beginning and ending amounts of unrecognized income tax benefits for the years ended December 31, 2013 , 2012 and 2011 is as follows (amounts in thousands):

	Years Ended December 31,		
	2013	2012	2011
Balance at January 1	$ 16,773	$ 16,610	$ 11,816
Tax positions related to current year:			
Additions	1,156	589	608
Tax positions related to prior years:			
Additions	956	1,521	4,911
Reductions	(91)	(1,947)	(725)
Settlements	—	—	—
Balance at December 31	$ 18,794	$ 16,773	$ 16,610

Rambus recognizes interest and penalties related to uncertain tax positions as a component of the income tax provision (benefit). At December 31, 2013 and 2012 , an immaterial amount of interest and penalties are included in long-term income taxes payable.

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

In July 2013, the FASB issued ASU 2013-11, "Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists". The amendments of this ASU require that entities that have an unrecognized tax benefit and a net operating loss carryforward or similar tax loss or tax credit carryforward in the same jurisdiction as the uncertain tax position present the unrecognized tax benefit as a reduction of the deferred tax asset for the loss or tax credit carryforward rather than as a liability when the uncertain tax position would reduce the loss or tax credit carryforward under the tax law. The disclosure requirements will be effective for annual periods beginning after December 15, 2013. The Company expects to adopt this new standard in the first quarter of tax year 2014. The Company anticipates the adoption may result in equal reductions to both deferred tax assets and long term taxes payable of approximately $4.7 million .

Rambus files income tax returns for the U.S., California, India and various other state and foreign jurisdictions. The U.S. federal returns are subject to examination from 2012 and forward. The California returns are subject to examination from 2009 and forward. In addition, any R&D credit carryforward or net operating loss carryforward generated in prior years and utilized in these or future years may also be subject to examination. The India returns are subject to examination from fiscal year ending March 2006 and forward. The Company is currently under examination by California for the 2010 and 2011 tax years and by India for fiscal years ending March 2006, 2009 and 2010. Management regularly assesses the likelihood of outcomes resulting from income tax examinations to determine the adequacy of their provision for income taxes and believes their provision for unrecognized tax benefits is adequate. In January 2014, an Internal Revenue Service examination covering the 2010 through 2011 tax years was completed. The recognition or remeasurement of unrecognized tax benefits from the audit will be reflected in the Company’s financial statements for the quarter ending March 31, 2014 and is not expected to be material to the Consolidated Statement of Operations because of the Company’s valuation allowance position.

At December 31, 2013 , no deferred taxes have been provided on undistributed earnings of approximately $7.4 million from the Company’s international subsidiaries since these earnings have been, and under current plans will continue to be, permanently reinvested outside the United States. It is not practicable to determine the amount of the unrecognized tax liability at this time.

18. Litigation and Asserted Claims

SK hynix Litigation

U.S District Court of the Northern District of California

On August 29, 2000, SK hynix (formerly Hyundai and Hynix) and various subsidiaries filed suit against Rambus in the U.S. District Court for the Northern District of California. The complaint asserts claims for fraud, violations of federal antitrust laws and deceptive practices in connection with Rambus' participation in a standards setting organization called JEDEC, and seeks a declaratory judgment that the Rambus patents-in-suit are unenforceable, invalid and not infringed by SK hynix, compensatory and punitive damages, and attorneys' fees. Rambus denied SK hynix's claims and filed counterclaims for patent infringement against SK hynix. The case was divided into three phases: (1) unclean hands; (2) patent infringement; and (3) antitrust, equitable estoppel, and other JEDEC-related issues. Rambus prevailed in all three phases and judgment was entered against SK hynix. On appeal, the Federal Circuit vacated the judgment and remanded the case back to the district court for further proceedings consistent with its unclean hands and spoliation opinions in the SK hynix and Micron cases. SK hynix was also awarded costs of appeal. The Company had previously accrued approximately $8.1 million related to those costs.

On remand, the district court found that Rambus engaged in spoliation of evidence. Because the asserted patents were otherwise valid and Rambus did not intentionally destroy particular damaging documents, the court concluded that the appropriate sanction was to strike from the record evidence supporting a royalty in excess of a reasonable, non-discriminatory royalty. Accordingly, the court ordered the parties to submit briefs on what a reasonable and non-discriminatory royalty would be for the patents in suit.

On December 19, 2012, the district court held a hearing on the reasonable royalty motion; SK hynix's motion for summary judgment of invalidity, new trial, or a stay of the case, and Rambus' motion to amend the unclean hands decision. No decisions have issued to date.

SK hynix subsequently filed a motion for collateral estoppel based on the Micron spoliation decision on remand. On February 27, 2013, the district court issued notice that SK hynix's motion has been submitted without oral argument from the parties.

On June 11, 2013, Rambus and SK hynix announced that they had entered into a settlement of all outstanding disputes between the parties, which is described in Note 19, "Agreements with SK hynix and Micron." As a result of the settlement, the

Company has reversed the cost accrual of $8.1 million referenced above during the second quarter of 2013, which was included in marketing, general and administrative expenses in the consolidated statements of operations.

Micron Litigation

U.S District Court in Delaware: Case No. 00-792-SLR

On August 28, 2000, Micron filed suit against Rambus in the U.S. District Court for Delaware. The suit asserts violations of federal antitrust laws, deceptive trade practices, breach of contract, fraud and negligent misrepresentation in connection with Rambus' participation in JEDEC. Micron seeks a declaration of monopolization by Rambus, compensatory and punitive damages, attorneys' fees, a declaratory judgment that eight Rambus patents are invalid and not infringed, and the award to Micron of a royalty-free license to the Rambus patents. Rambus has filed an answer and counterclaims disputing Micron's claims and asserting infringement by Micron of 12 U.S. patents. Micron prevailed on its unclean hands defense and judgment was entered against Rambus on the patent infringement claims. On appeal, the Federal Circuit remanded the case back to the district court for further proceedings consistent with its opinion.

On January 2, 2013, the court issued its decision finding that Rambus had spoliated documents in bad faith, that Micron's inequitable conduct defense and JEDEC-based claims and defenses related to patent misuse, antitrust, and unfair competition were prejudiced, and that the patents-in-suit are thus unenforceable against Micron. The court issued an order on January 24, 2013, directing judgment be entered against Rambus on the patent infringement claims in 30 days , and staying the remainder of the case pending appeal. Rambus filed a notice of appeal to the United States Court of Appeals for the Federal Circuit on March 27, 2013. Rambus' opening appellate brief was filed in July 2013 and Micron filed a responsive brief in October 2013. Rambus filed a reply brief in November 2013.

On December 9, 2013, Rambus and Micron announced that they had entered into a settlement of all outstanding disputes between the parties, which is described in Note 19, "Agreements with SK hynix and Micron."

U.S. District Court of the Northern District of California

On January 13, 2006, Rambus filed suit against Micron in the U.S. District Court for the Northern District of California. Rambus alleges that 14 Rambus patents are infringed by Micron's DDR2, DDR3, GDDR3, and other advanced memory products. Rambus seeks compensatory and punitive damages, attorneys' fees, and injunctive relief. This case has been stayed since February 3, 2009. On December 9, 2013, Rambus and Micron announced that they had entered into a settlement of all outstanding disputes between the parties, which is described in Note 19, "Agreements with SK hynix and Micron."

European Patent Infringement Cases

In 2001, Rambus filed suit against Micron in Mannheim, Germany, for infringement of European patent, EP 1 22 642. That suit has not been active. Two related proceedings in Italy remain active. One relates to Rambus' claim that Micron is infringing European patent, EP 1 4 956. The court in this proceeding has found the '956 patent valid but not infringed. The court also dismissed Micron's claims for unfair competition based on JEDEC as well as abuse of process. Micron did not appeal this decision so this case is now closed. The second case in Italy involves Micron's purported claim resulting from a seizure of evidence in Italy in 2000 carried out by Rambus pursuant to a court order. The court in this proceeding dismissed Micron's claim. Micron has appealed this decision to the Italian Supreme Court. On December 9, 2013, Rambus and Micron announced that they had entered into a settlement of all outstanding disputes between the parties, which is described in Note 19, "Agreements with SK hynix and Micron."

DDR2, DDR3, gDDR2, GDDR3, GDDR4 Litigation ("DDR2")

U.S District Court in the Northern District of California

On January 25, 2005, Rambus filed a patent infringement suit in the U.S. District Court for the Northern District of California against SK hynix, Infineon, Nanya, and Inotera. Infineon and Inotera were subsequently dismissed from this litigation as was Samsung, which previously had been added as a defendant. Rambus alleges that certain of its patents are infringed by certain of the defendants' SDRAM, DDR, DDR2, DDR3, gDDR2, GDDR3, GDDR4 and other advanced memory products. This case has been stayed since February 3, 2009. On June 11, 2013, Rambus and SK hynix announced that they had entered into a settlement of all outstanding disputes between the parties.

European Commission Competition Directorate-General

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

On or about April 22, 2003, Rambus was notified by the European Commission Competition Directorate-General (Directorate) (the “European Commission”) that it had received complaints from Infineon and SK hynix, which led to a statement of objections from the European Commission alleging that through Rambus' participation in the JEDEC standards setting organization and subsequent conduct, Rambus violated European Union competition law.

On December 9, 2009, the European Commission announced that it had reached a final settlement with Rambus to resolve the pending case. On March 25, 2010, SK hynix filed appeals with the General Court of the European Union purporting to challenge the settlement and the European Commission's rejection of SK hynix's complaint.

On June 11, 2013, Rambus and SK hynix announced that they had entered into a settlement of all outstanding disputes between the parties, which is described in Note 19, "Agreements with SK hynix and Micron."

Superior Court of California for the County of San Francisco

On May 5, 2004, Rambus filed a lawsuit against Micron, SK hynix, Infineon and Siemens in San Francisco Superior Court seeking damages for conspiring to fix prices, conspiring to monopolize under the Cartwright Act, intentional interference with prospective economic advantage, and unfair competition. This lawsuit alleges that there were concerted efforts beginning in the 1990s to deter innovation in the DRAM market and to boycott Rambus and/or deter market acceptance of Rambus' RDRAM product. Subsequently, Infineon and Siemens were dismissed from this action (as a result of a settlement with Infineon) and three Samsung-related entities were added as defendants and later dismissed (as a result of a settlement with Samsung).

A jury trial against Micron and SK hynix began on June 20, 2011. On November 16, 2011, the jury returned a verdict in favor of Micron and SK hynix and against Rambus and judgment was entered by the Court on February 15, 2012. The court issued an order on January 29, 2013, awarding costs to Micron and SK hynix of $0.5 million and $0.4 million , respectively.

Rambus filed a notice of appeal on April 3, 2012 and thereafter filed its opening brief on appeal on September 19, 2012. Defendants filed their responsive briefs on March 8, 2013. Rambus filed its reply brief on July 12, 2013.

On June 11, 2013, Rambus and SK hynix announced that they had entered into a settlement of all outstanding disputes between the parties, which is described in Note 19, "Agreements with SK hynix and Micron." As a result of the settlement, the Company has reversed the cost accrual of $0.4 million referenced above during the second quarter of 2013, which was included in marketing, general and administrative expenses in the consolidated statements of operations.

On December 9, 2013, Rambus and Micron announced that they had entered into a settlement of all outstanding disputes between the parties, which is described in Note 19, "Agreements with SK hynix and Micron." As a result of the settlement, the Company has reversed the cost accrual of $0.5 million referenced above during the fourth quarter of 2013, which was included in marketing, general and administrative expenses in the consolidated statements of operations.

Broadcom, Freescale, LSI, MediaTek, and STMicroelectronics Litigation

International Trade Commission 2010 Investigation

On December 1, 2010, Rambus filed a complaint with the United States International Trade Commission (the "ITC") requesting the commencement of an investigation and seeking an exclusion order barring the importation, sale for importation, or sale after importation of products that incorporate at least DDR, DDR2, DDR3, LPDDR, LPDDR2, mobile DDR, GDDR, GDDR2, and GDDR3memory controllers from Broadcom, Freescale, LSI, MediaTek and STMicroelectronics that infringe patents from the Barth family of patents, and products having certain peripheral interfaces, including PCI Express interfaces, DisplayPort interfaces, and certain Serial AT Attachment (“SATA”) and Serial Attached SCSI (“SAS”) interfaces, from Broadcom, Freescale, LSI and STMicroelectronics that infringe patents from the Dally family of patents. The complaint names, among others, Broadcom, Freescale, LSI, MediaTek and STMicroelectronics as respondents, as well as companies whose products incorporate those accused companies' products and are imported into the United States, including Asustek Computer Inc. and Asus Computer International Inc., Audio Partnership Plc, Cisco Systems, Garmin International, G.B.T. Inc., Giga-Byte Technology Co. Ltd., Gracom Technologies LLC, Hewlett-Packard Company, Hitachi GST, Motorola, Inc., Oppo Digital, Inc., and Seagate Technology. The complaint also names NVIDIA and certain companies whose products incorporate accused NVIDIA products with certain peripheral interfaces, including PCI Express and DisplayPort peripheral interfaces, and seeks to bar their importation, sale for importation, or sale after importation. On December 29, 2010, the ITC instituted the investigation. On June 20, 2011, January 17, 2012, and March 19, 2012, respectively, the administrative law judge granted joint motions to terminate the investigation as to Freescale, Broadcom and Mediatek pursuant to the parties' settlement agreement. A final hearing before the administrative law judge was held October 12-20, 2011.

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

On July 25, 2012, the ITC issued the notice of its determination to terminate the investigation with a finding of no violation for the following reasons: all of the asserted patent claims were invalid due to anticipation or obviousness, except for certain Dally claims that include multiple-transmitters for which the ITC determined there was no infringement; Rambus did not demonstrate the existence of a domestic industry for both the Barth and Dally patents; the Barth patents were unenforceable under the doctrine of unclean hands; and the Barth patents were exhausted as to one respondent. The ITC's opinion setting forth its determinations was issued on July 31, 2012. Rambus filed a notice of appeal on September 21, 2012. Rambus and LSI announced that they had entered into a settlement of their disputes on February 19, 2013. Rambus filed its opening brief on May 23, 2013 and the appeal was dismissed on June 24, 2013 as a result of the settlement with STMicroelectronics as the only remaining respondent.

U.S District Court in the Northern District of California

On December 1, 2010, Rambus filed complaints against Broadcom, Freescale, LSI, MediaTek and STMicroelectronics in the U.S. District Court for the Northern District of California alleging that 1) products that incorporate at least DDR, DDR2, DDR3, LPDDR, LPDDR2, mobile DDR, GDDR, GDDR2, and GDDR3 memory controllers from Broadcom, Freescale, LSI, MediaTek and STMicroelectronics infringe patents from the Barth family of patents; 2) those same products and products from those companies that incorporate SDR memory controllers infringe patents from the Farmwald-Horowitz family; and 3) products having certain peripheral interfaces, including PCI Express, DisplayPort, and certain SATA and SAS interfaces, from Broadcom, Freescale, LSI and STMicroelectronics infringe patents from the Dally family of patents. On March 20, 2011, June 7, 2011, December 29, 2011, and February 26, 2013, respectively, Rambus' complaint against MediaTek, Freescale, Broadcom and LSI was dismissed pursuant to the parties' settlement agreement. Rambus and STMicroelectronics announced that they had entered into a settlement of their disputes on June 17, 2013.

Potential Future Litigation

In addition to the litigation described above, companies continue to adopt Rambus technologies into various products. Rambus has notified many of these companies of their use of Rambus technology and continues to evaluate how to proceed on these matters.

There can be no assurance that any ongoing or future litigation will be successful. Rambus has spent substantial company resources defending its intellectual property in litigation, which may continue for the foreseeable future given the pending litigation. The outcome of any litigation, as well as any delay in their resolution, could affect Rambus' ability to license its intellectual property in the future.

The Company records a contingent liability when it is probable that a loss has been incurred and the amount is reasonably estimable in accordance with accounting for contingencies. A reasonably possible loss in excess of amounts accrued is not material to the consolidated financial statements.

19. Agreements with SK hynix and Micron

SK hynix

On June 11, 2013, Rambus, SK hynix and certain related entities of SK hynix entered into a settlement agreement, pursuant to which the parties have agreed to release all claims against each other with respect to all outstanding litigation between them. Pursuant to the settlement agreement, Rambus and SK hynix entered into a semiconductor patent license agreement on June 11, 2013, under which SK hynix licenses from Rambus non-exclusive rights to certain Rambus patents and has agreed to pay Rambus cash amounts over the next five years as described below. Under the license agreement, Rambus has granted to SK hynix (i) a paid-up perpetual patent license for certain identified SK hynix DRAM products and (ii) a five -year term patent license to all other DRAM and other semiconductor products. Each license is a non-exclusive, non-transferable, royalty-bearing, worldwide patent license, without the right to sublicense, solely under the applicable patent claims of Rambus for such licensed products, to make (including have made), use, sell, offer for sale and/or import such licensed products until the expiration or termination of the license pursuant to the terms of the license agreement. The license agreement requires that SK hynix pay Rambus cash payments over the next five years of a fixed amount of $12.0 million each quarter, commencing in the quarter ended September 30, 2013. Additional payments or certain adjustments to the payments by SK hynix to Rambus under the license agreement may be due for certain acquisitions of businesses or assets by SK hynix involving unlicensed products. The license agreement and the licenses granted thereunder may be modified under certain conditions and may be terminated upon a material breach by a party of its obligations under the agreement, a bankruptcy event involving a party or a change of control of SK hynix subject to certain conditions.

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The agreements with SK hynix are considered a multiple element arrangement for accounting purposes. For a multiple element arrangement under the applicable accounting rules, the Company is required to identify specific elements of the arrangement and then determine when those elements should be recognized. The Company identified three elements in the arrangement: antitrust litigation settlement, settlement of past infringement, and license agreement. The Company considered several factors in determining the accounting fair value of the elements of the SK hynix agreements which included a third party valuation using an income approach (collectively the “SK hynix Fair Value”). The inputs and assumptions used in this accounting valuation were from a market participant perspective and included projected customer revenue, royalty rates, estimated discount rates, useful lives and income tax rates, among others. The development of a number of these inputs and assumptions in the model requires a significant amount of management judgment and discretion, and is based upon a number of factors, including the selection of industry comparables, market growth rates and other relevant factors. Changes in any number of these assumptions may have a substantial impact on the SK hynix Fair Value as assigned to each element. These inputs and assumptions represent management’s best estimates at the time of the transaction. The following estimates do not reflect any agreement (expressed or implied) reached between the parties on the values attributed to any aspect of this transaction. The estimated SK hynix Fair Value is determined as follows:

(in millions)	Estimated SK hynix Fair Value
Antitrust litigation settlement	$ 4.0
Settlement of past infringement	280.0
License agreement	250.0
Total SK hynix Fair Value	$ 534.0

The total consideration of $240.0 million (as per the terms of the agreements with SK hynix) takes into account the court ruling in May 2013 that $250.0 million should be applied as a credit against the court’s March 2009 award to Rambus in the SK hynix litigation. Using the accounting guidance from multiple element revenue arrangements, the Company allocated the consideration to each element using the estimated SK hynix Fair Value of the elements which include antitrust litigation settlement, settlement of past infringement, and license agreement as shown in the table above. The following allocations do not reflect any agreement (expressed or implied) reached between the parties on the values attributed to any aspect of this transaction, but instead, reflect only what is required as disclosure under the applicable accounting rules. Based on the estimated SK hynix Fair Value, the total consideration of $240.0 million was allocated to the following elements:

(in millions)	Allocated Consideration
Antitrust litigation settlement	$ 1.9
Settlement of past infringement	125.8
License agreement	112.3
Total consideration	$ 240.0

The consideration of $240.0 million (assuming no adjustments to the payments under the terms of the agreements) will be recognized in the Company’s financial statements until 2018 as follows:

- $238.1 million as "royalty revenue" which represents the allocated consideration related to the settlement of past infringement ($125.8 million) from the resolution of the infringement litigation and the patent license agreement ($112.3 million); and
- $1.9 million as "gain from settlement" which represents the allocated consideration related to the resolution of the antitrust litigation.

During the year ended December 31, 2013, the Company received cash consideration of $24.0 million from SK hynix. The amount was allocated between royalty revenue ($23.6 million) and gain from settlement ($0.4 million) based on the elements’ SK hynix Fair Value.

The remaining $216.0 million is expected to be paid in successive quarterly payments of $12.0 million , concluding in the second quarter of 2018.

The cumulative cash receipts through December 31, 2013 and the remaining future cash receipts from the agreements with SK hynix are expected to be recognized as follows assuming no adjustments to the payments under the terms of the agreements:

RAMBUS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(in millions)	Received in 2013	Estimated to Be Received in 2014	2015	2016	2017	2018	Total Estimated Cash Receipts
Royalty revenue	$ 23.6	$ 47.3	$ 47.3	$ 47.9	$ 48.0	$ 24.0	$ 238.1
Gain from settlement	0.4	0.7	0.7	0.1	—	—	1.9
Total	$ 24.0	$ 48.0	$ 48.0	$ 48.0	$ 48.0	$ 24.0	$ 240.0

Micron

On December 9, 2013, Rambus, Micron and certain related entities of Micron entered into a settlement agreement, pursuant to which the parties have agreed that they will release all claims against each other with respect to all outstanding litigation between them and certain other potential claims. Pursuant to the settlement agreement, Rambus and Micron entered into a semiconductor patent license agreement on December 9, 2013. Under the license agreement, Rambus has granted to Micron and its subsidiaries and certain affiliated entities (i) a paid-up perpetual patent license for certain identified Micron DRAM products and (ii) a seven -year term patent license to other memory and semiconductor products. The initial seven -year term patent license may be renewed and extended by three years, or successive five years following the initial renewal term, each solely at Micron's option, whereby after each renewal term, certain additional Micron products will be covered under a paid-up perpetual patent license as noted above. Each license is a non-exclusive, non-transferable, royalty-bearing, worldwide patent license, without the right to sublicense, solely under the applicable patent claims of Rambus for such licensed products, to make (including have made), use, sell, offer for sale and/or import such licensed products until the expiration or termination of the license pursuant to the terms of the license agreement. The license agreement requires that Micron pay Rambus cash payments of an amount equal to 0.6% of sales of certain identified Micron products on a quarterly basis, with such amounts not to exceed $10.0 million in any quarter, and $40.0 million during a rolling twelve month period beginning on September 1st and ending on August 31st during the initial term, and any renewal term thereafter. Additional payments or certain adjustments to the payments by Micron to Rambus under the license agreement may be due for certain acquisitions of businesses or assets by Micron involving unlicensed products. The license agreement and the licenses granted thereunder may be terminated upon a material breach by a party of its obligations under the agreement, a bankruptcy event involving a party or a future change of control of Micron subject to certain conditions.

The agreements with Micron are considered a multiple element arrangement for accounting purposes. For a multiple element arrangement under the applicable accounting rules, the Company is required to identify specific elements of the arrangement and then determine when those elements should be recognized. The Company identified three elements in the arrangement: antitrust litigation settlement, settlement of past infringement, and license agreement. The Company considered several factors in determining the accounting fair value of the elements of the Micron agreements which included a third party valuation using an income approach (collectively the "Micron Fair Value"). The inputs and assumptions used in this accounting valuation were from a market participant perspective and included projected customer revenue, royalty rates, estimated discount rates, useful lives and income tax rates, among others. The development of a number of these inputs and assumptions in the model requires a significant amount of management judgment and discretion, and is based upon a number of factors, including the selection of industry comparables, market growth rates and other relevant factors. Changes in any number of these assumptions may have a substantial impact on the Micron Fair Value as assigned to each element. These inputs and assumptions represent management's best estimates at the time of the transaction. The following estimates do not reflect any agreement (expressed or implied) reached between the parties on the values attributed to any aspect of this transaction. The estimated Micron Fair Value is determined as follows:

(in millions)	Estimated Micron Fair Value
Antitrust litigation settlement	$ 8.0
Settlement of past infringement	235.0
License agreement	440.0
Total Micron Fair Value	$ 683.0

The total consideration of $280.0 million (as per the terms of the agreements with Micron) takes into account the court ruling in January 2013 that Rambus' patents-in-suit are unenforceable against Micron in the Micron litigation, but which was pending appeal at the time of settlement. Using the accounting guidance from multiple element revenue arrangements, the Company allocated the consideration to each element using the estimated Micron Fair Value of the elements which include antitrust litigation settlement, settlement of past infringement, and license agreement as shown in the table above. The following allocations do not reflect any agreement (expressed or implied) reached between the parties on the values attributed to any aspect of this transaction, but instead, reflect only what is required as disclosure under the applicable accounting rules. Based on the estimated Micron Fair Value, the total consideration of $280.0 million was allocated to the following elements:

(in millions)	Allocated Consideration
Antitrust litigation settlement	$ 3.3
Settlement of past infringement	96.3
License agreement	180.4
Total consideration	$ 280.0

The consideration of $280.0 million (assuming no adjustments to the payments under the terms of the agreements) will be recognized in the Company's financial statements until 2020 as follows:

- $276.7 million as "royalty revenue" which represents the allocated consideration related to the settlement of past infringement ($96.3 million) from the resolution of the infringement litigation and the patent license agreement ($180.4 million); and
- $3.3 million million as "gain from settlement" which represents the allocated consideration related to the resolution of the antitrust litigation.

During the year ended December 31, 2013, the Company received cash consideration of $5.5 million from Micron. The amount was allocated between royalty revenue ($5.3 million) and gain from settlement ($0.2 million) based on the elements' Micron Fair Value.

The remaining $274.5 million is expected to be paid in successive quarterly payments of $10.0 million , concluding in the fourth quarter of 2020.

The cumulative cash receipts through December 31, 2013 and the remaining future cash receipts from the agreements with Micron are expected to be recognized as follows assuming no adjustments to the payments under the terms of the agreements:

	Received in	Estimated to Be Received in					
	2013	2014	2015	2016	2017	2018 and thereafter	Total Estimated Cash Receipts
(in millions)							
Royalty revenue	$ 5.3	$ 38.7	$ 38.7	$ 39.5	$ 40.0	$ 114.5	$ 276.7
Gain from settlement	0.2	1.3	1.3	0.5	—	—	3.3
Total	$ 5.5	$ 40.0	$ 40.0	$ 40.0	$ 40.0	$ 114.5	$ 280.0

Supplementary Financial Data

RAMBUS INC.
CONSOLIDATED SUPPLEMENTARY FINANCIAL DATA
Quarterly Statements of Operations
(Unaudited)

	Dec. 31, 2013	Sept. 30, 2013	June 30, 2013	March 31, 2013	Dec. 31, 2012	Sept. 30, 2012	June 30, 2012	March 31, 2012
	(In thousands, except for per share amounts)							
Total revenue	$ 73,422	$ 73,294	$ 57,919	$ 66,866	$ 57,443	$ 57,530	$ 56,215	$ 62,863
Total operating costs and expenses (1) (2)	$ 67,208	$ 64,229	$ 52,175	$ 65,425	$ 61,470	$ 104,630	$ 77,964	$ 80,421
Operating income (loss)	$ 6,214	$ 9,065	$ 5,744	$ 1,441	$ (4,027)	$ (47,100)	$ (21,749)	$ (17,558)
Net loss	$ (9,777)	$ (5,725)	$ (7,844)	$ (10,402)	$ (16,132)	$ (58,098)	$ (32,216)	$ (27,890)
Net loss per share — basic	$ (0.09)	$ (0.05)	$ (0.07)	$ (0.09)	$ (0.14)	$ (0.52)	(0.29)	$ (0.25)
Net loss per share — diluted	$ (0.09)	$ (0.05)	$ (0.07)	$ (0.09)	$ (0.14)	$ (0.52)	(0.29)	$ (0.25)
Shares used in per share calculations — basic	113,217	112,640	112,183	111,599	111,332	110,826	110,553	110,358
Shares used in per share calculations — diluted	113,217	112,640	112,183	111,599	111,332	110,826	110,553	110,358

(1) The quarterly financial information includes the following amounts related to the impairment of goodwill and long-lived assets as follows: $9.7 million in the quarter ended December 31, 2013, $8.1 million in the quarter ended September 30, 2013 and $35.5 million in the quarter ended September 30, 2012. Refer to Note 6, "Intangible Assets and Goodwill" of Notes to Consolidated Financial Statements of this Form 10-K.

(2) The quarterly financial information includes the following amounts related to restructuring charges as follows: $2.2 million in the quarter ended December 31, 2013, $1.1 million in the quarter ended September 30, 2013, $2.2 million in the quarter ended March 31, 2013, $0.7 million in the quarter ended December 31, 2012, and $6.6 million in the quarter ended September 30, 2012. Refer to Note 16, "Restructuring Charges" of Notes to Consolidated Financial Statements of this Form 10-K.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

RAMBUS INC.

By: /s/ SATISH RISHI

Satish Rishi

Senior Vice President, Finance and Chief Financial Officer

Date: February 21, 2014

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Satish Rishi as his true and lawful agent, proxy and attorney-in-fact, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to (i) act on, sign, and file with the Securities and Exchange Commission any and all amendments to this Annual Report on Form 10-K, together with all schedules and exhibits thereto, (ii) act on, sign, and file such certificates, instruments, agreements and other documents as may be necessary or appropriate in connection therewith, and (iii) take any and all actions that may be necessary or appropriate to be done, as fully for all intents and purposes as he might or could do in person, hereby approving, ratifying and confirming all that such agent, proxy and attorney-in-fact or any of his substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ RONALD BLACK Ronald Black	Chief Executive Officer, President and Director (Principal Executive Officer)	February 21, 2014
/s/ SATISH RISHI Satish Rishi	Senior Vice President, Finance and Chief Financial Officer (Principal Financial and Accounting Officer)	February 21, 2014
/s/ ERIC STANG Eric Stang	Chairman of the Board of Directors	February 21, 2014
/s/ J. THOMAS BENTLEY J. Thomas Bentley	Director	February 21, 2014
/s/ PENELOPE HERSCHER Penelope Herscher	Director	February 21, 2014
/s/ CHARLES KISSNER Charles Kissner	Director	February 21, 2014
/s/ DAVID SHRIGLEY David Shrigley	Director	February 21, 2014

INDEX TO EXHIBITS

Exhibit Number	Description of Document
2.2(1)	Merger Agreement dated as of May 12, 2011, by and among Rambus Inc., Padlock Acquisition Corp., Cryptography Research, Inc. and the shareholder representative.
3.1(2)	Amended and Restated Certificate of Incorporation of Registrant filed May 29, 1997.
3.2(3)	Certificate of Amendment of Amended and Restated Certificate of Incorporation of Registrant filed June 14, 2000.
3.3(4)	Amended and Restated Bylaws of Registrant dated April 25, 2013.
4.1(5)	Form of Registrant's Common Stock Certificate.
4.2(6)	Indenture between Rambus Inc. and U.S. Bank, National Association, dated as of June 29, 2009 (including the form of 5% Convertible Senior Note due 2014 therein).
4.3(7)	Indenture between Rambus Inc. and U.S. Bank, National Association, dated as of August 16, 2013 (including the form of 1.125% Convertible Senior Note due 2018 therein).
10.1(8)	Form of Indemnification Agreement entered into by Registrant with each of its directors and executive officers.
10.2(9)*	1997 Stock Plan (as amended and restated as of April 4, 2007) and related forms of agreements.
10.3(10)*	2006 Equity Incentive Plan, as amended.
10.4(11)*	Forms of agreements under the 2006 Equity Incentive Plan, as amended.
10.5(12)*	2006 Employee Stock Purchase Plan as amended.
10.6(13)	Redwood and Yellowstone Semiconductor Technology License Agreement, dated as of January 6, 2003, between Registrant, Sony Corporation and Sony Computer Entertainment Inc.
10.7(14)	Triple Net Space Lease, dated as of December 15, 2009, by and between Registrant and MT SPE, LLC.
10.8(15)†	Settlement Agreement, dated January 19, 2010, among Registrant, Samsung Electronics Co., Ltd, Samsung Electronics America, Inc., Samsung Semiconductor, Inc. and Samsung Austin Semiconductor, L.P.
10.9(15)†	Semiconductor Patent License Agreement, dated January 19, 2010, between Registrant and Samsung Electronics Co., Ltd.
10.10(15)†	Stock Purchase Agreement, dated January 19, 2010, between Registrant and Samsung Electronics Co., Ltd.
10.11(16)	First Amendment of Lease, dated November 4, 2011, by and between Registrant and MT SPE, LLC.
10.12(17)	Employment Agreement between the Company and Ronald Black, dated as of June 22, 2012.
10.13(18)†	Settlement Agreement, dated June 11, 2013, among Registrant, SK hynix and certain SK hynix affiliates.
10.14(19)†	Semiconductor Patent License Agreement, dated June 11, 2013, between Registrant and SK hynix.
10.15**	Settlement Agreement, dated December 9, 2013, between Rambus Inc., Micron Technology, Inc., and certain Micron affiliates.
10.16**	Semiconductor Patent License Agreement, dated December 9, 2013, between Rambus, Inc. and Micron Technology, Inc.
10.17**	Amendment to Semiconductor Patent License Agreement, dated December 30, 2013, by and between Rambus Inc. and Samsung Electronics Co., Ltd.
12.1(20)	Computation of ratio of earnings to fixed charges.
21.1	Subsidiaries of Registrant.
23.1	Consent of Independent Registered Public Accounting Firm.
24	Power of Attorney (included in signature page).
31.1	Certification of Principal Executive Officer, pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Principal Financial Officer, pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

32.1	Certification of Principal Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Principal Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS±	XBRL Instance Document
101.SCH±	XBRL Taxonomy Extension Schema Document
101.CAL±	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB±	XBRL Taxonomy Extension Label Linkbase Document
101.PRE±	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF±	XBRL Taxonomy Extension Definition Linkbase Document

*	Management contracts or compensation plans or arrangements in which directors or executive officers are eligible to participate.
†	Confidential treatment has been granted with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.
**	Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.
±	XBRL (Extensible Business Reporting Language) information is furnished and not filed or a part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, and otherwise is not subject to liability under these sections.

(1) Incorporated by reference to the Form 10-Q filed on August 5, 2011.

(2) Incorporated by reference to the Form 10-K filed on December 15, 1997.

(3) Incorporated by reference to the Form 10-Q filed on May 4, 2001.

(4) Incorporated by reference to the Form 8-K filed on April 30, 2013.

(5) Incorporated by reference to the Form S-1/A (file no. 333-22885) filed on April 24, 1997.

(6) Incorporated by reference to the Form 8-K filed on June 29, 2009.

(7) Incorporated by reference to the Form 8-K filed on August 16, 2013.

(8) Incorporated by reference to the Form S-1 (file no. 333-22885) filed on March 6, 1997.

(9) Incorporated by reference to the Form 10-K filed on September 14, 2007.

(10) Incorporated by reference to the Form 8-K filed on May 1, 2012.

(11) Incorporated by reference to the Form 8-K filed on May 16, 2006.

(12) Incorporated by reference to the Form 8-K filed on May 1, 2012.

(13) Incorporated by reference to the Form 10-Q filed on April 30, 2003.

(14) Incorporated by reference to the Form 10-K filed on February 25, 2010.

(15) Incorporated by reference to the Form 10-Q filed on May 3, 2010.

(16) Incorporated by reference to the Form 10-K filed on February 24, 2012.

(17) Incorporated by reference to the Form 8-K filed on June 25, 2012.

(18) Incorporated by reference to the Form 10-Q/A filed on January 13, 2014.

(19) Incorporated by reference to the Form 10-Q filed on July 29, 2013.

(20) Incorporated by reference to the Form S-3 filed on June 22, 2009.

Exhibit 10.15

SETTLEMENT AGREEMENT

THIS SETTLEMENT AGREEMENT (the " Agreement ") is made and entered into as of the 9th day of December, 2013 (the " Effective Date") by and among Rambus Inc., a Delaware corporation (" Rambus "), on the one hand, and Micron Technology, Inc., a Delaware corporation, together with its Subsidiaries (as defined in Article 1), Micron Semiconductors Products, Inc., an Idaho corporation, Micron Semiconductor (Deutschland) GmbH, a corporation organized under the laws of Germany, and Micron Technology Italia Srl, a corporation organized under the laws of Italy (collectively, " Micron "), on the other hand. Rambus and Micron may hereinafter be referred to collectively as the " Parties" and individually as a " Party ."

WHEREAS , Micron and its Subsidiaries and Rambus and its Subsidiaries are currently parties to a number of Disputes (as defined in Article 1) relating to certain products of Micron and certain Rambus Patents (as defined in Article 1), including but not limited to disputes as to whether claims of such Rambus Patents are infringed by Micron's products, and disputes relating to the validity, enforceability and scope of such Rambus Patents, and the Antitrust Litigation (as defined in Article 1);

WHEREAS , the Parties desire to eliminate the risks associated with such litigation and to enter into a comprehensive resolution to compromise, settle and release the Disputes, and to compromise, resolve and avoid other disputes that may arise after the Effective Date with respect to Micron's products and the Rambus Patents;

WHEREAS, the Parties acknowledge that in resolving the Disputes, and other disputes that may arise after the Effective Date, the promises and covenants each will receive under this Agreement and the Patent License Agreement (as defined in Article 1) represent a package, and are not intended to be severable from each other; in particular (a) Micron is receiving a full and final release of the claims asserted or that could be or could have been asserted against it in the Disputes and securing a license to certain claims of the Rambus Patents, in exchange for the Initial Payment and other payments set forth in the Patent License Agreement, and (b) Rambus is receiving the Initial Payment and other payments set forth in the Patent License Agreement, in exchange for granting such releases and licenses, as well as other benefits provided for in this Agreement and the Patent License Agreement;

WHEREAS, the Parties acknowledge that it is therefore essential that their respective obligations under this Agreement be certain and not subject to collateral attack, or otherwise subject to change or modification except on the terms expressly set forth therein;

WHEREAS , this Agreement is entered into for the purpose of settlement and compromise only,

NOW, THEREFORE , in consideration of the mutual covenants and promises contained herein, and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the Parties, the Parties agree as follows:

[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

Article 1

Definitions

In addition to the terms defined in other parts of this Agreement, the following terms used herein with initial capital letters shall have the respective meanings specified in this Article 1.

1.1 Affiliate . The term "Affiliate" means, for an identified entity, any other entity that (a) is a Subsidiary of such identified entity; or (b) Controls or is under common Control of such identified entity, but only so long as such Control exists.

1.2 Agreement . The term "Agreement" has the meaning set forth in the introductory paragraph.

1.3 Antitrust Litigation . The term "Antitrust Litigation" means the matter entitled *Rambus Inc. v. Micron Technology Inc. et al.* , No. 04-431105 (Supr. Ct. Cal., San Fran. Filed May 5, 2004) and any appeals therefrom and related proceedings, including specifically the appeal in *Rambus Inc. v Micron Technology, Inc., et al* ., in the Court of Appeal of the State of California, First Appellate District, Division Two, Case No. A135150.

1.4 Change of Control . The term "Change of Control" has the meaning set forth in the Patent License Agreement.

1.5 Comprehensive Resolution Agreements . The term "Comprehensive Resolution Agreements" means this Agreement and the Patent License Agreement.

1.6 Control . The term "Control" has the meaning set forth in the Patent License Agreement.

1.7 Design. The term "Design" has the meaning set forth in the Patent License Agreement.

1.8 Disputes . The term "Disputes" means any and every litigation, lawsuit, or similar proceeding pending between the Parties as of the Effective Date in any court, governmental body, or agency in any jurisdiction, including the Patent Litigation, the German Patent Litigation, the Italian Patent Litigation, the Antitrust Litigation, and the Patent Actions, and any and all disputes related thereto.

1.9 Effective Date . The term "Effective Date" has the meaning set forth in the introductory paragraph.

1.10 Excluded Entity . The term "Excluded Entity" means Broadcom Corporation, LSI Corporation, MediaTek Inc., SK hynix Inc., SK hynix America Inc., Hynix Semiconductor Manufacturing America Inc., SK hynix U.K. Ltd., SK hynix Deutschland, GmbH, Nanya Technology Corporation, Nanya Technology Corporation U.S.A., NVIDIA Corporation, Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., Samsung Semiconductor, Inc., Samsung Austin Semiconductor, L.P., STMicroelectronics N.V., STMicroelectronics Inc. and any other Third Party (including the Affiliates of such Third Party) that is an adverse party to Rambus or its Subsidiaries in any lawsuit, litigation or other similar proceedings pending as of the Effective Date.

[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

1.11 German Patent Litigation . The term "German Patent Litigation" means (a) the infringement action based on the German part of EP 0 525 068 and based on the German utility model DE 19 17 296.9 filed by Rambus Inc. against Micron Semiconductor (Germany) GmbH at the District Court Mannheim/Germany (Court docket 7 O 451/00) on August 31, 2000, which claim has been withdrawn on June 18, 2004 and April 28, 2006, respectively, (b) the infringement action based on the German part of EP 1 022 642, filed by Rambus Inc. against Micron Semiconductor (Deutschland) GmbH at the District Court Mannheim/Deutschland (Court docket 7 O 452/01) on August 9, 2001, which proceedings are stayed (decision dated July 29, 2002), and (c) the infringement suit based on the German part of EP 1 022 642 filed by Rambus Inc. against Micron Technology at the Administrative Court Karlsruhe/Deutschland (Court docket 6 K 2021/01), which proceedings have been continued with the District Court Mannheim/Germany (Court docket 7 O 131/02) and stayed (decision dated July 26, 2002) (the “value in dispute” for such decision has preliminarily been fixed to EUR 2.500.000 (decision dated March 3, 2003)).

1.12 Initial Payment . The term “Initial Payment” has the meaning set forth in the Patent License Agreement.

1.13 Italian Patent Litigation . The term "Italian Patent Litigation" means the matters entitled (a) *Micron Technology Inc. and Micron Technology Italia Srl v. Rambus Inc.* , Docket nos. 33560/01 and 61500/09, District Court of Milan (J. Bichi), and (b) *Micron Technology Inc. and Micron Technology Italia Srl v. Rambus Inc.* , Docket no. 18700/2011, Supreme Court.

1.14 Licensed Product . The term “Licensed Product” has the meaning set forth in the Patent License Agreement.

1.15 Micron . The term “Micron” has the meaning set forth in the introductory paragraph.

1.16 Micron Patents . The term “Micron Patents” has the meaning set forth in the Patent License Agreement.

1.17 Micron Product . The term “Micron Product” has the meaning set forth in the Patent License Agreement.

1.18 Party . The terms “Party” and “Parties” have the meanings set forth in the introductory paragraph.

1.19 Patent Actions . The term “Patent Actions” means all United States Patent and Trademark Office, all European Patent Office and all other governmental reexamination proceedings, oppositions, actions or challenges filed, requested or supported by Micron with respect to any Rambus Patents, and any appeals thereof, as of the Effective Date, including without limitation all such reexaminations and/or oppositions of U.S. Patent, European Patent and or other governmental Patent numbers.

1.20 Patent License Agreement . The term “Patent License Agreement” has the meaning set forth in Article 2.

1.21 Patent Litigation . The term “Patent Litigation” means the matters entitled *Micron Technology, Inc. v. Rambus Inc.* , No. 00-792 (D. Del. Filed Aug. 28, 2000) and *Rambus Inc.*

[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

v. Micron Technology, Inc., et al. , No. C-06-00244 (N.D. Cal. Filed Jan. 13, 2006), and any appeals therefrom and related proceedings, including specifically the appeal in Micron Technology, Inc. v. Rambus, Inc., Federal Circuit No. 13-1294 (“Delaware Appeal”).

1.22 Patents . The term “Patents” has the meaning set forth in the Patent License Agreement.

1.23 Rambus . The term “Rambus” has the meaning set forth in the introductory paragraph.

1.24 Rambus Patents . The term “Rambus Patents” has the meaning set forth in the Patent License Agreement.

1.25 Rambus Leadership Products . The term “Rambus Leadership Products” has the meaning set forth in the Patent License Agreement.

1.26 [***]

1.27 Subsidiary . The term “Subsidiary” has the meaning set forth in the Patent License Agreement.

1.28 Third Party . The term “Third Party” means with respect to a specified Party, or any Subsidiary of such specified Party, any entity that is not the specified Party or an Affiliate or Subsidiary of such specified Party.

Article 2

Patent License Agreement

Concurrent with the execution and delivery of this Agreement, and as an integral part of the overall consideration received by the Parties in respect of their respective releases, covenants not to sue, and other obligations under this Agreement, Rambus and Micron shall enter into the Patent License Agreement in the form attached hereto as Exhibit A (the “ Patent License Agreement ”).

Article 3

Releases

Subject to the delivery of the Initial Payment in accordance with the Patent License Agreement, and the execution and delivery of the Patent License Agreement in accordance with Article 2 (for the avoidance of doubt, none of the Parties’ releases, covenants not to sue, or other obligations under this Article 3 shall be effective until Rambus has received the full amount of the Initial Payment in accordance with the Patent License Agreement and the execution and delivery of the Patent License Agreement in accordance with Article 2):

3.1 Release by Rambus .

Effective upon Rambus’ receipt of the Initial Payment as set forth in the Patent License Agreement, Rambus, on behalf of itself and its Subsidiaries, and its and their respective former and current agents, representatives, directors, officers, employees, predecessors,

[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

successors, and attorneys (collectively, “Rambus Group”) hereby irrevocably releases, acquits, and forever discharges Micron, its Subsidiaries, its and their respective former and current agents, representatives, directors, officers, employees, predecessors, successors, and attorneys (collectively, “Micron Group”) from any and all claims, counterclaims, defenses, demands, damages, debts, liabilities, accounts, actions and causes of action of any kind, [***], including but not limited to (i) any and all claims of any kind for infringement of the Rambus Patents arising from the manufacture, use, importation, exportation, sale or offer for sale of any products up until the Effective Date and (ii) any and all claims that were alleged or could have been alleged by Rambus Group in any Disputes.

3.2 Release by Micron.

Effective upon Rambus’ receipt of the Initial Payment as set forth in the Patent License Agreement, Micron, on behalf of Micron Group, hereby irrevocably releases, acquits, and forever discharges Rambus Group from any and all claims, counterclaims, defenses, demands, damages, debts, liabilities, accounts, actions and causes of action of any kind, known or unknown, suspected or unsuspected, that arise or arose from or relate in any way to any act of Rambus Group prior to the Effective Date, where such act gives or gave rise to a cause of action that Micron Group had standing to assert against Rambus Group, or against any other Person as to whom Rambus Group was then obliged by written agreement to indemnify, including but not limited to (i) any and all claims of any kind for infringement of the Micron Patents arising from the manufacture, use, importation, exportation, sale or offer for sale of any Design up until the Effective Date and (ii) any and all claims that were alleged or could have been alleged by Micron Group in any Disputes.

3.3 Releases Shall Remain Effective. Each of Rambus and Micron acknowledges that, after entering into this Agreement, they may discover facts different from, or in addition to, those they now believe to be true with respect to the conduct of the other Party. Each of Rambus and Micron intends that the releases and discharges set forth in this Article 3 shall be, and shall remain, in effect in all respects as written, notwithstanding the discovery of any different or additional facts.

3.4 Waiver of California Civil Code § 1542. In connection with the releases and discharges described in this Article 3, each of Rambus and Micron acknowledges that it is aware of the provisions of section 1542 of the Civil Code of the State of California, and hereby expressly waives and relinquishes all rights and benefits that it has or may have had under that section (or any equivalent law or rule of any other jurisdiction), which reads as follows:

> A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.

3.5 [***]

Rambus, on behalf of itself and its Subsidiaries, hereby covenants not to assert any claims of infringement of the Rambus Patents against Micron’s distributors and customers or against Micron’s Subsidiaries’ distributors and customers solely arising from the use,

[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

importation, sale or offer for sale up until the Effective Date of any Micron Products.

3.6 Certain Exclusions . For the avoidance of doubt:

(a) The releases and covenants not to sue contained in this Article 3 shall apply solely to (i) the activities occurring prior to the Effective Date of each of the Parties, (ii) the activities occurring prior to the Effective Date of each of the Parties' respective Subsidiaries existing on or prior to the Effective Date [***]. In no event shall the releases and covenants not to sue contained in this Article 3 apply to the activities, whether occurring prior to or after the Effective Date, of (1) any Third Party with or into which a Party merges or combines, whether or not such Party remains the surviving entity, or (2) any Third Party and/or portion of the assets of any business of a Third Party that may be acquired by a Party, through merger (including reverse triangular merger), acquisition of stock, acquisition of assets or otherwise, in each case, after the Effective Date.

(b) The releases and covenants not to sue contained in this Article 3 are not intended to and do not extend to any Excluded Entity.

3.7 Dismissals and Other Provisions Terminating the Disputes .

(a) [***], Micron and Rambus, through their respective counsel, shall take all necessary and permissible actions to obtain dismissal with prejudice of all claims, counterclaims, cross-claims and cross-complaints asserted against one another and/or one another's Subsidiaries in the Patent Litigation and the Antitrust Litigation and the withdrawal or dismissal with prejudice of all appeals therefrom. Such dismissals are final and not appealable.

(b) [***]. Both Parties shall, [***], withdraw or discontinue any formal or informal complaints, requests, petitions, actions, or other proceedings they may have pending against the other Party or its Subsidiaries before any court or regulatory body anywhere in the world related to the claims, counterclaims, demands, damages, debts, liabilities, accounts, actions and causes of action released by this Agreement or that relate in any way to the Rambus Patents or the Micron Patents. For the avoidance of doubt, this provision (i) requires Micron to withdraw and discontinue the German Patent Litigation, (ii) requires the Parties, through their respective counsel, to withdraw the Italian Patent Litigation by executing, delivering and submitting such documents as may be necessary to dismiss those cases, and (iii) does not require Rambus to withdraw any complaint or other proceeding as against parties other than Micron or its Subsidiaries.

(c) [***], Micron shall, to the full extent permitted by applicable law, withdraw, cease to prosecute or pursue and notify the U.S. Patent and Trademark Office, the European Patent Office, and/or other applicable governmental agency, that it no longer intends to participate in, the Patent Actions.

(d) The Parties and their counsel shall cooperate in good faith to effect the dismissals and withdrawals required by Sections 3.7(a), (b), and (c) herein.

[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

3.8 Costs and Attorneys' Fees . For any and all cases, lawsuits, proceedings, Disputes and Patent Actions, including but not limited to the Patent Litigation, German Patent Litigation, the Italian Patent Litigation and the Antitrust Litigation, the Parties agree that each will pay its own costs and attorneys' fees and that neither will file requests for costs or fees or otherwise seek to recover its fees and/or costs. Without limiting the foregoing, Micron shall not seek to recover any costs previously awarded to it in the Antitrust Litigation. Any bills of costs, judgments or other requests previously filed or awarded in such cases that have not yet been paid including without limitation the judgment for costs awarded to Micron in the Antitrust Litigation shall be withdrawn or vacated.

3.9 No Admission . Nothing contained in any of the Comprehensive Resolution Agreements, or done or omitted in connection with any of the Comprehensive Resolution Agreements, is intended as, or shall be construed as, an admission by any Party of any fault, liability or wrongdoing.

3.10 No Further Actions . During the Initial Term-Product License Period (as defined in the Patent License Agreement) and each Term-Product License Renewal Period (as defined in the Patent License Agreement) , if any, and as part of the settlement of claims and releases contemplated by this Agreement, during the term of the Patent License Agreement, and in each case unless and to the extent required by court order, summons, subpoena or judicial or regulatory agency order or rule:

(a) Micron covenants not to bring, or aid, assist or participate in, any action or proceeding challenging or contesting the assertion, enforcement, validity or enforceability of, or any use or infringement by any Third Party of, the Rambus Patents, including but not limited to filing, requesting, participating or assisting in any of the Patent Actions, provided that, notwithstanding the foregoing, Micron may assist (e.g., provide prior art and/or non-infringement analyses to) each Third Party to whom Micron has distributed or sold a Micron Product before the Effective Date or a Licensed Product during the term of the license associated with such Licensed Product as set forth in the Patent License Agreement, in its defense of any claim of a Rambus Patent asserted against such Third Party by Rambus to the extent that Micron is obligated to provide such Third Party with such assistance pursuant to an indemnification provision;

(b) [***]; and

(c) Each Party covenants not to (i) file or bring a complaint against, or formally or informally request or urge investigation of, the other Party or any of its Subsidiaries before any regulatory body, or (ii) support, cooperate with or otherwise assist any Third Party in any dispute against the other Party or any of its Subsidiaries, or any regulatory body in any proceeding involving the other Party or any of its Subsidiaries, in each case in any matter related to the claims, counterclaims, defenses, demands, damages, debts, liabilities, accounts, actions and causes of action released by this Agreement, including but not limited to filing, requesting, participating or assisting in any United States, European, or other patent office reexamination proceedings, actions, challenges, oppositions or interferences with respect to Patents of the other Party or any of its Subsidiaries, and filing *amicus curiae* briefs in the Patent Litigation, the Antitrust Litigation, or any other Dispute.

[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

Article 4

Warranties

Each Party represents, warrants and covenants, on behalf of itself and its Subsidiaries, to the other Party during the term of this Agreement:

4.1 Due Incorporation. Such Party is duly incorporated, validly existing and in good standing under the laws of its jurisdiction of formation with the requisite corporate authority to own and use its properties and assets and to carry on its business as currently conducted.

4.2 Due Authorization; Enforceability. Such Party has the requisite corporate or other authority to enter into, and to grant the releases and discharges, make the covenants, and consummate the transactions contemplated by, this Agreement, on behalf of itself and its Subsidiaries, and otherwise to carry out its and its Subsidiaries' obligations hereunder. The execution, delivery and performance of this Agreement by such Party and its Subsidiaries has been duly authorized by all necessary action of such Party and its Subsidiaries, and no other act or proceeding on the part of or on behalf of such Party and its Subsidiaries is necessary to approve the execution and delivery of this Agreement, the performance by such Party and its Subsidiaries of their obligations hereunder and the consummation of the transactions contemplated hereby. This Agreement has been duly executed and delivered by such Party and constitutes a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium and similar laws relating to or affecting creditors generally, by general equity principles or by limitations on indemnification pursuant to public policy.

4.3 No Conflicts; No Consents. The execution, delivery and performance of this Agreement by such Party and its Subsidiaries, including but not limited to the granting of the releases and discharges contemplated hereby, will not infringe any law, regulation, judgment or order applicable to such Party and its Subsidiaries and is not and will not be contrary to the provisions of the constitutional documents of such Party and its Subsidiaries and will not (with or without notice, lapse of time or both) result in any breach of the terms of, or constitute a default under, any instrument or agreement to which such Party and its Subsidiaries is a party or by which it or its property is bound. All consents and approvals of any court, government agencies or other regulatory body required by such Party and its Subsidiaries for the execution, delivery and performance of the terms of this Agreement have been obtained and are in full force and effect.

4.4 No Assignment of Claims. Each Party represents and warrants that it has not assigned, transferred or granted to any Third Party any rights or interests with respect to any claim or cause of action, or any right (s) underlying any claim or cause of action, it had, has, or may have against the other or its Subsidiaries as of, or prior to, the Effective Date of this Agreement.

4.5 Micron Electronics, Inc. Micron represents and warrants that Micron Electronics, Inc. is not a Subsidiary of Micron.

[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

Article 5

Notices and other Communications

5.1 All notices or other communication required or permitted hereunder shall be in writing and shall be (a) mailed by first class air mail (registered or certified if available), postage prepaid, or otherwise delivered by hand, by messenger, addressed to the addresses set forth below, or (b) delivered by facsimile to the facsimile number set forth below. Each Party may change its address or facsimile number for notices by providing a notice to the other Party in the manner set forth herein. Such notices shall be deemed to have been effective when delivered or, if delivery is not accomplished by reason of some fault or refusal of the addressee, when tendered (which tender, in the case of mail, shall be deemed to have occurred upon posting, and in the case of facsimile, shall be deemed to have occurred upon transmission). All notices shall be in English.

If to Micron:

Micron Technology, Inc.
8000 S. Federal Way
Boise, Idaho 83716-9632
Telephone: 208-368-4500
Facsimile: 208-368-4540
Attention: General Counsel

If to Rambus:

Rambus Inc.
1050 Enterprise Way, Suite 700
Sunnyvale, CA 94089
Telephone: 408-462-8000
Facsimile: 408-462-8001
Attention: General Counsel

(with a copy, which shall not constitute notice, to the following:)

Satish Rishi
Chief Financial Officer
Rambus Inc.
4440 El Camino Real
Los Altos, CA 94022
Telephone: 408-462-8000
Facsimile: 408-462-8001

[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

Article 6

Successors and Assigns

6.1 Subject to the limitation in Section 3.6 and 8.5, this Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective heirs, successors and assigns, and upon any corporation, limited liability partnership, limited liability company, or other entity into or with which any Party hereto may merge, combine or consolidate. For the avoidance of doubt, this provision does not govern the rights or obligations of successors or assigns of the Parties under the Patent License Agreement. The releases, dismissals and covenants granted by each Party and its Subsidiaries under this Agreement (but not any benefits received by such Party or its Subsidiaries under this Agreement) shall run with (a) in the case of Micron, the Micron Patents or (b) in the case of Rambus, the Rambus Patents, and remain in full force and effect regardless of any subsequent assignment, sale or other transfer of any such Micron Patents or Rambus Patents or any rights or interests therein. Any such assignment, sale, or transfer of rights in contravention of the foregoing shall be null and void *ab initio* and of no force or effect.

Article 7

Dispute Resolution

7.1 Governing Law . This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to any choice-of-law or conflict-of-law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of Delaware.

7.2 English Language . This Agreement is executed in the English language and no translation shall have any legal effect.

7.3 Jurisdiction and Venue . Any legal action, suit or proceeding arising under, or relating to, this Agreement, shall be brought in State or Federal Courts located in the State of Delaware, and each Party agrees that any such action, suit or proceeding may be brought only in such courts. Each Party further waives any objection to the laying of jurisdiction and venue for any such suit, action or proceeding in such courts.

Article 8

Miscellaneous

8.1 Entire Agreement . This Agreement and the Patent License Agreement embody the entire understanding of the Parties with respect to the subject matter hereof, and merges all prior oral or written communications between them, and neither of the Parties shall be bound by any conditions, definitions, warranties, understandings, or representations with respect to the

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subject matter hereof other than as expressly provided herein.

8.2 Relationship of the Parties . Nothing contained in this Agreement or the Patent License Agreement shall be construed as creating any association, partnership, joint venture or the relation of principal and agent between Rambus and Micron. Each Party is acting as an independent contractor, and no Party shall have the authority to bind any other Party or its representatives in any way.

8.3 Headings and Recitals . The headings of the several articles and sections are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement. The recitals to this Agreement are intended to be a part of and affect the meaning and interpretation of this Agreement.

8.4 Modification; Waiver . No modification or amendment to this Agreement, nor any waiver of any rights, will be effective unless assented to in writing by the Party to be charged, and the waiver of any breach or default will not constitute a waiver of any other right hereunder or any subsequent breach or default.

8.5 No Assignment . This Agreement is personal to the Parties, and the Agreement and/or any right or obligation hereunder is not assignable, whether in conjunction with a change in ownership, merger, acquisition, the sale or transfer of all, or substantially all or any part of either Party's or any of their respective Subsidiaries' business or assets or otherwise, voluntarily, by operation of law, reverse triangular merger or otherwise, without the prior written consent of the other Party, which consent may be withheld at the sole discretion of such other Party. Each Party understands that, as a condition to such consent, the other Party may require it to convey, assign or otherwise transfer its rights and obligations under the other Comprehensive Resolution Agreements to the entity assuming such Party's rights and obligations under this Agreement. Any such purported or attempted assignment or transfer in violation of the foregoing shall be deemed a breach of this Agreement and shall be null and void. Notwithstanding the foregoing, either Party shall be entitled to, and each Party hereby agrees to, assign this Agreement to a successor to all or substantially all of a Party's assets in a transaction entered into solely to change a Party's place of incorporation.

8.6 Interpretation . Each Party confirms that it and its respective counsel have reviewed, negotiated and adopted this Agreement as the agreement and understanding of the Parties hereto and the language used in this Agreement shall be deemed to be the language chosen by the Parties hereto to express their mutual intent. Regardless of which Party may have drafted this Agreement or any part thereof, no rule of strict construction shall be applied against either Party. For the avoidance of doubt "includes", "including", "included", and other variations of such terms shall be deemed to be followed by the phrase "without limitation".

8.7 No Third Party Beneficiaries . Unless otherwise expressly stated herein, nothing in this Agreement, express or implied, is intended to confer upon any person other than the Parties hereto or their respective permitted assignees, successors in interest, and Subsidiaries any rights or remedies under or by reason of this Agreement. The former and current agents, representatives, directors, officers, employees, and attorneys of the Parties and their Subsidiaries are intended beneficiaries of Sections 0, 0, 0, 3.4, and 3.5.

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8.8 Severability. If any provision of any Comprehensive Resolution Agreement is held to be invalid or unenforceable, the meaning of such provision shall be construed, to the extent feasible, so as to render the provision enforceable and to effectuate the intent and purpose of the Parties with respect to such invalid or unenforceable provision, and if no feasible interpretation shall save such provision, (a) a suitable and equitable provision shall be substituted therefor in order to effectuate, so far as may be valid and enforceable, the intent and purpose of the Parties with respect to such invalid or unenforceable provision, and (b) the remainder of such Comprehensive Resolution Agreement shall remain in full force and effect.

8.9 Counterparts; Facsimile Transmission. This Agreement may be executed in two (2) or more counterparts, all of which, taken together, shall be regarded as one and the same instrument. Each Party may rely on facsimile or .pdf signature pages as if such facsimile or .pdf pages were originals.

8.10 Bankruptcy Code. All rights, licenses, privileges, releases, and immunities granted under this Agreement shall be deemed to be, for the purposes of Section 365(n) of the U.S. Bankruptcy Code, as amended (the "Bankruptcy Code"), licenses of rights to "intellectual property" as defined under Section 101(35A) of the Bankruptcy Code. The Parties agree that each of the Parties shall retain and may fully exercise all of their respective rights and elections under the Bankruptcy Code. [***].

8.11 Further Actions. Each of the Parties hereto agrees to take and cause its Subsidiaries to take any and all actions reasonably necessary in order to effectuate the intent, and to carry out the provisions, of this Agreement.

8.12 Public Disclosures and Confidentiality. The Parties shall issue a press release with respect to the Comprehensive Resolution Agreement in a mutually acceptable form. Each Party agrees that, after the issuance of such press release, each Party shall be entitled to disclose the general scope and nature of this Agreement, but that the terms and conditions of this Agreement, to the extent not already disclosed pursuant to such press release, shall be treated as confidential information and that neither Party will disclose such terms or conditions to any Third Party without the prior written consent of the other Party, provided, however, that each Party may disclose the terms and conditions of this Agreement:

(a) as required by any court or other governmental body;

(b) as otherwise required by law;

(c) as otherwise may be required by applicable securities and other law and regulation, including to legal and financial advisors in their capacity of advising a party in such matters, so long as the disclosing Party shall seek confidential treatment of such terms and conditions to the extent reasonably possible;

(d) to legal counsel, accountants, and other professional advisors of the Parties;

(e) in confidence, to banks, investors and other financing sources and their advisors;

(f) in connection with the enforcement of this Agreement or rights under this Agreement;

[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

(g) during the course of litigation so long as the disclosure of such terms and conditions are restricted in the same manner as is the confidential information of other litigating parties and so long as (i) the restrictions are embodied in a court-entered protective order limiting disclosure to outside counsel and (ii) the disclosing party informs the other party in writing at least ten (10) business days in advance of the disclosure and discusses the nature and contents of the disclosure, in good faith, with the other party (for purposes of this provision, the Protective Order entered in the Antitrust Litigation is acceptable, as long as the disclosure is designated as both "Highly Confidential-BP and Highly Confidential-IP");

(h) in confidence, in connection with an actual or prospective merger or acquisition or similar transaction; or

(i) in confidence, in connection with a Party's obligation(s) under any most favored nation, or similar clause, whereby such Party is contractually obligated to disclose and offer terms given to Third Parties.

In addition, upon execution of this Agreement, or thereafter, Rambus, in its discretion, shall be entitled to file a copy of this Agreement with the U.S. Securities and Exchange Commission, so long as Rambus seeks confidential treatment of such agreement to the extent reasonably possible. In addition, [***] .

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IN WITNESS WHEREOF, this Agreement has been duly and executed and delivered by the duly authorized officers of the Parties hereto as of the date first written above.

RAMBUS INC.

By: /s/ Kevin Donnelly

Name: Kevin Donnelly

MICRON TECHNOLOGY, INC.

By: /s/ Brian M. Shirley

Name: Brian M. Shirley

MICRON SEMICONDUCTOR PRODUCTS, INC.

By: /s/ Thomas L. Laws Jr.

Name: Thomas L. Laws Jr.

MICRON TECHNOLOGY ITALIA, SRL

By: /s/ Thomas L. Laws Jr.

Name: Thomas L. Laws Jr.

MICRON SEMICONDUCTOR (DEUTSCHLAND) GMBH

By: /s/ Thomas L. Laws Jr.

Name: Thomas L. Laws Jr.

[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

EXHIBIT A

PATENT LICENSE AGREEMENT

SEMICONDUCTOR PATENT LICENSE AGREEMENT

Incorporated by reference to Exhibit 10.16 to the Annual Report on Form 10-K for the fiscal year ended December 31, 2013

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Exhibit 10.16

SEMICONDUCTOR PATENT LICENSE AGREEMENT

This SEMICONDUCTOR PATENT LICENSE AGREEMENT ("Agreement") is effective as of December 1, 2013 ("Effective Date") by and between Rambus Inc., a corporation duly organized and existing under the laws of Delaware, U.S.A., having its principal place of business at 1050 Enterprise Way, Suite #700, Sunnyvale, California 94089, U.S.A., (hereinafter "Rambus") and Micron Technology, Inc., a corporation duly organized and existing under the laws of Delaware, U.S.A., having its principal place of business at 8000 S. Federal Way, Boise, Idaho 83716, U.S.A., (hereinafter "Micron"). Micron and Rambus shall be referred to herein individually as a Party, and collectively as the Parties.

WHEREAS, Rambus and Micron are currently parties to a number of disputes, including, but not limited to, the Antitrust Litigation and disputes relating to Rambus Patents;

WHEREAS , the Parties recognize that litigation of such disputes is inherently uncertain, and is subject to certain risks and to various possible outcomes, some of which may be more favorable to Rambus, and some of which may be more favorable to Micron;

WHEREAS , concurrent with the execution and delivery of this Agreement, the Parties have entered into a Settlement Agreement (the "Settlement Agreement") to eliminate the risks associated with such litigation and to enter into a comprehensive resolution to compromise, settle and release certain existing claims and disputes between them, and to resolve and avoid other disputes that may arise after the Effective Date;

WHEREAS , as part of such comprehensive resolution, the Parties have agreed to enter into this Agreement; and,

WHEREAS , because this Agreement is part of such comprehensive resolution, the Parties acknowledge that it is essential that their respective obligations under this Agreement be certain and not subject to collateral attack, or otherwise subject to change or modification except on the terms expressly set forth herein.

NOW, THEREFORE , in consideration of the mutual covenants and premises contained herein, and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the Parties, the Parties, on behalf of themselves and of each of their respective Subsidiaries, agree as follows:

1. Definitions

1.1 "Acquired Business" means (a) a Third Party, (b) substantially all of the business or assets of a Third Party, (c) any business unit and/or product line of a Third Party, or (d) substantially all of the business and assets used by a Third Party in connection with a Qualified Product Line, that either Party or any of its Subsidiaries acquires in an Acquisition.

1.2 "Acquisition" means, as to a Party, a transaction or a series of related transactions in which such Party acquires, through merger (including reverse triangular merger), acquisition of stock, acquisition of assets or otherwise, (i) the Control of a Third Party, (ii) ownership of substantially all of the assets or business of a Third Party, (iii) ownership of any business unit and/or product line of a Third Party, or (iv) ownership of substantially all of the business and assets used by a Third Party in connection with a Qualified Product Line.

1.3 "Acquisition Date" means the closing date of any Acquisition.

1.4 "Acquisition Products" means DRAMs, DRAM Controllers, SerDes ICs, Resistive RAMs, and RAM Flash Memories.

1.5 "Affiliate" means, for an identified entity, any other entity that (a) is a Subsidiary of such identified entity or (b) Controls or is under common Control with such identified entity, but only for so long as such Control exists.

1.6 "Antitrust Litigation" means the matter entitled *Rambus Inc. v. Micron Technology Inc.* , No. 04-431105 (Sup. Ct. Cal., San Fran. Filed May 5, 2004).

1.7 "Change of Control" as applied to any specified entity means a transaction or a series of related transactions in

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

which (a) a Third Party or Related Parties who did not previously Control such entity obtain(s) Control of such entity, or (b) such entity merges with or transfers substantially all of its assets to a Third Party and the shareholders of such entity immediately before the transaction or series of related transactions own less than a fifty percent (50%) interest in the acquiring or surviving entity immediately after the transaction or series of related transactions.

1.8 “Component” means any product comprised of one or more Integrated Circuits physically connected, stacked, or attached to a unitary substrate, directly, or through supporting material such as silicon interposers, or the like, or other Integrated Circuit where all other elements of such product operate primarily to provide physical support, packaging and/or connectivity with respect to such Integrated Circuits. Examples of Components include DIMMs, SIMMs and other modules, and cards, multi-chip packages (MCP), system-on-chip, system-in-package, system-on-insulator, solid state storage devices, and other form factors.

1.9 “Control” (including “Controlled” and other forms) of an entity means (a) beneficial ownership (whether directly or indirectly through entities or other means) of more than fifty percent (50%) of the outstanding voting securities of that entity or (b) in the case of an entity that has no outstanding voting securities, having (whether directly or indirectly) more than fifty percent (50%) of the power to direct the management and control of such entity.

1.10 “CRI” means Cryptography Research, Inc., a Subsidiary of Rambus.

1.11 “CRI Patents” means Patents of CRI or its Subsidiaries.

1.12 “Custom Memory IC” means each Memory IC that substantially implements the minimum set of features, parameters, and protocols defined in a Technical Specification developed by Micron for a specific customer, by such specific customer, or jointly by Micron and such specific customer, in each case where such Memory IC is Sold by Micron or a Subsidiary of Micron as a Micron Product solely to such customer.

1.13 “DDR DRAM” means each double data rate DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for DDR DRAM, (b) contains features enabling communication with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating (i) at a data transfer rate exceeding [***] or (ii) with data bit width other than x4, x8, x16, and/or x32.

1.14 “DDR Mobile RAM” means each low-power DDR DRAM.

1.15 “DDR2 DRAM” means each double data rate DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for DDR2 DRAM, (b) contains features enabling communication with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating (i) at a data transfer rate exceeding [***] or (ii) with data bit width other than x4, x8, x16 and/or x32.

1.16 “DDR2 Mobile RAM” means each low-power DDR2 DRAM.

1.17 “DDR3 DRAM” means each double data rate DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for DDR3 DRAM, (b) contains features enabling communication with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating (i) at a data transfer rate exceeding [***] or (ii) with data bit width other than x4, x8, x16 and/or x32.

1.18 “DDR4 DRAM” means each double data rate DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for DDR4 DRAM, (b) is solely capable of communicating with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating (i) at a data transfer rate exceeding [***] or (ii) with data bit width other than x4, x8, x16 and/or x32.

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

1.19 “Design” means any human or machine readable representation of a design, such as a circuit layout in a drawing or a register transfer level description (RTL) file, for any product.

1.20 “DRAM” means a random-access Memory IC which requires periodic refresh for the maintenance of the bits stored within its memory cells at least every ten (10) seconds, and which does not guarantee said bits to be retained within the memory cells when they cease to receive electrical power. The term “DRAM” shall not include RAM Flash Memory or Resistive RAM.

1.21 “DRAM Controller” means any Integrated Circuit having circuitry integrated thereon or contained therein that is capable through an Interface of transmitting and/or receiving data from a DRAM.

1.22 “Effective Date” has the meaning assigned in the first paragraph of this Agreement.

1.23 “Elpida” means Elpida Memory, Inc., a Subsidiary of Micron, and also known as Micron Memory Japan, Inc.

1.24 “Elpida Patent License Agreement” means that certain Memory Products Patent License Agreement entered into by and between Rambus and Elpida as of January 1, 2010, as amended by that certain Amendment No. 1 to Memory Products Patent License Agreement dated August 12, 2012 and that certain Amendment No. 2 to Memory Products Patent License Agreement dated September 14, 2013.

1.25 “Elpida Technology License Agreement” means that certain Direct Rambus DRAM Semiconductor Technology License Agreement entered into by and between Rambus and Elpida as of the later of (a) May 26, 2006 or (b) the date upon which Elpida became an Ultimate Parent Entity (as such term is defined in such agreement) and provided Rambus with written notice thereof in accordance with Section 9.3 of such agreement.

1.26 “Elpida XDR License Agreement” means that certain Yellowstone DRAM Semiconductor Technology License Agreement entered into by and between Rambus and Elpida effective as of March 18, 2003.

1.27 “Existing Rambus Agreement” has the meaning assigned in Section 5.2(b).

1.28 “Expiration Date” means the seventh (7 th) anniversary of the Effective Date.

1.29 “Former Subsidiary” has the meaning assigned to it in Section 4.2.

1.30 “GDDR DRAM” means each graphics double date rate DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for GDDR DRAM, (b) contains features enabling communication with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating (i) at a data transfer rate exceeding [***] or (ii) with data bit width other than x16 and x32.

1.31 “GDDR2 DRAM” means each graphics double date rate DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for GDDR2 DRAM, (b) contains features enabling communication with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating (i) at a data transfer rate exceeding [***] or (ii) with data bit width other than x16 and x32.

1.32 “GDDR3 DRAM” means each graphics double date rate DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for GDDR3 DRAM, (b) contains features enabling communication with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating (i) at a data transfer rate exceeding [***] or (ii) with data bit width other than x16 and x32.

1.33 “GDDR4 DRAM” means each graphics double data rate DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for GDDR4 DRAM, (b) is solely capable of communicating with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating (i) at a data transfer

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rate exceeding [***] or (ii) with data bit width other than x16 and x32.

1.34 “GDDR5 DRAM” means each graphics double data rate DRAM that (a) substantially implements those interface features, parameters, and protocols in the same manner in all material respects as the DRAM Sold by Micron or its Subsidiaries on or before the Effective Date as “GDDR5 DRAM” or implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for GDDR5 DRAM, (b) contains features enabling communication with any other Integrated Circuit either, prior to the publication of such Technical Specification, through the protocol contained in such DRAM Sold by Micron or its Subsidiaries on or before the Effective Date as “GDDR5 DRAM” or, after the publication of such Technical Specification, in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating (i) at a data transfer rate exceeding [***] or (ii) with a data bit width other than x16 and x32.

1.35 “Hybrid Memory Cube 1.X DRAM” means each DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by the Hybrid Memory Cube Consortium as HMC Specification 1.X, (b) contains features enabling communication with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating at a data transfer rate exceeding [***].

1.36 “Hybrid Memory Cube 2.X DRAM” means each DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined or recommended in any Technical Specification published by the Hybrid Memory Cube Consortium as HMC Specification 2.X, (b) contains features enabling communication with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating at a data transfer rate exceeding [***].

1.37 “IMFT” means IM Flash Technologies, LLC, a Micron Joint Venture that is jointly owned by Micron and Intel Corporation.

1.38 “Indirect Infringement” means any form of patent infringement where the accused infringer is not directly infringing the subject patent right(s), but who contributes to or induces the direct infringement of the subject patent right(s) by a Third Party by, for example (without limitation), and with knowledge of the subject patent right(s) alleged to be infringed, supplying designs, parts or instructions to the Third Party that enable such Third Party to infringe directly the subject patent right(s).

1.39 “Industry Standards Setting Body” means any industry standards setting organization (e.g., a collection of companies that cooperate, under contract or applicable law, in the drafting and publication of a Technical Specification that is intended, if implemented, to increase the compatibility between various products), including, but not limited to, JEDEC and the Hybrid Memory Cube Consortium, that publishes for industry adoption one or more Technical Specifications that define a minimum set of features, parameters and protocols for one or more Interfaces for Memory ICs.

1.40 “Initial Paid-Up Product” means each Micron Product that is an SDR DRAM, DDR DRAM, DDR2 DRAM, DDR3 DRAM, GDDR DRAM, GDDR2 DRAM, GDDR3 DRAM, GDDR4 DRAM, GDDR5 DRAM, LPSDR DRAM, LPDDR DRAM, LPDDR2 DRAM, LPDDR3 DRAM, RLDRAM, DDR Mobile RAM, DDR2 Mobile RAM, Wide I/O Mobile DRAM , and Hybrid Memory Cube 1.X DRAM. Notwithstanding the foregoing sentence, any product that constitutes a Rambus Leadership Product shall be deemed not to be an Initial Paid-Up Product.

1.41 “Initial Paid-Up Product License” means the rights and licenses granted pursuant to Section 2.1(b).

1.42 “Initial Payment” has the meaning assigned to it in Section 5.1(a).

1.43 “Initial Term-Product License Period” means the period of time that starts on the Effective Date and ends on the earlier of (a) the Expiration Date or (b) the date, if any, on which the Term-Product License is terminated.

1.44 “Initial Term-Product License Renewal Period” has the meaning assigned to it in Section 7.1(d).

1.45 “Inotera” means Inotera Memories, Inc. (□□□□□□□□□□), a company incorporated under the laws of the Republic of China.

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

1.46 “Integrated Circuit” means a single, discrete integrated circuit chip, whether in wafer, singulated die or packaged die form. For clarity, the term “Integrated Circuit” specifically excludes any substrate on which or to which such integrated circuit chip in packaged form may be physically attached.

1.47 “Interface” means an electrical, optical, RF, mechanical, or software data path that is capable of conveying information between two or more (a) Integrated Circuits or (b) portions of an Integrated Circuit, in each case together with the set of protocols defining the electrical, physical, timing and/or functional characteristics, sequences and/or control procedures of such data path.

1.48 “JEDEC” means the JEDEC Solid State Technology Association, originally known as the Joint Electron Device Engineering Council, a non-stock corporation organized and existing under the laws of the Commonwealth of Virginia. The term “JEDEC” shall include any Industry Standards Setting Body that displaces or replaces JEDEC as the entity primarily responsible for the publication of Technical Specifications formerly published by JEDEC with respect to any Memory IC or any other product.

1.49 “JEDEC Minor Update” means a Technical Specification published by JEDEC that (a) updates or revises any Technical Specification that was published by JEDEC as of the Effective Date, (b) corrects, clarifies, or enhances such previously published Technical Specification without adding any significant new features or functionality to such Technical Specification, and (c) in no way reduces interoperability between and among any versions of such Technical Specification (e.g., JEDEC’s LPDDR3-E Technical Specification is a JEDEC Minor Update to JEDEC’s LPDDR3 Technical Specification.)

1.50 “[***] Acquisition Products” has the meaning assigned to it in Section 5.2(b).

1.51 “Licensed Product” means, individually, a given Term Product, a given Initial Paid-Up Product, or a given Subsequent Paid-Up Product; “Licensed Products” means, collectively, each Term Product, each Initial Paid-Up Product, and each Subsequent Paid-Up Product.

1.52 “LPDDR DRAM” means each low-power double data rate DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for LPDDR DRAM, (b) contains features enabling communication with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating (i) at a data transfer rate exceeding [***] or (ii) with data bit width other than x8, x16 and/or x32.

1.53 “LPDDR2 DRAM” means each low-power double data rate DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for LPDDR2 DRAM, (b) contains features enabling communication with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating (i) at a data transfer rate exceeding [***] or (ii) with data bit width other than x8, x16 and/or x32.

1.54 “LPDDR3 DRAM” means each low-power double data rate DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for LPDDR3 DRAM, (b) contains features enabling communication with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating (i) at a data transfer rate exceeding [***] or (ii) with data bit width other than x8, x16 and/or x32.

1.55 “LPDDR4 DRAM” means each low-power double data rate DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for LPDDR4 DRAM, (b) contains features enabling communication with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating (i) at a data transfer rate exceeding [***] or (ii) with data bit width other than x8, x16 and/or x32.

1.56 “LPSDR DRAM” means each low-power SDR DRAM.

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

1.57 “Memory IC” means any Integrated Circuit that is configured to store bits of data in memory cells within a memory array and that has as its primary purpose the storage and retrieval of such electronic data. For clarity, a Memory IC shall include any logic functions on such Integrated Circuit necessary for such storage and retrieval.

1.58 “Memory Module” means a Component that has as its primary purpose the storage and retrieval of electronic data.

1.59 “Micron Applicable Patent Claims” are defined and determined separately for each specific product. For each such product, a Micron Applicable Patent Claim means each claim of a Micron Patent that, absent a license, is [***] infringed by the making (including having made), use, Sale, offer for Sale or importation of such product, in each case, on a stand-alone basis and not in combination with any other circuits, products or components.

1.60 “Micron JV Partner” means any Third Party(ies) with whom Micron or a Micron Subsidiary owns a joint venture entity that is directly or indirectly at least twenty-five percent (25%) owned by Micron or by a Micron Subsidiary, and whereby such joint venture entity is subject to one or more joint venture agreements by and among the joint venture entity, Micron, and at least one of the other such Third Party(ies) setting forth the ongoing governance and operating relationships regarding such joint venture entity.

1.61 “Micron Joint Venture” means any entity owned by Micron or by a Subsidiary of Micron, in combination with one or more Micron JV Partners.

1.62 “Micron Patents” means Patents of Micron and Patents of its Subsidiaries.

1.63 “Micron Product” means any product Sold by Micron or by a Micron Subsidiary under a Micron Trademark, and for which Micron or any of its Subsidiaries either:

(a) owns or co-owns the entire design of such product and are free to set the price and other terms with respect to such product and not subject to limitation on how it may use and exploit such design except for field of use limitations agreed at arms-length with one or more JV Partners; or,

(b) owns, or co-owns, only a portion of the entire design of such product with no limitations on how it may use and exploit such portion and where, with respect to the remaining portion(s) of such design, (i) Micron or any of its Subsidiaries has a license from the entity or entities that own(s) such remaining portion(s) of the design to (A) make (and/or have made) such remaining portion(s) as embodied in such product and (B) Sell such made (or have made) remaining portion(s) as embodied in such product without restriction as to whom Micron and/or its Subsidiaries may Sell such remaining portion(s) as embodied in such product and (ii) Micron and/or its Subsidiaries are free to set the price and other terms with respect to such remaining portion(s) as embodied in such product; or,

(c) has a license from the entity or entities that own(s) the entire design of such product to (i) make (and/or have made) such product and (ii) Sell such made (or have made) product without restriction as to whom Micron and/or its Subsidiaries may Sell such product and Micron and/or its Subsidiaries are free to set the price and other terms with respect to such product.

[***]

1.64 “Micron Trademark” means a trademark, trade name, logo or other indicia of origin of Micron or Micron Subsidiaries.

1.65 “Net Sales” means, for a given Quarter and for one or more given products, the gross amount received in such Quarter from Third Parties by Micron and/or by one or more of its Subsidiaries for the Sale of such products anywhere in the world by Micron and/or its Subsidiaries, less (a) amounts credited in such Quarter for returns of such products by Third Parties to Micron and (b) insurance, handling, duty, freight and taxes where such items are separately invoiced to and paid for by a Third Party. Where a product is transferred by Micron through one or more Subsidiaries for Sale to a Third Party, Net Sales shall be calculated only on the Sale to such Third Party, except as otherwise provided herein.

1.66 “New Subsidiaries” has the meaning assigned to it in Section 4.1.

1.67 “Patents” means, with respect to an identified entity, patents and utility models and applications therefor, including,

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[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

without limitation, all continuations, continuations-in-part and divisionals thereof, in all countries of the world that now or hereafter are (a) owned or controlled by such entity and/or one or more of its Subsidiaries and/or (b) otherwise licensable by such entity and/or one or more of its Subsidiaries, in each case of (a) and (b) where such entity and/or one or more of its Subsidiaries have the right to grant the licenses, sublicenses or other rights and covenants of the scope granted herein.

1.68 "Qualified Product Line" means a portion of a business transferred by a Third Party to a Party in an Acquisition **, [***]**

1.69 "Quarter" shall mean each successive period of three consecutive calendar months (the first of which begins on the Effective Date).

1.70 "Quarterly Payment" has the meaning ascribed to such term in Section 5.1(b).

1.71 "Quarterly Payment Cap" has the meaning assigned to it in Section 5.1(b).

1.72 "Quarterly Payment Cap Increase" has the meaning assigned to it in Section 5.2(a).

1.73 "RAM Flash Memory" means a Memory IC that (a) stores bits of data in memory cells by storing charges within a transistor, (b) is capable of retaining, for more than 10 seconds, data stored in such memory cells when they cease to receive electrical power, (c) has an Interface which is capable of transferring data in a synchronous fashion relative to both the rising and falling edges of a timing signal, such as a clock or strobe, and (d) has an Interface over which commands, operation codes, and addresses are transferred primarily by one or more buses that are separate from the data bus.

1.74 "Rambus Applicable Patent Claims" are defined and determined separately for each specific product. For each such product, a Rambus Applicable Patent Claim means each claim of a Rambus Patent that, absent a license, is [***] infringed by the making (including having made), use, Sale, offer for Sale or importation of such product, in each case, on a stand-alone basis and not in combination with any other circuits, products or components.

1.75 "Rambus Leadership Product" means (a) any Design of RDRAM ®, XDR ™, XDR ™ 2 and/or Mobile XDR ™, (b) any other Design that implements a Rambus Proprietary Specification, and (c) any Rambus Proprietary Specification, including, without limitation, the Technical Specifications for RDRAM ®, XDR ™, XDR ™ 2 and/or Mobile XDR ™. For clarity, the term "Rambus Leadership Product" specifically excludes any physical embodiment of such Design, including any Integrated Circuit or device.

1.76 "Rambus Patents" means Patents of Rambus and its Subsidiaries, in each case other than the CRI Patents.

1.77 "Rambus Proprietary Specification" means any Technical Specification that is first designed and developed (as demonstrated by customary means, including, but not limited to, engineering notebooks) by, or on behalf of, Rambus or any of its Subsidiaries, over which Rambus and/or any of its Subsidiaries has exclusive control and that neither Rambus nor any of its Subsidiaries has voluntarily (a) disclosed except under a confidentiality or non-disclosure agreement or (b) proposed or disclosed to any standards setting organization. In addition to the foregoing sentence, Rambus Proprietary Specification also includes any Technical Specification exclusively acquired by Rambus from a Third Party where such Technical Specification would otherwise meet the definition of a Rambus Proprietary Specification had Rambus, and not the relevant Third Party, been the original developer and owner of such Technical Specification. Notwithstanding the above, a Technical Specification developed independently of Rambus by or on behalf of Micron, by an Industry Standards Setting Body, or by one or more Third Parties, shall not be deemed to be a Rambus Proprietary Specification, even if it describes similar or identical functions. A Technical Specification shall not be deemed to be developed independently of Rambus for purposes of the preceding sentence to the extent such Technical Specification, or any portion thereof, was developed or derived based on information (i) which Micron, such Industry Standards Setting Body, or such one or more Third Parties received in confidence from Rambus and with respect to which Micron, any of its Subsidiaries, such Industry Standards Setting Body, or such one or more Third Parties, is bound by an obligation of confidentiality or non-use to Rambus; (ii) obtained from any other Third Party in violation of such Third Party's obligation of confidentiality or non-use to Rambus; or (iii) obtained by Micron, any of its Subsidiaries or any other Third Party based on reverse engineering of any product that instantiates a Rambus Proprietary Specification.

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

1.78 “Related Parties” means two or more entities (a) who are Affiliates of one another or (b) who, through contract, arrangement or agreement, are bound or have otherwise agreed to exercise their aggregate beneficial ownership, rights and/or contractual power under any of the circumstances as described under Section 1.7 with respect to any subject entity in order to Control such subject entity.

1.79 “Released Design” means each Design subject to the releases as provided for under Section 3.2 of the Settlement Agreement.

1.80 “Released Product” means each product subject to the releases as provided for under Section 3.1 of the Settlement Agreement.

1.81 “Resistive RAM” means a Memory IC that is capable of storing bits of data in memory cells by changing the resistance of a storage element, other than a transistor, and is capable of retaining, for more than 10 seconds, data stored in such memory cells when they cease to receive electrical power. Resistive RAM shall not include RAM Flash Memory or DRAM.

1.82 “RLDRAM” means each reduced-latency DRAM that is incapable of communicating with any DDR4 DRAM, LPDDR3 DRAM, LPDDR4 DRAM, Wide I/O 2.X DRAM, Wide I/O Mobile DRAM, Hybrid Memory Cube 1.X DRAM, Hybrid Memory Cube 2.X DRAM, and/or any other DRAM and that (a) is configured to support a read/write addressing mode that does not distinguish row and column addresses, (b) is configured to use a simplified command set that omits activate/precharge commands, and (c) is not Sold or specified as being capable of operating at a data transfer rate exceeding [***].

1.83 “SDR DRAM” means each single data rate DRAM that (a) implements the minimum set of features, parameters, and protocols defined or recommended in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for SDR DRAM, (b) is solely capable of communicating with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating (i) at a data transfer rate exceeding [***] or (ii) with data bit width other than x4, x8, x16 and/or x32.

1.84 “Sell” (including “Sale” and “Sold” and other forms) means to sell, lease, or otherwise transfer or dispose of a product, by a Party to a Third Party or by a Subsidiary of a Party to a Third Party.

1.85 “SerDes IC” means any Integrated Circuit having circuitry integrated thereon or contained therein that is configured to (a) de-serialize data received by such Integrated Circuit from a different Integrated Circuit and/or (b) serialize data originating on such Integrated Circuit prior to transmitting such data to a different Integrated Circuit. Notwithstanding the foregoing, any Memory IC shall be deemed not to be a SerDes IC.

1.86 “Settlement Agreement” has the meaning assigned in the recitals to this Agreement.

1.87 “Subsequent Paid-Up Product” means:

(a) for the Initial Term-Product License Period, [***]; and,

(b) for each Term-Product License Renewal Period, [***].

Notwithstanding the foregoing, any product that constitutes a Rambus Leadership Product shall be deemed not to be a Subsequent Paid-Up Product.

1.88 “Subsequent Paid-Up Product License” means the rights and licenses granted pursuant to Section 2.1(c).

1.89 “Subsequent Term-Product License Renewal Period” has the meaning assigned to it in Section 7.1(d).

1.90 “Subsidiary” means, with respect to an identified entity, any entity Controlled by such identified entity, but only for so long as such Control exists.

1.91 “Technical Specification” means a final specification for an optical, RF, electrical, mechanical or software product that describes substantially all of the characteristics of such product necessary for such product to operate. As an example, the written description of an electrical interface (including timing and signaling parameters and characteristics) for a data bus connecting two (2) Integrated Circuits would meet the definition of a Technical Specification, provided that such interface specified all of the signals necessary for such data bus to function.

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

1.92 “Term Product” means each Micron Product that is either an Integrated Circuit (including each Micron Product that is a Memory IC) or a Component (including each Micron Product that is a Memory Module), but that is neither an Initial Paid-Up Product nor a Subsequent Paid-Up Product. Notwithstanding the foregoing sentence, any product that constitutes a Rambus Leadership Product shall be deemed not to be a Term Product.

1.93 “Term-Product License” means the rights and licenses granted under Section 2.1(a).

1.94 “Term-Product License Renewal Period” means, generically, the Initial Term-Product License Renewal Period and each Subsequent Term-Product License Renewal Period.

1.95 “Third Party” means with respect to a specified Party, or any Subsidiary of such specified Party, any entity that is not the specified Party or a Subsidiary of such specified Party.

1.96 “Ultimate Parent” means with respect to an identified entity, any entity that Controls such identified entity and where such Controlling entity is not under the Control of any other entity.

1.97 “[***] Acquisition Products” has the meaning assigned to it in Section 5.2(a)(ii).

1.98 “Wide I/O Mobile DRAM” means each single data rate DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for WIDE I/O SINGLE DATA RATE (WIDE I/O SDR), (b) contains features enabling communication with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating at a data transfer rate exceeding [***].

1.99 “Wide I/O 2.X DRAM” means each single data rate DRAM that (a) substantially implements the minimum set of features, parameters, and protocols defined in any Technical Specification published by JEDEC as of the Effective Date, as well as any JEDEC Minor Updates thereto, for WIDE I/O DOUBLE DATA RATE (WIDE I/O DDR-TBC) , (b) contains features enabling communication with any other Integrated Circuit in accordance with substantially all of the mandatory requirements in such Technical Specification, and (c) is not Sold or specified as being capable of operating at a data transfer rate exceeding [***].

2. Grant of Rights

2.1 License to Micron .

(a) Term-Product License . Subject to the terms and conditions of this Agreement, Rambus, on behalf of itself and its Subsidiaries, hereby grants to Micron and, subject to Section 5.2 below, its Subsidiaries, for each product that falls within the definition of a Term Product, a non-exclusive, non-transferable, worldwide license, without the right to sublicense, solely under the Rambus Applicable Patent Claims applicable to such Term Product, to make (including have made), use, Sell, offer for Sale, transfer from Micron and its Subsidiaries to their Affiliates, and import such Term Product until the expiration or termination of this license pursuant to Section 7.1(a) below, provided that such license:

(i) is expressly conditioned upon Rambus’ receipt of the Initial Payment in accordance with Section 6.2 below or during the cure period set forth in Section 7.2 below; and,

(ii) shall be renewable in accordance with Section 7.1(d) below.

(b) Initial Paid-Up Product License . Subject to the terms and conditions of this Agreement, Rambus, on behalf of itself and its Subsidiaries, hereby grants to Micron and, subject to Section 5.2 below, its Subsidiaries, for each product that falls within the definition of an Initial Paid-Up Product, a non-exclusive, non-transferable, worldwide license, without the right to sublicense, solely under the Rambus Applicable Patent Claims applicable to such Initial Paid-Up Product, to make (including have made), use, Sell, offer for Sale, transfer from Micron and its Subsidiaries to their Affiliates, and import such Initial Paid-Up Product until the termination of this license pursuant to Section 7.1(b) below, provided that such license, is expressly conditioned upon Rambus’ receipt, in accordance with Section 6.2 below or during the cure period set forth in Section 7.2 below, of (i) the Initial Payment and (ii) each Quarterly Payment that becomes due on or before the Expiration Date.

(c) Subsequent Paid-Up Product License . Subject to the terms and conditions of this Agreement, Rambus, on behalf

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

of itself and its Subsidiaries, hereby grants to Micron and, subject to Section 5.2 below, its Subsidiaries, for each product that falls within the definition of a Subsequent Paid-Up Product, a non-exclusive, non-transferable, worldwide license, without the right to sublicense, solely under the Rambus Applicable Patent Claims applicable to such Subsequent Paid-Up Product, to make (including have made), use, Sell, offer for Sale, transfer from Micron and its Subsidiaries to their Affiliates, and import such Subsequent Paid-Up Product until the expiration or termination of this license pursuant to Section 7.1(c), provided that such license, in its entirety and with respect to such Subsequent Paid-Up Product, is expressly conditioned upon Rambus' receipt, in accordance with Section 6.2 below or during the cure period set forth in Section 7.2 below, of (i) the Initial Payment and (ii) each Quarterly Payment that becomes due on or before the date of the expiration of the Term-Product License Renewal Period that immediately follows the Qualifying Term-Product License Renewal Period for such Subsequent Paid-Up Product.

2.2 License to Rambus . Subject to the terms and conditions of this Agreement, Micron, on behalf of itself and its Subsidiaries, hereby grants to Rambus and its Subsidiaries a non-exclusive, non-transferable, worldwide license, without the right to sublicense, solely under the associated Micron Applicable Patent Claims to make (including have made), use, Sell, offer for Sale and import Rambus Leadership Products during the Initial Term-Product License Period and each Term-Product License Renewal Period (if any).

2.3 Obligations When Transferring Patents . Each Party agrees that it shall take all actions reasonably necessary to ensure that any Third Party to whom any Patents containing one or more claims that are licensed hereunder are transferred, assigned or exclusively licensed or any right to enforce is granted (including any successor or assignee in interest thereto) is bound in writing to all covenants, licenses and other rights granted hereunder with respect to such transferred, assigned or exclusively licensed Patents.

2.4 Previously Divested Rambus Patents] .

(a) Rambus, on behalf of itself and its Subsidiaries, represents and warrants that Exhibit A sets forth all patents and patent applications that have been assigned, between [***] and the Effective Date, to one or more Third Parties by Rambus and its Subsidiaries.

(b) Rambus, on behalf of itself and its Subsidiaries, represents and warrants that:

(i) [***]; and,

(ii) such assignment is subject to the following covenant:

(A) [***]; and,

(B) [***]

[***]

2.5 CRI Representation [***]. Rambus represents and warrants that, to the best of its knowledge, Micron does not currently infringe or otherwise need a license under those Patents of CRI that have an effective filing date earlier than the Effective Date. [***]

2.6 No Implied or Other Rights and Licenses .

(a) The rights and licenses granted herein apply solely to those products and activities expressly provided for under this Agreement. Nothing in this Agreement shall be deemed to, and shall not be construed to, constitute any release, forbearance, forfeiture or other waiver of any rights of either Party or their respective Subsidiaries to enforce any of their respective intellectual property rights with respect to any activities undertaken by the other Party, its Subsidiaries, and/or any other Third Party to the extent not expressly granted or made hereunder.

(b) Except as expressly provided for under this Agreement, no authorization, release, license, covenant or other right is granted or made, by implication, estoppel, acquiescence or otherwise under this Agreement, to either Party, its respective Subsidiaries, and/or any other Third Party under any patents, utility models, patent or utility model claims, or other intellectual property rights now or hereafter owned or controlled by either Party or their respective Subsidiaries.

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

(c) Except as expressly provided for under this Agreement, none of the terms of this Agreement shall be deemed to, and shall not be construed to, constitute, whether by implication, estoppel, acquiescence or otherwise, (i) an authorization by either Party, its Subsidiaries, and/or any Third Party to Sell, offer for Sale and/or import any product (A) in or for combination with any other element (including, but not limited to any function or feature), product or instrumentality; or (B) unconditionally for use in or for combination with any other element (including, but not limited to any function or feature), product or instrumentality or (ii) a waiver by either Party or its Subsidiaries of any liability for infringement based on the other Party's, its respective Subsidiaries, and/or any other Third Party's making, use, Sale, offer for Sale and/or import of any product in combination with any other element (including, but not limited to, any function or feature), product or instrumentality.

3. [***] and Covenants

3.1 Rambus [***] and Covenants .

(a) [***]. Provided that and for so long as Micron and its Subsidiaries are not in breach of either this Agreement or the Settlement Agreement, and subject to Sections 3.4, 3.5, and 3.6 below, Rambus, for itself and on behalf of its Subsidiaries, agrees that [***].

(b) [***] . Provided that and for so long as Micron and its Subsidiaries are not in breach of either this Agreement or the Settlement Agreement, and subject to Sections 3.4, 3.5, and 3.6 below, Rambus, for itself and on behalf of its Subsidiaries, agrees that, [***].

(c) Covenants [***] .

(i) Components . Provided that and for so long as Micron and its Subsidiaries are not in breach of either this Agreement or the Settlement Agreement and subject to subsection (iii) below and Sections 3.4, 3.5, and 3.6 below, Rambus, on behalf of itself and its Subsidiaries, covenants, that [***].

(ii) [***]. Provided that and for so long as Micron and its Subsidiaries are not in breach of either this Agreement or the Settlement Agreement and subject to subsection (iii) below and Sections 3.4, 3.5, and 3.6 below, Rambus, on behalf of itself and its Subsidiaries, covenants that [***].

(iii) Conditions on Covenants . The foregoing covenants are personal and cannot be assigned, transferred or delegated to any Third Party (except as otherwise set forth in Section 9.5 below). For the avoidance of doubt, the foregoing covenants are not and shall not be construed to be (A) an authorization by Rambus for any Third Party, including any Third Party customers of Micron or of any of its Subsidiaries, [***] (B) a covenant by Rambus that [***].

(d) Benefits Not Transferable . The benefits under Sections 3.1(a), 3.1(b), and 3.1(b) above are personal and cannot be assigned, transferred, or delegated by Micron to any Third Party.

3.2 Micron [***] .

(a) Designs and Released Designs . Provided that Rambus and its Subsidiaries are not in breach of either this Agreement or the Settlement Agreement, and subject to Sections 3.4, 3.5, and 3.6 below, Micron, for itself and on behalf of its Subsidiaries, agrees that [***].

(b) Other Rambus Designs . Provided that Rambus and its Subsidiaries are not in breach of either this Agreement or the Settlement Agreement, and subject to Sections 3.4, 3.5, and 3.6 below, Micron, for itself and on behalf of its Subsidiaries, agrees that, [***].

(c) Benefits Not Transferable . The benefits under Sections 3.2(a) and 3.2(b) above are personal and cannot be assigned, transferred, or delegated by Rambus to any Third Party.

3.3 No Waiver of Liability . Rambus and Micron each agrees that Sections 3.1 and 3.2 above do not grant, and shall not be construed, argued, or relied upon as granting (a) any license, covenant [***] or the like under any Patent of the other Party (by implication, estoppel or otherwise) or (b) any release or waiver with respect to any liability, damages or claims for infringement of any Patent of the other Party. Furthermore, each Party, on behalf of itself and its Subsidiaries, hereby irrevocably [***], all applicable statutes of limitations shall be tolled upon the Effective Date and shall remain tolled until the expiration or termination of the Term-Product License. Nothing in this Section 3.3

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

shall operate to impact or limit the application of 35 U.S.C. § 287.

3.4 Notice of [***] . Notwithstanding the [***] as described above, either Party shall be free during the Initial Term-Product License Period and each Term-Product License Renewal Period (if any) to put the other Party on notice or otherwise engage in discussions regarding any [***].

3.5 Patent [***] . A Party (and its Subsidiaries) is [***].

3.6 [***] . Nothing in this Agreement or in the Settlement Agreement shall preclude either Party, during the Initial Term-Product License Period and each Term-Product License Renewal Period (if any), [***].

4. Subsidiaries

4.1 Subsidiaries . Subject to the terms and conditions of this Agreement (including Sections 4.3 and 5.2 below), the Parties intend that this Agreement, and the licenses and benefits granted herein, shall extend to all of each Party's Subsidiaries. The Parties agree that, to the extent they are not already bound, each Party shall ensure that all of its Subsidiaries (including, without limitation, all entities that become Subsidiaries after the Effective Date ("New Subsidiaries")) are bound by the terms of this Agreement. Without limiting the foregoing:

(a) Each Party shall ensure that the Patents of each New Subsidiary are included within the definition of the applicable Party's Patents; and,

(b) Each Party shall ensure that each New Subsidiary is bound as applicable, by this Agreement.

4.2 Former Subsidiaries . All rights and licenses granted and covenants made to any Subsidiary of either Party shall immediately and automatically terminate upon a Party ceasing to Control such entity ("Former Subsidiary"). However, if a Subsidiary of a Party that holds any Patent that is subject to the rights, licenses and covenants granted hereunder becomes a Former Subsidiary, such rights, licenses and covenants granted by such Former Subsidiary (including every successor entity in interest to any such Patents) shall continue in accordance with the terms of this Agreement after such entity becomes a Former Subsidiary.

4.3 No Release . The releases granted and covenants made under the Settlement Agreement shall not apply to any Acquired Business of Micron.

4.4 Prior Agreements .

(a) Rambus agrees that the Elpida Technology License Agreement and the Elpida XDR License Agreement are each hereby amended such that, from and after the Effective Date, Elpida will be licensed (i) to sell Direct Rambus DRAMs and Direct Rambus Multichip Modules to Micron, as a Semiconductor Company, for resale as an integrated circuit, in the case of Direct Rambus DRAMs, or Direct Rambus Multichip Module, and (ii) to make, use and sell Yellowstone Rambus DRAMs, alone or incorporated into Yellowstone Rambus Multichip Modules, Yellowstone Rambus Boards, and Yellowstone Rambus Systems to Micron as a Semiconductor Company, for resale by Micron to Third Parties, where the meaning of each of the foregoing capitalized terms has the meaning ascribed to in the Elpida Technology License Agreement or the Elpida XDR License Agreement, as the case may be.

(b) The Elpida Patent License Agreement shall be deemed to have terminated on September 30, 2013 and, for the avoidance of doubt, Elpida shall be licensed hereunder as a Subsidiary of Micron. Notwithstanding Section 7.6 (Survival) of the Elpida Patent License Agreement, the following provisions of the Elpida Patent License Agreement are hereby terminated and shall not survive this termination: Section 5.2 (Quarterly License Payment), Section 6 (Payments), and Section 9.1 (DRAM Revenue).

(c) The Semiconductor Technology License Agreement entered into by and between Rambus and Micron, effective March 24, 1997 shall be deemed to have terminated on the Effective Date, if and to the extent such agreement is still in place and effective as of the Effective Date.

5. Consideration

5.1 Payments .

(a) Initial and Fixed 28th Quarterly Payments .

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

(i) Micron shall pay to Rambus five-million five-hundred and thirty-three thousand and three-hundred and thirty-four United States Dollars (US $5,533,334.00; the "Initial Payment").

(ii) In lieu of a Quarterly Payment based on Net Sales that occur within the twenty-eighth (28 th) Quarter of the Initial Term-Product License Period, Micron shall pay to Rambus for such Quarter the fixed amount of four-million four-hundred and sixty-six thousand and six-hundred and sixty-six United States Dollars (US $4,466,666.00; the "Fixed 28th Quarterly Payment").

(b) Quarterly Payments . Subject to Section 5.3 below, Micron shall pay to Rambus:

(i) an amount equal to six-tenths of a percent (0.6%) of the Net Sales that Micron and each of its Subsidiaries received during the first twenty-seven (27) Quarters that occur within the Initial Term-Product License Period for the Sale worldwide of (A) DRAMs, (B) DRAM Controllers, (C) SerDes ICs, (D) Resistive RAMs, and (E) RAM Flash Memories;

(ii) an amount equal to six-tenths of a percent (0.6%) of the Net Sales that Micron and each of its Subsidiaries received during each Quarter that occurs within the Initial Term-Product License Renewal Period (if any) for the Sale worldwide of (A) DRAMs, (B) DRAM Controllers, (C) SerDes ICs, (D) Resistive RAMs, and (E) RAM Flash Memories, in each case of (A) through (E), excluding the Sale of each Initial Paid-Up Product; and,

(iii) an amount equal to six-tenths of a percent (0.6%) of the Net Sales that Micron and each of its Subsidiaries received during each Quarter that occurs within each Subsequent Term-Product License Renewal Period (if any) for the Sale worldwide of (A) DRAMs, (B) DRAM Controllers, (C) SerDes ICs, (D) Resistive RAMs, and (E) RAM Flash Memories, in each case of (A) through (E), excluding the Sale of (I) each Initial Paid-Up Product and (II) each Subsequent Paid-Up Product for which the Qualifying Term-Product License Renewal Period preceded such Subsequent Term-Product License Renewal Period (each such amount associated with the Sales for a given Quarter set forth in (i) through (iii), a "Quarterly Payment");

provided that:

(A) each given Quarterly Payment shall not exceed an amount of ten-million United States Dollars (US $10,000,000), as such ten-million dollar amount may be increased by one or more Quarterly Payment Cap Increases in accordance with Section 5.2(a) below (such ten-million dollar amount limit, as it may be increased by one or more Quarterly Payment Cap Increases in accordance with Section 5.2(a) below, the "Quarterly Payment Cap"); and,

(B) the cumulative amount of any four consecutive Quarterly Payments shall not exceed the greater of (I) forty-million United States Dollars (US $40,000,000) or (II) the sum of the four Quarterly Payment Caps (as one or more may have been increased by one or more Quarterly Payment Cap Increases in accordance with Section 5.2(a) below) associated with each Quarter of such four consecutive Quarterly Payments, provided that if any Quarterly Payment would have, absent the Quarterly Payment Cap, exceeded the Quarterly Payment Cap, the amount in excess of the Quarterly Payment Cap that would have otherwise been due shall be added to each subsequent Quarterly Payment that is less than the Quarterly Payment Cap (as if such excess was attributable to Sales that had occurred in the Quarter associated with such subsequent Quarterly Payment).

5.2 Acquired Businesses .

(a) Acquisition of Business with [***] Products . If (i) Micron or any of its Subsidiaries completes an Acquisition for which:

(A) [***]; and,

(B) [***]; and,

(ii) [***];

[***] For the avoidance of doubt, [***].

(b) Acquisition of Business with [***] Products [***] . If Micron or any of its Subsidiaries completes an Acquisition

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

for which [***], then:

(i) [***];

(ii) [***]; and,

(iii) [***].

For absence of doubt, [***].

(c) Acquisition Report and Audit Rights . Within thirty (30) days after the end of each Quarter (until all Quarterly Payments payable hereunder have been reported and paid) in which one or more Acquisition Dates occurred, Micron shall notify Rambus in writing of such event and Micron's determination of the associated Quarterly Payment Cap Increase, if any, and provide Rambus with a written detailed statement (in suitable form) containing all information necessary to calculate such Quarterly Payment Cap Increase. Each Quarterly Payment Cap Increase will become effective in the Quarter following the Quarter in which the associated Acquisition Date occurred. If, for any reason, Rambus disagrees with Micron's determination of the associated Quarterly Payment Cap Increase, Rambus may conduct an audit pursuant to subsection (e) below. If the Parties cannot reach agreement on the determination of the associated Quarterly Payment Cap Increase within thirty (30) days following the conclusion of such audit, either Party may, as its sole and exclusive remedy to resolve such dispute, submit such dispute to binding arbitration pursuant to the terms of Section 9.1. Unless and until the Parties resolve such disagreement, none of the rights, licenses and covenants granted under Section 2 .1 shall apply to any activity of any such Acquired Business ("Audited Acquired Business").

(d) [***]

(e) [***]

(f) [***]

5.3 Revenue Attributable [***].

5.4 Rates and Collateral Attack .

(a) Given the worldwide scope of this Agreement, the impracticality of monitoring by Micron of the movement of Licensed Products through international markets, and that Rambus will be issued new patents and/or utility models continually in various countries throughout the Initial Term-Product License Period and the Term-Product License Renewal Periods (if any) that will be licensed hereunder, it is agreed and recognized that paying Quarterly Payments based on the worldwide Sales of certain DRAMs, DRAM Controllers, SerDes ICs, Resistive RAMs, and RAM Flash Memories at the rates set forth in this Agreement, is fair and reasonable, representing a balance between the concerns and interests of both Parties and resulting in a convenience for both Parties.

(b) The Parties acknowledge that it is essential that their respective obligations under this Agreement be certain and not subject to collateral attack. Accordingly, each Party agrees that it will not seek, through litigation or otherwise, to adjust the amount of payments required under this Agreement, or to avoid, defer or modify their respective obligations hereunder, and that Micron shall make the full amount of such payments regardless of whether any of the Rambus Patents is determined not to be infringed by any particular Licensed Product, or whether any court, patent office or other governmental agency determines any Rambus Patent to be invalid or unenforceable in any reexamination, action or other proceeding, provided that the foregoing shall not prevent the Parties from seeking enforcement of the terms or conditions of the this Agreement or taking any action expressly contemplated by this Agreement.

6. Reports; Payments; Records and Audits

6.1 Reports . Within thirty (30) days after the end of each Quarter and until all Quarterly Payments payable hereunder have been reported and paid, Micron shall furnish to Rambus a statement, in a form acceptable to Rambus, that shows:

(a) the total revenue and Net Sales, each in United States Dollars, that Micron and each of its Subsidiaries invoiced or otherwise charged during such Quarter for the Sale worldwide of DRAMs, DRAM Controllers, SerDes ICs,

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

Resistive RAMs, and RAM Flash Memories (excluding Initial Paid-Up Products and Subsequent Paid-Up Products to the extent that they are so excluded under Section 5.1(b) above), provided that if no such revenue and/or Net Sales were invoiced or otherwise charged during such Quarter, that fact shall be shown on such statement;

(b) an itemized accounting of the number of DRAMs, DRAM Controllers, SerDes ICs, Resistive RAMs, and RAM Flash Memories (excluding Initial Paid-Up Products and Subsequent Paid-Up Products to the extent that they are so excluded under Section 5.1(b) above) Sold worldwide during such Quarter by Micron and each of its Subsidiaries; and,

(c) an itemized accounting (by associated customer and associated Technical Specification) of the number of Custom Memory ICs Sold worldwide during such Quarter by Micron and each of its Subsidiaries and the total revenue and Net Sales, each itemized (by associated customer and associated Technical Specification) and in United States Dollars, that Micron and each of its Subsidiaries invoiced or otherwise charged during such Quarter for the Sale worldwide of each such Custom Memory IC (excluding Initial Paid-Up Products and Subsequent Paid-Up Products to the extent that they are so excluded under Section 5.1(b) above), provided that if no such revenue and/or Net Sales were invoiced or otherwise charged during such Quarter, that fact shall be shown on such statement;

(d) the associated Quarterly Payment payable thereon (each such itemized statement, a “Quarterly Itemized Sales Report”).

6.2 Payments .

(a) Micron shall, by electronic transfer, pay to Rambus the Initial Payment by the earlier of (i) the tenth (10th) day immediately following the date of the later signature below or (ii) December 31, 2013. The Initial Payment paid under this Agreement shall not be, in whole or part, refundable, cancellable or subject to any credit against any amounts, including future Quarterly Payments, that are owed under this Agreement, provided that, in the case of a material breach of this Agreement by Rambus, Micron may seek monetary compensation for damages arising from such breach.

(b) Within thirty (30) days after the end of each Quarter, Micron shall pay to Rambus by electronic transfer, as applicable, the Quarterly Payment or the Fixed 28th Quarterly Payment payable hereunder for such Quarter. No Quarterly Payment, in whole or part, paid under this Agreement shall be refundable, cancellable or subject to any credit against any amounts, including future Quarterly Payments, that are owed under this Agreement, provided that, in the case of a material breach of this Agreement by Rambus, Micron may seek monetary compensation for damages arising from such breach.

(c) Each such electronic transfer shall be made in United States Dollars either directly to or via the Federal Reserve Bank of San Francisco for credit to the following account or another designated in writing by Rambus:

Rambus Inc.
[***]

6.3 Records and Audits . With respect to the Quarterly Payments set forth herein, Micron shall keep complete and accurate records. These records shall be retained for a period of at least five (5) years following the date of each corresponding payment, notwithstanding the termination of this Agreement. Except with respect to Quarters in which Micron’s Quarterly Payment equaled or exceeded the Quarterly Payment Cap, Rambus, through its designated independent accounting or licensing audit firm, shall have the right, upon thirty (30) days’ prior written notice, to initiate an examination and audit, not more than [***], and during normal business hours, of all such records and such other records and accounts as may contain, under recognized accounting practices, information bearing upon the amount of Quarterly Payments payable to Rambus under this Agreement. In addition to the results of any such audit, the auditor shall be permitted to disclose to Rambus the progress of the audit and may identify to Rambus any materials required, but not furnished, to complete the audit. Micron shall provide all reasonable access to such applicable information in both electronic and tangible form. Micron shall promptly make Rambus whole for any

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

underpayments of the Quarterly Payments that are disclosed by such examination or audit. To the extent that any underpayments revealed by such audit exceed [***] percent ([***]%) of the total Quarterly Payments due for the period under audit, then Micron shall also **[***]** .

6.4 Currency and Late Payments . All payments to Rambus hereunder shall be in United States Dollars. Late payments hereunder shall be subject to interest at the one-year United States Government Treasury Constant Maturity Rate, as published by the Federal Reserve (www.federalreserve.gov) on the date the amount payable was due, plus five percent (5%) (or the maximum interest rate allowed by applicable law, if lower).The amount of interest shall be calculated from the payment due date to the date of electronic transfer.

6.5 No Escrow . Payment of amounts due under this Agreement to any person, firm or entity, other than Rambus, including, without limitation, any escrow fund or escrow agent, unless agreed to by Rambus or ordered by any court or government agency of competent jurisdiction or arbitration panel, shall constitute a material breach of this Agreement. Any payment once made by Micron to Rambus shall not be refunded or refundable to Micron for any reason, provided that, in the case of a material breach of this Agreement by Rambus, Micron may seek monetary compensation for damages arising from such breach.

7. Term and Termination of Licenses and Agreement

7.1 Term and Renewal of Licenses .

(a) Term-Product License . The Term-Product License shall, unless earlier terminated in accordance with Section 7.1(e) below, continue in full force and effect until:

(i) the Expiration Date if Micron fails to renew the Term-Product License for the Initial Term-Product License Renewal Period in accordance with Section 7.1(d) below; or,

(ii) the expiration of any Term-Product License Renewal Period (if any) in which Micron fails to further renew the Term-Product License in accordance with Section 7.1(d) below.

For avoidance of doubt, the Term-Product License shall automatically be rendered null, void, and without effect as if never granted if Micron breaches this Agreement by failing to pay Rambus the Initial Payment in a timely manner and fails to cure such failure in accordance with Section 7.2 below.

(b) Initial Paid-Up Product License . The Initial Paid-Up Product License shall, continue in full force and effect unless and until terminated in accordance with Section 7.1(e). For avoidance of doubt, the Initial Paid-Up Product License shall automatically be rendered null, void, and without effect as if never granted if Micron breaches this Agreement by failing to pay Rambus (A) the Initial Payment in a timely manner and (B) each Quarterly Payment that becomes due on or before the Expiration Date in a timely manner and fails to cure such failure in accordance with Section 7.2 below.

(c) Subsequent Paid-Up Product License . The Subsequent Paid-Up Product License shall, with respect to each given Subsequent Paid-Up Product qualifying as such under Section 1.87(a), unless earlier terminated in accordance with Section 7.1(e) below, continue in full force and effect until the date of the expiration of the Initial Term-Product License Period, if Micron fails to renew the Term-Product License for the Initial Term-Product License Renewal Period in accordance with Section 7.1(d) below, and in perpetuity following the date of the expiration of the Initial Term-Product License Renewal Period, if Micron renews the Term-Product License for the Initial Term-Product License Renewal Period in accordance with Section 7.1(d) and Micron has satisfied all of its payment obligations set forth in this Agreement during such Initial Term-Product License Renewal Period. The Subsequent Paid-Up Product License shall, with respect to each given Subsequent Paid-Up Product qualifying as such under Section 1.87(b), unless earlier terminated in accordance with Section 7.1(e), below, continue in full force and effect until:

(i) the date of the expiration of the Qualifying Term-Product License Renewal Period for such Subsequent Paid-Up Product, if Micron fails to renew the Term-Product License for an immediately following Term-Product License Renewal Period in accordance with Section 7.1(d) below; or,

(ii) in perpetuity, following the date of the expiration of the Term-Product License Renewal Period immediately

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following the Qualifying Term-Product License Renewal Period for such Subsequent Paid-Up Product, if Micron renews the Term-Product License for such an immediately following Term-Product License Renewal Period in accordance with Section 7.1(d) below.

For avoidance of doubt, the Subsequent Paid-Up Product License for Subsequent Paid-Up Products shall automatically be rendered null, void, and without effect as if never granted if Micron breaches this Agreement by failing to pay Rambus the Initial Payment in accordance with Section 6.2 below and fails to cure such failure in accordance with Section 7.2 below, and each Quarterly Payment that becomes due on or before the date of the expiration of the Initial Term-Product License Renewal Period (if any) in accordance with Section 6.2 and fails to cure such failure in accordance with Section 7.2 below.

(d) Term-Product License Renewal . Micron shall have the option to:

(i) renew the Term-Product License for a single three-year renewal term upon the expiration of the Initial Term-Product License Period, in accordance with its terms, on the Expiration Date (such renewal term, the "Initial Term-Product License Renewal Period"); and,

(ii) upon the expiration of the Initial Term-Product License Renewal Period in accordance with its terms, successively renew the Term-Product License for additional five-year terms (each such five-year period in which the Term-Product License has been renewed by Micron in accordance with this subsection (ii), a "Subsequent Term-Product License Renewal Period"),

provided that, in each case of (i) and (ii), Micron delivers to Rambus, no later than ninety (90) days prior to, as applicable, the Expiration Date, the expiration date of the Initial Term-Product License Renewal Period (if any), or the then-current Subsequent Term-Product License Renewal Period (if any), a written notice of Micron's election to exercise such option to renew the Term-Product License for an additional, as applicable, three-year or five-year term.

(e) Effect of Termination of Agreement .

(i) Upon any termination of this Agreement that occurs between the Effective Date and the Expiration Date (inclusive of both dates), the Term-Product License, the Initial Paid-Up License, and the Subsequent Paid-Up License for Subsequent Paid-Up Products will each immediately terminate.

(ii) Upon any termination of this Agreement that occurs during the Initial Term-Product License Renewal Period (if any), the Term-Product License and the Subsequent Paid-Up License for Subsequent Paid-Up Products will each immediately terminate.

(iii) Upon any termination of this Agreement that occurs during any Subsequent Term-Product License Renewal Period (if any), the Term-Product License and the Subsequent Paid-Up Product License for any Subsequent Paid-Up Product for which such Subsequent Term-Product License Renewal Period is the Qualifying Term-Product License Renewal Period will each immediately terminate.

7.2 Material Breach . Rambus may terminate this Agreement upon notice if Micron materially breaches its payment obligations under this Agreement and does not correct or cure such breach within ninety (90) days after receiving written notice complaining thereof. Failure of Micron to pay any payment due and payable in accordance with the terms of this Agreement shall constitute a material breach of this Agreement. For the avoidance of doubt, any payments tolled in accordance with the terms of this Agreement shall not be due and payable during such tolling period.

7.3 Bankruptcy . Either Party may terminate this Agreement effective upon written notice to the other Party if the other Party is adjudicated insolvent or bankrupt at the conclusion of proceedings initiated by a voluntary or involuntary petition in bankruptcy or any proceeding relating to insolvency, or composition for the benefit of creditors, and such Party undergoes a Change of Control during or following the pendency of such proceedings.

7.4 [***].

7.5 Change of Control .

(a) In General . [***] in the event of [***] Change of Control, Rambus may, in addition to the rights set forth in

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

Sections 7.2, 7.3, and 7.4 above, terminate this Agreement effective upon written notice thereof to Micron or the relevant successor or assignee in interest. Notwithstanding the foregoing, if Rambus receives written notice of such Change of Control from Micron (or its successor or assignee in interest) no later than ten (10) business days after such Change of Control, Rambus agrees to negotiate in good faith with such successor or assignee in interest, for a period of one hundred and eighty (180) days after receipt of such notice, the application of this Agreement to such successor's or assignee's business activities prior to terminating this Agreement based on such Change of Control. Rambus' failure to terminate this Agreement after a given Change of Control by Micron (or any successor or assignee in interest) shall not in any way limit Rambus' right to exercise these rights for any subsequent Change of Control. Termination of this Agreement based on a Change of Control shall be deemed to be effective immediately prior to the effective date of such Change of Control.

(b) [***]

7.6 Survival. All payment obligations accruing prior to any termination of this Agreement shall survive any such termination. In addition, the following sections shall survive and remain in full force and effect after any termination of this Agreement, but only to extent relevant to rights, obligations, benefits, or liabilities that had accrued under such sections prior to such termination of this Agreement: Section 1 (Definitions), Section 2.6 (No Implied or Other Rights and Licenses), Section 3.3 (No Waiver of Liability), Section 4.1 (Subsidiaries), Section 4.2 (Former Subsidiaries), Section 4.3 (No Release), Section 5 (Consideration), Section 6 (Reports; Payments; Records and Audits), this Section 7.6 (Survival), Section 8.2 (Confidentiality), and Section 9 (Miscellaneous).

8. Confidentiality

8.1 Press Release. The Parties intend to issue a press release as set forth in the Settlement Agreement in the form and as agreed by the Parties.

8.2 Confidentiality. Each Party agrees that only after the announcement referenced in Section 8.1 above, each Party shall be entitled to disclose the general nature of this Agreement but that the terms and conditions of this Agreement, to the extent not already disclosed pursuant to Section 8.1 above, shall be treated as Confidential Information and that neither Party will disclose such terms or conditions to any Third Party without the prior written consent of the other Party, provided, however, that each Party may disclose the terms and conditions of this Agreement:

(a) as required by any court or other governmental body;

(b) as otherwise required by law;

(c) as otherwise may be required by applicable securities and other law and regulation, including to legal and financial advisors in their capacity of advising a Party in such matters so long as the disclosing Party shall seek confidential treatment of such terms and conditions to the extent reasonably possible;

(d) in confidence to legal counsel, accountants, and other professional advisors of the Parties;

(e) in confidence, to banks, investors and other financing sources and their advisors;

(f) during the course of litigation so long as the disclosure of such terms and conditions are restricted in the same manner as is the confidential information of other litigating entities and so long as (A) the restrictions are embodied in a court-entered protective order limiting disclosure to outside counsel and (B) the disclosing Party informs the other Party in writing at least ten (10) business days in advance of the disclosure and discusses the nature and contents of the disclosure, in good faith, with the other Party;

(g) in confidence, to a Third Party to whom either Party assigns one or more of its Patents, but solely to the extent necessary to inform such Third Party of the encumbrances contained herein on such Patents;

(h) in confidence, in connection with an actual or prospective merger or acquisition or similar transaction,

(i) in confidence, by Rambus to [***]; or,

(j) in confidence, in connection with a Party's obligation(s) under any most favored nation, or similar clause, whereby such Party is contractually obligated to disclose and offer terms given to Third Parties.

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

Upon execution of this Agreement, or thereafter, Rambus, in its discretion, shall be entitled to file a copy of this Agreement with the United States Securities and Exchange Commission, so long as Rambus seeks confidential treatment of such agreement to the extent reasonably possible.

9. Miscellaneous

9.1 Dispute Resolution . Any dispute submitted to binding arbitration pursuant to the terms of this Agreement shall take place in New York City, NY before one arbitrator, and shall be administered by Judicial Arbitration and Mediation Services, Inc. pursuant to its Streamlined Arbitration Rules and Procedures. Judgment on the award may be entered in any court having jurisdiction.

9.2 Disclaimers . Nothing contained in this Agreement shall be construed as:

(a) a warranty or representation by either Party as to the validity, enforceability, and/or scope of any intellectual property rights;

(b) imposing upon either Party any obligation to institute any suit or action for infringement of any intellectual property right, or to defend any suit or action brought by a Third Party which challenges or concerns the validity, enforceability or scope of any intellectual property rights;

(c) imposing on either Party any obligation to file any application or registration with respect to any intellectual property rights or to secure or maintain in force any intellectual property rights;

(d) imposing on either Party any obligation to furnish any technical information or know-how; or,

(e) imposing or requiring, whether by implication or otherwise, any support, maintenance or any technology deliverable obligations on either Party's or their respective Subsidiaries' part under this Agreement (and neither Party nor any of their respective Subsidiaries are providing any support, maintenance or technology deliverables under this Agreement).

9.3 Notices . All notices and other communications required or permitted hereunder shall be in writing and shall be (a) mailed by first class air mail (registered or certified if available), postage prepaid, or otherwise delivered by hand, by messenger, addressed to the addresses set forth below, or (b) delivered by facsimile to the facsimile number set forth below. Each Party may change its address or facsimile number for notices by providing a notice to the other Party in the manner set forth herein. Such notices shall be deemed to have been effective when delivered or, if delivery is not accomplished by reason of some fault or refusal of the addressee, when tendered (which tender, in the case of mail, shall be deemed to have occurred upon posting, and in the case of facsimile, shall be deemed to have occurred upon transmission). All notices shall be in English.

If to Rambus:

Rambus Inc.
1050 Enterprise Way, Suite 700
Sunnyvale, California 94089
U.S.A.
Telephone: +1-408-462-8000
Facsimile: +1-408-462-8001
Attention: SVP, Licensing
With copy to: General Counsel

If to Micron:

Micron Technology, Inc.
8000 S. Federal Way
Boise, Idaho 83716-9632
Telephone: 208-368-4500
Facsimile: 208-368-4540
Attention: General Counsel

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

9.4 Governing Law & Venue .

(a) This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to any choice-of-law or conflict-of-law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of Delaware.

(b) This Agreement is executed in the English language and no translation shall have any legal effect.

(c) Any legal action, suit or proceeding arising under, or relating to, this Agreement, shall be brought in the State or Federal Courts located in the State of Delaware, and each Party agrees that any such action, suit or proceeding may be brought only in such courts. Each Party further waives any objection to the laying of jurisdiction and venue for any such suit, action or proceeding in such courts.

9.5 No Assignment . Subject to Section 7.5, this Agreement is personal to the Parties, and the Agreement and/or any right or obligation hereunder is not transferable, assignable, and/or delegatable whether in conjunction with a change in ownership, merger, acquisition, the sale or transfer of all, or substantially all or any part of either Party's or any of their respective Subsidiaries business or assets or otherwise, voluntarily, by operation of law, reverse triangular merger or otherwise, without the prior written consent of the other Party, which consent may be withheld at the sole discretion of such other Party. Any such purported or attempted assignment or transfer in violation of the foregoing shall be deemed a breach of this Agreement and shall be null and void. Subject to the foregoing, this Agreement shall be binding upon and inure to the benefit of the Parties and their permitted successors and assigns. Notwithstanding the foregoing, either Party shall be entitled to, and each Party hereby agrees to, assign this Agreement to a successor to all or substantially all of a Party's assets in a transaction entered into solely to change a Party's place of incorporation.

9.6 No Rule of Strict Construction . Regardless of which Party may have drafted this Agreement or any part thereof, no rule of strict construction shall be applied against either Party. For the avoidance of doubt "includes", "including", "included", and other variations of such terms shall be deemed to be followed by the phrase "without limitation".

9.7 Severability . If any provision of this Agreement is held to be invalid or unenforceable, the meaning of such provision shall be construed, to the extent feasible, so as to render the provision enforceable, and if no feasible interpretation shall save such provision, (a) a suitable and equitable provision shall be substituted therefore in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision, and (b) the remainder of this Agreement shall remain in full force and effect.

9.8 Entire Agreement . This Agreement and the Settlement Agreement embodies the entire understanding of the Parties with respect to the subject matter hereof, and merges all prior oral or written communications between them, and neither of the Parties shall be bound by any conditions, definitions, warranties, understandings, or representations with respect to the subject matter hereof other than as expressly provided herein. No oral explanation or oral information by either Party hereto shall alter the meaning or interpretation of this Agreement.

9.9 Modification; Waiver . No modification or amendment to this Agreement, nor any waiver of any rights, will be effective unless assented to in writing by the Party to be charged, and the waiver of any breach or default will not constitute a waiver of any other right hereunder or any subsequent breach or default.

9.10 Counterparts . This Agreement may be executed in two (2) or more counterparts, all of which, taken together, shall be regarded as one and the same instrument.

9.11 Bankruptcy Code . All rights, licenses, privileges, releases, and immunities granted under this Agreement shall be deemed to be, for the purposes of Section 365(n) of the United States Bankruptcy Code, as amended (the "Bankruptcy Code"), licenses of rights to "intellectual property" as defined under Section 101(35A) of the Bankruptcy Code. The Parties agree that each of the Parties shall retain and may fully exercise all of their respective rights and elections under the Bankruptcy Code. The Parties further agree that, in the event that any proceeding shall be instituted by or against a Party seeking to adjudicate it as bankrupt or insolvent, or seeking liquidation, winding up, reorganization, arrangement, adjustment, protection, relief or composition of that Party or that Party's debts under any law relating to bankruptcy, insolvency, or reorganization or relief of debtors, or seeking an entry of an order for relief or the appointment of a receiver, trustee or other similar official for that Party or any substantial part of its property or if

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a Party hereto shall take any action to authorize any of the foregoing actions, the other Party shall have the right to retain and enforce their respective rights under this Agreement.

9.12 Ultimate Parent Entity . Each of Micron and Rambus hereby represents and warrants that on the Effective Date it is an Ultimate Parent.

REMAINDER OF PAGE INTENTIONALLY BLANK; SIGNATURE PAGE FOLLOWS

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be signed by duly authorized officers or representatives as of the date first above written.

RAMBUS INC.		**MICRON TECHNOLOGY, INC.**	
By:	/s/ Kevin Donnelly	By:	/s/ Brian M. Shirley
Name:	Kevin Donnelly	Name:	Brian M. Shirley
Title:	Senior Vice President	Title:	Vice President of DRAM Solutions
Date:	December 9, 2013	Date:	December 9, 2013

____

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

EXHIBIT A
ASSIGNED RAMBUS PATENTS (BETWEEN [***] AND THE EFFECTIVE DATE)

ASSIGNED UNITED STATES PATENTS

[***]

ASSIGNED FOREIGN PATENTS

[***]

____

[***] Confidential treatment has been requested for the bracketed portions. The confidential redaction portion has been omitted and filed separately with the Securities and Exchange Commission.

Exhibit 10.17

AMENDMENT
TO
SEMICONDUCTOR PATENT LICENSE AGREEMENT

This Amendment ("Amendment") to the Semiconductor Patent License Agreement dated January 19, 2010 ("SPLA") is effective as of October 1, 2013 ("Amendment Effective Date") and entered into by and between Rambus Inc., a corporation duly organized and existing under the laws of Delaware, U.S.A., having its principal place of business at 1050 Enterprise Way, Suite 700, Sunnyvale, CA 94089, U.S.A., ("Rambus") on behalf of itself and its subsidiaries, and Samsung Electronics Co., Ltd., a Korean corporation having its principal place of business at San #16, Banwol-Dong, Hwasung-City, Gyeonggi-Do, Korea, 445-701 ("Samsung") on behalf of itself and its subsidiaries. Rambus and Samsung are each individually a "Party" and collectively the "Parties."

RECITAL

A. Samsung, Rambus (or Rambus' subsidiaries) are parties to various agreements that grant licenses under the patents of Rambus and its subsidiaries. Such agreements include the SPLA and the Tamper Resistance License Agreement dated January 1, 2009 ("TRLA") between Samsung and Cryptography Research, Inc. ("CRI").

B. The Parties wish to (1) extend the grant of license under the SPLA to include additional patents of Rambus and its subsidiaries, (2) extend the scope of the license to cover additional Samsung products, and (3) to extend the duration of the SPLA for a longer term.

The Parties agree as follows:

TERMS

1. The following shall replace Section 1.17 of the SPLA in its entirety:

"1.17 "Expiration Date" means September 30, 2023."

2. The following shall replace Section 1.26 of the SPLA in its entirety:

"1.26 "Integrated Circuit" means a single, discrete integrated circuit chip, in any form factor, including wafer, cingulated die, or packaged die, such as, without limitation, packaged system-on-chips (SOCs), package-on-packages (POPs), package-in-packages (PIPs), memory cards, smart cards, and solid-state drives (SSDs).

3. The following shall replace Section 1.34 of the SPLA in its entirety:

"1.34 "Paid-up Product" means each double-data rate DRAM (including each graphics-based and low-power DRAM) that (a) implements the minimum set of features, parameters, and protocols defined or recommended in any JEDEC published specification for such double-data rate DRAM, (b) is solely capable of communicating with any other Integrated Circuit through the protocol defined or recommended in such JEDEC-published specification, and (c) has been sold in arms-length transactions to Third Parties by Samsung and/or one or more of its Subsidiaries prior to [***] in a volume of not

less than [***] units, where such units have been sold for a cumulative amount of not less than [***] United States Dollars (US$[***]). Notwithstanding the foregoing sentence, any product that constitutes a Rambus Leadership Product, and each physical instantiation thereof, shall be deemed not to be a Paid-up Product."

4. The following shall replace Section 1.49 of the SPLA in its entirety:

[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

“1.49 “Rambus Patents” means all Patents owned or controlled by Rambus and/or its Subsidiaries, including without limitation (a) all Patents owned or controlled by CRI (as set forth in Section 1.63), and (b) any and all Patents acquired by Rambus or its Subsidiaries during the Term; in either case , excluding Patents that are or become licensed by Samsung in any way in separate agreements (“Encumbered Patents”). For avoidance of doubt, Samsung shall continue to enjoy all rights and be subject to all obligations, including payment obligations with respect to any such Encumbered Patents, including without limitation the rights to (a) terminate the license (if applicable) under such separate agreements, or (b) obtain a license in perpetuity due to change of control (if applicable) under such separate agreements.”

5. The following new sentence shall be added at the end of Section 1.63 of the SPLA:

“For avoidance of doubt, Cryptography Research, Inc. (“CRI”) duly organized and existing under the laws of Delaware, U.S.A., having its principal place of business at 425 Market Street, 11th Floor, San Francisco, CA 94105 is a Subsidiary of Rambus.”

6. The following new paragraph shall be added at the end of Section 2.3 of the SPLA:

“Any Rambus Patents transferred, assigned, or exclusively licensed to a Third Party shall be subject to Samsung’s right to purchase or take a fully paid-up license for the lives of any such Patents (“Transferred Patents”). The parties shall negotiate in good faith regarding the process by which Rambus Patents shall be offered to Samsung and/or any Third Party in advance of any proposed transfer. For avoidance of doubt, unless Rambus grants to Samsung a [***] to any Transferred Patents for the life of such patents, Rambus may not reject a Samsung offer of consideration either for purchase or for license under such Transferred Patents that is greater in value than any offer by a Third Party for the same Transferred Patents.”

7. The following shall replace Section 4.1 of the SPLA in its entirety:

“4.1 In consideration of the extended terms herein, Samsung shall pay Rambus: (a) twenty two million U.S. dollars ($22,000,000) by no later than December 31, 2013; (b) subject to timely invoices by Rambus pursuant to Section 5.1(a), by the end of each of the following nineteen (19) quarters starting on January 1, 2014, [***] fifteen million U.S. dollars ($15,000,000) [***]; and (c) further, subject to timely invoices by Rambus pursuant to Section 5.1(a), by the end of each of the subsequent twenty (20) quarters starting on October 1, 2018, the [***] Quarterly as set forth in Section 1.72. For the avoidance of doubt, payments under Section 4.1(b) and (c) shall be subject to any applicable adjustment under Section 3.3 of the SPLA, and payments under Section 4.1(c) shall be further subject to [***].”

8. The following shall be added as new Sections 1.72 through 1.77:

“1.72 “[***] Quarterly”, as determined at any time during the Term, shall mean, either: [***] For purposes herein, (i) “[***]Quarterly” means the average quarterly payment [***] under a Qualified License, which shall be deemed to have become effective [***], (ii) “Qualified License” means an agreement under which Rambus and/or one or more of its Subsidiaries grants [***] a license covering at least [***], and such agreement is primarily in the nature of a [***] as opposed to being primarily in the nature of a [***], and (iii) “[***]” means either (x) [***] million U.S. dollars ($[***], or (y) [***] million U.S. dollars ($[***] as of the then-applicable quarter.

[***]

“1.73 [***]

“1.74 “Set Products” means all products that are not Integrated Circuit made by or for Samsung including without limitation consumer products such as mobile handsets and high definition televisions; provided that such products (a) are sold under a Samsung brand; and (b) would have qualified as Samsung Products if they had been Integrated Circuits.”

[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

"1.75 "CRI Patents" means all Patents owned or controlled by CRI."

"1.76 [***] and "Qualified License" shall take the meaning set forth in Section 1.72."

"1.77 "Initial Quarterly" means the amount determined in either Subsection 4.1(b)(i) or (ii) herein."

9. The following shall be added as new Section 2.1(e) of the SPLA:

"2.1(e) Set Product License. Rambus grants Samsung and its Subsidiaries a non-exclusive, non-transferable, worldwide license, without the right to sublicense, solely under the CRI Patents, other than Encumbered Patents, to make (including have made), use, Sell, offer for Sale, and/or import the Set Products during the term of the SPLA."

10. The following shall be added as new Section 2.7 of the SPLA:

"2.7 [***]

11. The following shall be added as new Section 3.3(e) of the SPLA:

"Notwithstanding anything to the contrary, if Samsung or its Subsidiaries acquires an entity or business: (a) making, using, selling or importing DRAMs that were not licensed under all necessary rights to the Rambus Patents prior to the acquisition, then nothing in the SPLA or the TRLA shall operate to license such DRAMs after the acquisition, and Samsung shall promptly notify Rambus of such acquisition, and the Parties shall cooperate in good faith to amend the SPLA to expand the license therein to cover such DRAMs, taking into consideration, among other factors, [***]; or (b) making, using, selling or importing products that were not licensed under all necessary rights to the CRI Patents, then nothing in the SPLA or the TRLA shall operate to license such products after the acquisition, but the Parties shall negotiate in good faith to extend any of the existing licenses or granting a new license to cover such products, taking into consideration, any additional payment and any other relevant terms and conditions to account for such acquisition."

12. The following shall be added as new Section 3.5 of the SPLA :

"3.5 [***]

13. The following shall replace Section 5.1(a) of the SPLA in its entirety:

"5.1(a) Samsung shall pay Rambus each payment set forth in Section 4.1 within ten (10) business days (as determined for notices under Section 9.2 of this Agreement) of Samsung's receipt of Rambus' invoice therefor. Rambus, during the Term, shall invoice Samsung by no later than twenty (20) days prior to the end of each quarter for each of the payments set forth in Section 4.1(b) and (c)."

14. The following shall be added as new Section 7.3:

"7.3 [***] Audit. Notwithstanding any of the provisions in this Section 7, Samsung shall have the right to audit Rambus' Qualified Licenses with [***] through a mutually acceptable third-party accounting or law firm only with respect to those provisions in such agreements relevant to determining compliance of [***] provisions herein including without limitation [***] Quarterly terms; provided however, that with respect to any preexisting agreements containing confidentiality obligations restricting disclosure by Rambus, the foregoing shall not require Rambus to disclose such agreements, but Rambus shall provide Samsung with a representation and warranty that Rambus' [***] Quarterly calculation pursuant to Section 1.72 is accurate in relation to such preexisting agreements. Rambus shall, in good faith, provide Samsung with timely notices of any future executed Qualified Licenses [***]."

15. Amendment Press Release. The Parties shall issue a mutually acceptable press release upon signing this Amendment.

16. TRLA. The Parties hereby agree that, during the Term, all terms of the TRLA shall remain full force and effect except that: (a) on account of Section 3.3(e) of the SPLA, Section 2.3.5(c) of the TRLA is deemed

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[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

inapplicable during the Term; and (b) on account of Section 4.1 of the SPLA, all payment and payment-related obligations of Samsung under the TRLA are deemed fully satisfied (including without limitation all such obligations under Sections 2.3.2, 2.3.3, 2.3.4 and 3.1). For avoidance of doubt, Samsung retains its right to terminate the TRLA pursuant to Section 6.2 of the TRLA upon termination of the SPLA. Samsung represents that neither it nor its Subsidiaries have made, had made, used, sold, offered for sale, or imported any products covered by Licensed DPA Patents (as defined in the TRLA), other than Licensed DPA Products (as defined in the TRLA), prior to the Amendment Effective Date.

Agreed on behalf of Rambus:

/s/ Kevin Donnelly

Name: Kevin Donnelly
Title: Senior Vice President
Date: December 30, 2013

Agreed on behalf of Samsung:

/s/ Jay Shim

Name: Jay Shim
Title: Senior Vice President of IP
Date: December 23, 2013

[***] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

Exhibit 21.1

SUBSIDIARIES OF REGISTRANT

Rambus Delaware LLC
Rambus Deutschland GmbH (Germany)
Rambus International Ltd.
Rambus K.K. (Japan)
Rambus Ltd. (Grand Cayman Islands, BWI)
Rambus Chip Technologies (India) Private Limited
Rambus Korea, Inc. (Korea)
Rambus France
Cryptography Research, Inc.
Unity Semiconductor Corporation
Kamiyacho IP Holdings
Mozaik Multimedia, Inc.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (Nos. 333-28597, 333-38855, 333-67457, 333-93427, 333-48730, 333-52158, 333-86140, 333-103789, 333-115015, 333-124513, 333-146770, 333-159516, 333-181072 and 333-191432) and Form S-3 (No. 333-174754) of Rambus Inc. of our report dated February 21, 2014 relating to the consolidated financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10−K.

/s/ PricewaterhouseCoopers LLP

San Jose, California
February 21, 2014

Exhibit 31.1

**CERTIFICATION PURSUANT TO RULE 13A-14(A) AND RULE 15D-14(A)
OF THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Ronald Black, certify that:

1. I have reviewed this annual report on Form 10-K of Rambus Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 21, 2014

By:	/s/ Ronald Black
Name:	Ronald Black, Ph.D.
Title:	*Chief Executive Officer and President*

Exhibit 31.2

**CERTIFICATION PURSUANT TO RULE 13A-14(A) AND RULE 15D-14(A)
OF THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Satish Rishi, certify that:

1. I have reviewed this annual report on Form 10-K of Rambus Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 21, 2014

By:	/s/ Satish Rishi
Name:	Satish Rishi
Title:	*Senior Vice President, Finance and Chief Financial Officer*

Exhibit 32.1

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Ronald Black, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Rambus Inc. on Form 10-K for the fiscal year ended December 31, 2013, fully complies with the requirements of Section 13 (a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that information contained in such Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of Rambus Inc.

Date: February 21, 2014

By:	/s/ Ronald Black
Name:	Ronald Black, Ph.D.
Title:	*Chief Executive Officer and President*

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Satish Rishi, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Rambus Inc. on Form 10-K for the fiscal year ended December 31, 2013, fully complies with the requirements of Section 13 (a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that information contained in such Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of Rambus Inc.

Date: February 21, 2014

By:	/s/ Satish Rishi
Name:	Satish Rishi
Title:	*Senior Vice President, Finance and Chief Financial Officer*