2000 ANNUAL REPORT

CREE

dashboards

cell phones

LED signs

DVD/storage

cell towers

power

Company Profile

Cree, Inc. is the world leader in the development, manufacturing, and marketing of semiconductor materials and electronic devices made from silicon carbide (SiC) and gallium nitride (GaN). The Company uses its proprietary technology to produce compound semiconductors such as blue and green light emitting diodes (LEDs) for use in automotive and cellular backlighting; full color indoor and outdoor displays; indicator lamps, and other lighting applications. The Company also manufacturers and sells SiC wafers which are used for research directed toward optoelectronic, microwave and power device applications and SiC crystals for gemstone applications.

Cree's research team is focused on the creation of new electronic applications including microwave devices for use in wireless infrastructure and radar, blue/near-UV laser technology for digital versatile disc (DVD) applications, and devices for power switching and other power uses. Cree owns outright or licenses exclusively 73 U.S. and 45 foreign patents related to its process and device technology.

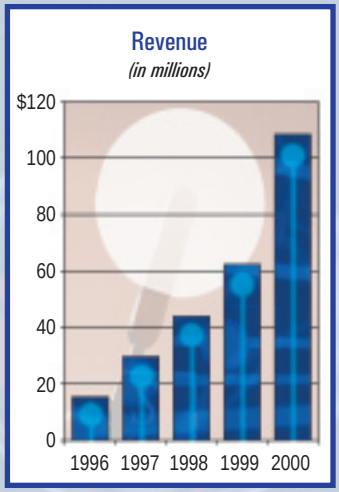
For the fiscal year ended June 25, 2000, revenue grew 74 percent to $108.6 million and net income increased 145 percent to $30.5 million. The Company is traded on the NASDAQ National Market System under the symbol "CREE."

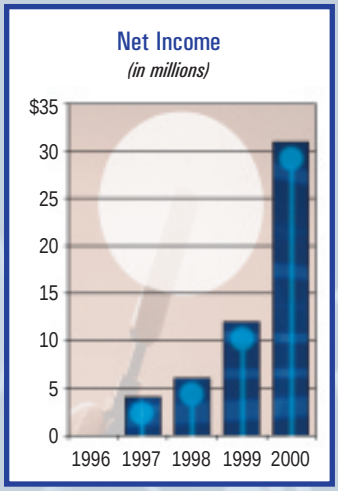
This report contains forward-looking statements that relate to our plans, objectives, estimates and goals. Words such as "expects," "anticipates," "intends," "plans," "believes," and "estimates," and variations of such words and similar expressions identify such forward-looking statements. Our business is subject to numerous risks and uncertainties, including variability in our quarterly operating results, risks associated with our operation of semiconductor manufacturing facilities, our ability to manage rapid growth, variability in our production yields, constraints in our manufacturing capacity, and our dependence on a limited number of customers. These and other risks and uncertainties, which are described in more detail in the company's Annual Report on Form 10-K, included with this report, could cause actual results and developments to be materially different from those expressed or implied by any of these forward-looking statements.

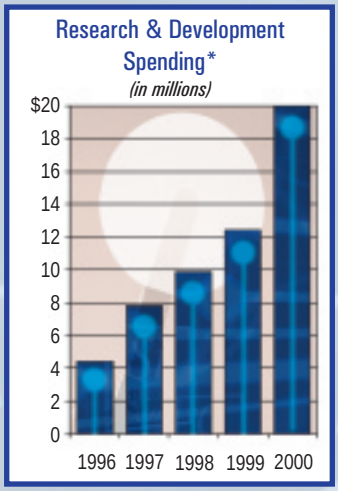
About the Cover

Current and future product applications featured on our cover include from top to bottom: Audi TT dashboard; Nokia 8850 handset; full color outdoor display, located in Leicester Square, London, England; DVD storage; cellular base station; and power plant.

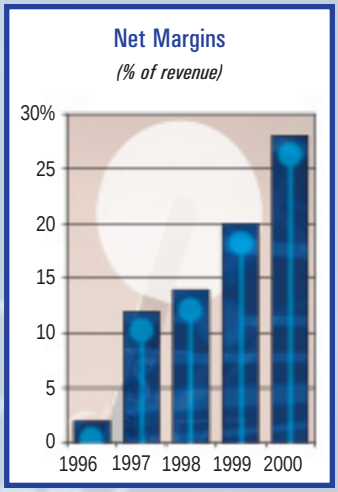
Shareholder Summary







*including customer and government funded programs



Selected Consolidated Financial Data

(In thousands, except per share data)

	Years Ended				
	June 25, 2000	June 27, 1999	June 28, 1998	June 30, 1997	June 30, 1996
Statement of Operations Data:					
Product revenue, net	$ 96,742	$ 53,424	$ 34,891	$ 19,823	$ 9,689
Contract revenue, net	11,820	8,977	9,071	7,025	3,960
License fee income	--	--	--	2,615	1,423
Total revenue	108,562	62,401	43,962	29,463	15,072
Gross profit	56,200	28,238	14,739	10,097	3,568
Net income	$ 30,520	$ 12,448	$ 6,243	$ 3,650	$ 231
Net income per share, diluted	$ 0.87	$ 0.41	$ 0.22	$ 0.13	$ 0.01
Weighted average shares outstanding, diluted	35,217	30,432	28,987	28,251	25,230

	Years Ended				
	June 25, 2000	June 27, 1999	June 28, 1998	June 30, 1997	June 30, 1996
Balance Sheet Data:					
Working capital	$ 265,957	$ 59,889	$ 28,265	$ 21,121	$ 18,584
Total assets	486,202	145,933	74,379	50,568	43,811
Long-term obligations	--	4,650	11,046	1,638	--
Shareholders' equity	$ 463,140	$ 131,001	$ 55,905	$ 45,236	$ 40,660

Letter to Our Shareholders

Fiscal 2000 was an outstanding and financially strong year for Cree. Revenue and earnings reached unprecedented levels. Our balance sheet has never been stronger with over $300 million in cash and investments. We converted our factory to produce a higher portion of high brightness LED products, which have had a greater market demand for use in white light conversion, outdoor display and other applications. On the LED front, we also acquired Nitres, Inc., now operating as Cree Lighting Company. In July 2000, Cree Lighting announced extraordinary progress in our development efforts for higher brightness with the demonstration of nitride LEDs with 28% quantum efficiency in the UV-to-blue portion of the wavelength spectrum, the highest reported in the world. During fiscal 2000, we sampled new microwave products to customers who verified the beneficial operation of silicon carbide (SiC) based devices. We also achieved record power levels at high frequencies and set new marks for voltage in power diodes and transistors in our development programs. Finally, we accelerated our blue laser program and made significant progress in this important area.

These achievements have positioned Cree as number 11 of the 100 fastest growing companies in America as ranked by Fortune magazine. In addition, Fortune further identified, from the list of 100, ten companies that could sustain long and explosive growth. Cree was named here as well.

Our financial results are impressive. During fiscal 2000, we generated nearly $63 million of cash from operations and have now reported 16 consecutive quarters of profitability. Compared to fiscal 1999,

- Year-end share price (adjusted for July 1999 stock split) grew 334%
- Revenue rose 74%
- Net income increased 145%
- Gross margins increased from 45% to 52%
- Operating margins grew from 26% to 34%

For much of the year demand for our LED products was outpacing our capacity to supply products. To alleviate the situation, we embarked on an aggressive expansion plan. We raised $266 million in net proceeds from a public stock offering of 3.29 million shares. We completed a 42,000 square foot addition for production and administration in December 1999, announced a 125,000 square foot expansion to our manufacturing site that is expected to be completed by December 2000, and have slated an additional 125,000 square feet for phase two of our expansion that is expected to be completed next year. We also acquired a 120,000 square foot building near our existing manufacturing operations that is being upfitted for administration, sales, research and development personnel. We are focused on increasing capacity to meet the increased demand for our products.

Our challenge has been and will continue to be to decrease costs and improve product performance. During this past year we made progress in increasing the brightness of our LEDs, and also introduced a smaller-sized LED device that consumes 50% less power and represents a significant cost savings to customers over our high brightness blue and green LEDs. These smaller devices are targeted for markets such as cellular phones, high-resolution video boards and segmented LED displays. Although the primary applications for our LEDs continues to be in automotive lighting, cellular backlighting and full color displays, new applications are emerging such as indicator lighting for appliances and other consumer applications. As we continue our efforts to reduce costs, which allows us to offer LEDs at lower prices, we believe new applications will continue to emerge.

In May, we concluded the acquisition of Nitres, Inc., now known as Cree Lighting Company. Our purpose in acquiring Nitres is to give Cree an advantage at the top end of the brightness spectrum by leveraging Nitres' research and development resources and world record near-UV nitride LED efficiency with Cree's low cost manufacturing and silicon carbide platform. We also bring together the two premier nitride teams in the world. With these resources, we are optimistic that we can develop products to compete in the commercial lighting market over the next few years.

Our wafer business turned in a solid year. We introduced the only three-inch SiC wafer in the world and a new lower priced two-inch wafer. The new two-inch product is targeted toward researchers working on nitride based optoelectronic devices. In October 1999, at the International Conference on Silicon Carbide and Related Materials, Cree demonstrated a four-inch SiC wafer, the largest diameter single crystal SiC wafer ever exhibited. These achievements reinforce Cree's position as the leader in SiC research and production. As we move to the three-inch platform for device production, we believe that we will significantly reduce the cost of our devices and improve capacity to meet our customer demand for our products.

Cree's core competency has been focused on SiC. As the company has evolved, we have explored other suitable materials and are now working on new material systems including SiC, gallium nitride (GaN) and aluminum nitride (AlN). While SiC remains a priority, we are also developing and matching the best material system for the required application. This research work is directed toward growing pure wafers using these materials as well as making wafers by depositing these materials on other platforms.

Our radio frequency (RF) and microwave business made great progress this past year in both the commercial and government sectors. We utilized both GaN and SiC based devices in demonstrating the distinct advantages of wide band semiconductors. Customer interest and potential applications are increasing as the marketplace recognizes the unique attributes and advantages our devices provide over existing devices. During the year we sampled our 48-volt, 10-watt product to major wireless infrastructure providers. In June, we announced a limited availability of three new RF products designed for wireless and broadcast applications. Our 10-watt product targets the third generation (3G) base station as well as the multi-channel, multi-point distribution system (MMDS) marketplace. We hope to introduce additional products in fiscal year 2001. These markets are extremely important, as there are few candidate materials available that perform well above the 2 GHz frequency range. With the next generation applications targeted at these frequencies, we believe Cree has an enormous opportunity to develop products for these markets. Our customers have confirmed that our devices can deliver the same linear performance as existing technology at half the rated power and greater than 30% higher efficiency. We are also reviewing potential acquisition and investment opportunities in this sector to expand our packaging and channel capabilities.

We continued to be successful this fiscal year in receiving government contracts to develop new microwave devices based on GaN. In August 2000, we also announced the demonstration of a record setting 10 GHz RF power performance from a GaN high electron mobility transistor. The GaN transistor was incorporated into a hybrid amplifier that achieved 40 watts of pulsed RF output power at 10 GHz. In addition, we demonstrated the first monolithic microwave integrated circuit (MMIC) on a GaN grown SiC substrate. The GaN MMIC achieved 20 watts of pulsed RF power at 9 GHz, well exceeding the highest RF output power demonstrated by gallium arsenide MMICs for this frequency range. Our efforts in this area are enabling us to move closer to delivering a commercially viable radar product.

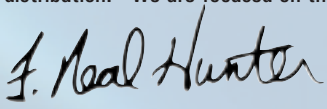
In the power area, we continue to break world records for power output. In May 2000, Cree and Kansai Electric Power Company announced the demonstration of the world's first 12.3 kV high efficiency SiC rectifier for use in electric power switching. This exceeds the highest blocking voltage commercially available on silicon or other known semiconductor materials. This is a key milestone in power and efficiency and demonstrates the range of capabilities and the robust properties of SiC based devices over silicon devices.

Our laser development effort is benefiting greatly from the $10 million in funding provided through our program with Microvision, Inc. The resources we have put in place are paying off with internal records for continuous wave operation. We've demonstrated output power necessary for reading optical storage media. These milestones enable us to formalize plans to release a blue laser product targeted for optical storage applications.

In the gemstone area, we continue to make improvements in the materials we provide to Charles & Colvard. Although Charles & Colvard has dramatically changed its distribution strategy to stimulate sales, its contribution to our revenue stream has diminished throughout the year. While the funding provided by Charles & Colvard in the past has been a key driver in our successful move to larger-sized crystals, we expect sales in fiscal year 2001 from this segment to be significantly reduced unless demand for these products improves.

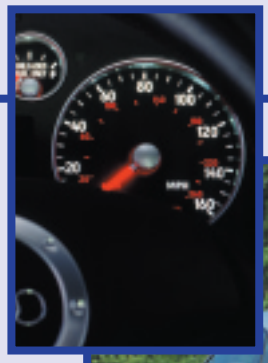
During this past year we have executed on all fronts including inventing new products and processes to complement our existing product lines. We dramatically increased our output of high brightness chips and lowered the cost of this product by 47%. At the same time, we put in place the necessary infrastructure for longer-term growth. Fiscal 2000 further established Cree as the volume leader in GaN device manufacturing. We expanded our customer base during a tough ramp-up cycle of our high brightness products.

For fiscal 2001, we are committed to build on our base. We begin this year as the world's leader in shipments of gallium nitride and silicon carbide based semiconductors. We will continue to focus on cost reductions while improving product quality and performance and provide the resources necessary to get new products to market quickly. We must execute all phases of our business from facility expansion to customer service. We realize that we have an opportunity to play a major role in the future of lighting, optical storage, wireless communication, full color displays and power distribution. We are focused on these developing opportunities.



F. Neal Hunter
CEO and Chairman of the Board

Products and Markets



Price *and superior* ***Performance*** *distinguish Cree's products in the market. Our expertise in silicon carbide (SiC) and gallium nitride (GaN) based semiconductor devices is our key advantage over competing products and materials. To maintain our leadership position in a rapidly accelerating market as well as progress in providing cutting-edge solutions, we must continue to develop enabling component technology for customers and offer products at a low price.*

LEDs

Light emitting diodes (LEDs) are the semiconductor light source. They offer a long lifetime as compared to incandescent technology and are more reliable because they do not contain a filament. More important is the lower cost of operation in many applications. Cree has long been known as a pioneer in the manufacture of blue LEDs. Now, our blue and green products, have been incorporated into numerous lighting applications that, until a few years ago, were handled through traditional illumination methods. Because our LEDs possess the highest specification for electrostatic discharge (ESD) resistance, a significant portion of our LEDs are used for backlighting the instrument panels in the Volkswagon and Audi models as well as other automotive console components. LED technology is also envisioned as the replacement light source for automotive map lighting, glove compartment and trunk lighting.

Cell phones are becoming information-intensive devices requiring a robust backlight source to display the increasing amount of data. Cree's LEDs have been designed into two Nokia wireless models to backlight both the display panel and the key pad. In addition to Nokia, we have been designed into other prominent wireless phone applications. During fiscal year 2000, an increased portion of our LED volume was focused on this market segment. In June of 2000, we also announced a new, low current LED that consumes 50% less power and represents a significant cost saving to customers over our high brightness LED devices. This new device targets the more price-sensitive applications including wireless phones.

The indoor and outdoor video screen market is growing rapidly due to the lower power consumption and longer life of LED technology over other lighting alternatives. Stadium signs, billboards, indoor signs, and outdoor signs have incorporated Cree's blue and green LEDs and illustrate the versatility of full color displays.

LED technology is being incorporated into other differentiating applications including indicator lighting in consumer applications, appliances, and traffic signals. These high volume markets should grow as the cost of the devices continues to decline.

Over the next 5-10 years, the future of blue LEDs may include conventional illumination markets, where LEDs could rival the incandescent light bulb for commercial lighting applications. To respond to this future demand, Cree acquired Nitres, Inc., now doing business as Cree Lighting Company. Cree Lighting has demonstrated a world record with the highest external quantum efficiency ever reported for an LED in the UV-to-blue portion of the wavelength spectrum, which translates to increased brightness. In order to produce LEDs for commercial lighting, we must dramatically increase the brightness of the chip while drastically reducing the cost. Cree Lighting will continue to focus on record brightness and the development of products with a low cost platform. Integrating this novel technology and increasing our market share in the lighting segment continues to be a priority.

Wafers

A multitude of companies, universities and research facilities continue to use our wafers to explore the viability of SiC for new product development in emerging applications. We have seen an increasing demand for SiC substrates as SiC is accepted for use in high performance applications. As the wafer size increases, the resulting diode costs decline; therefore, product development efforts by our customers are expected to further intensify. In October 1999, we demonstrated a four-inch wafer, which has four times the surface area of a two-inch wafer. These larger-sized wafers, together with continued quality improvements are expected to yield more cost-efficient devices.

Radio Frequency (RF) & Microwave

Tomorrow's wireless phones will do much more than simply transmit voice. More powerful solutions will be required than exist today to accomplish these tasks. Our initial products in the 2.2 GHz to 3.7 GHz range target applications for the wireless base station infrastructure including multi-channel, multi-point distribution system (MMDS), wireless local loop (WLL), and third generation (3G) cellular. Cree has demonstrated SiC metal-semiconductor field-effective transistors (MESFETs) that deliver up to five times the power of silicon or gallium arsenide solutions. They function at higher operating temperatures and are expected to offer better efficiency at the targeted performance levels resulting in a more cost-effective solution.

We made considerable progress during the year in developing our initial RF products on both GaN and SiC. Our products have been well received and we are moving aggressively to secure this exciting opportunity. Research and development efforts will continue to target future generation devices that operate at higher power and frequencies necessary to meet the market's increasing efficiency requirements.

Power

We continue to make steady progress in the development of power switching devices in combination with Kansai Electric Power Company. As a result of our R&D work, we announced the demonstration of a world record 12.3 kV high efficiency SiC power rectifier for use in electric power switching. SiC power conversion devices have the potential to handle significantly higher power densities than existing silicon-based devices. They are also expected to deliver considerable power savings due to the devices' high efficiency. We believe SiC power switching devices are 90% more efficient than silicon-based devices.

Potential applications include power drive components for electric vehicles, factory automation, lighting ballast components, industrial motor controls and power conditioning for high voltage power transmission.

Blue and Near-Ultraviolet Laser Diodes

To exploit the multi-billion dollar market envisioned for blue and near-ultraviolet laser diodes, our research and development efforts continue at a rapid pace focused on introducing a commercially viable product at an affordable price. Our $10 million R&D contract with Microvision, Inc. for optoelectronics has enabled us to accelerate our development efforts, and our technological evolution on LEDs is a precursor to blue laser commercialization. The principal application for blue and near-ultraviolet laser diodes is focused on next generation high-density digital versatile disk (DVD) optical storage systems, as well as CD-ROM and military applications. This product will be important to the market as they deliver three to four times the storage capacity over red and infrared technology currently used.

Gemstones

Although a departure from our core business as a semiconductor device manufacturer, Cree has benefited noticeably from the Charles & Colvard relationship. The growth of larger size crystals and improved color quality was brought about, in part, through our development agreement with Charles & Colvard. The gemstones offer a lower price and unique alternative to the expensive near-colorless jewels on the market today. We have been able to incorporate these developments, as well as other process improvements, into our device manufacture resulting in improved yields for all of our product lines.

Board of Directors

Top Row: Dr. John W. Palmour, Dr. Calvin H. Carter, Jr., Michael W. Haley, Dolph W. von Arx
Bottom Row: Dr. Walter L. Robb, F. Neal Hunter, James E. Dykes

Executive Officers

From Left to Right: Cynthia B. Merrell, Charles M. Swoboda, F. Neal Hunter, Dr. Calvin H. Carter

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Raleigh, North Carolina

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http://www.amstock.com

Investor Relations
Frances A. Barsky
(919) 313-5397
e-mail: fran_barsky@cree.com
Additional investor materials may be obtained without charge by contacting Investor Relations.

Annual Meeting of Shareholders
The annual meeting of shareholders will be held on October 31, 2000, at 10 a.m., at the company's corporate headquarters located at 4425 Silicon Drive, Durham, North Carolina.

Additional Information
The company's common stock is traded on the NASDAQ National Market System and is quoted under the symbol "CREE."

Executive Officers
F. Neal Hunter
Chairman of the Board and
Chief Executive Officer

Charles M. Swoboda
President and Chief Operating Officer

Cynthia B. Merrell
Chief Financial Officer and Treasurer

Calvin H. Carter, Jr., Ph.D.
Executive Vice President,
Director of Materials Technology

Board of Directors
F. Neal Hunter
Chairman of the Board and
Chief Executive Officer
Cree, Inc.

James E. Dykes
Retired President and
Chief Executive Officer
Signetics Company

John W. Palmour, Ph.D.
Director of Advanced Devices
Cree, Inc.

Dolph W. von Arx
Retired Chief Executive Officer Planters
Lifesavers Company

Calvin H. Carter, Jr., Ph.D.
Executive Vice President,
Director of Materials Technology
Cree, Inc.

Michael W. Haley
Chief Executive Officer
Triton Management Company

Walter L. Robb, Ph.D.
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