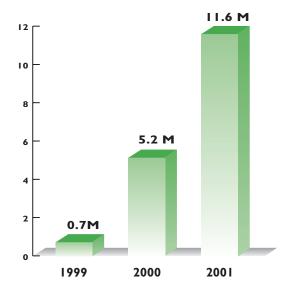
## AWARE, INC. / 2001 ANNUAL REPORT

# opening the lines of communication

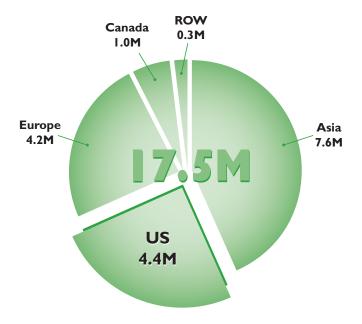
# **About Aware**

e are a leader in the development and marketing of intellectual **property** for broadband communications. Our principal offering to date has been Asymmetric Digital Subscriber Line (ADSL) technology for the telecommunications industry. ADSL enables telephone companies to use their existing copper telephone lines to offer broadband services. We license our **broadband** intellectual property on a nonexclusive and worldwide basis to semiconductor companies that manufacture and sell products that incorporate our technology. Our licensees sell integrated circuits to systems companies that manufacture and sell broadband communications equipment. We also offer ADSL test and development products as well as image compression software products.

# ADSL Subscriber Net Additions by Year (millions)



#### Cumulative ADSL Subscribers by Region at 12/31/01 (millions)



# Message to Shareholders

Dear Shareholders.

The past year has been a challenging one. The semiconductor and telecommunication industries have experienced significant downturns and many companies, including Aware, have been adversely affected.

Despite the current environment, the rollout of broadband communications services based on ADSL has continued and appears poised to accelerate. At year's end, there were over 17 million ADSL subscribers around the world and the DSL Forum forecasts that this will grow to 200 million by 2005. This growth is driven by consumer demand for high-speed data services and is creating tremendous opportunities for the technologies and products that enable it.

The ADSL industry continues to grow in scope as well as in size. In 2000, the primary deployments were in South Korea and the United States. In 2001, Japan and Germany experienced multi-million line deployments. This year, new rapid growth is expected in France, China and other countries. Each region has its own challenging set of commercial and technical requirements. In addition, international standards bodies are finalizing new standards for ADSL that are expected to change the technical landscape around the world. ADSL technology is a rapidly expanding and ever-changing collection of features and requirements.

Aware is the leading supplier of semiconductor intellectual property to the ADSL industry. We have continued to invest in technology and resources through the recent downturn. This has allowed us to continue to improve and expand our intellectual property. We enable our customers to sell chipsets that embody new emerging standards as well as what are now considered the "old" flavors of ADSL. We provide our customers with differentiating features such as Dr. DSL®, FastDSLTM and VeDSLTM to improve the value proposition to their customers. And we continue to work on new technologies that will add further value to our customers' offerings.

We remain confident that the industry we are focused on and the business model we are using will return our company and our shareholders to better days. We are grateful for the continued support from our customers, shareholders and employees.

Sincerely,

Michael A. Tzannes Chief Executive Officer John K. Kerr Chairman,

Board of Directors

In K. Ken

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

#### **FORM 10-K**

# Annual Report Pursuant To Section 13 Or 15(d) Of The Securities Exchange Act of 1934

For the fiscal year ended December 31, 2001

Commission file number 000-21129

## AWARE, INC.

(Exact Name of Registrant as Specified in Its Charter)

#### Massachusetts

(State or Other Jurisdiction of Incorporation or Organization)

#### 04-2911026

(I.R.S. Employer Identification No.)

#### 40 Middlesex Turnpike, Bedford, Massachusetts 01730

(Address of Principal Executive Offices) (Zip Code)

#### (781) 276-4000

(Registrant's Telephone Number, Including Area Code)

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

### Common Stock, par value \$.01 per share

(Title of class)

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 X NO \_\_\_\_

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of 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. [X]

The aggregate market value of the voting stock held by non-affiliates of the registrant as of March 12, 2002, based on the closing price of the Common Stock on March 12, 2002 as reported on the Nasdaq National Market, was approximately \$140,823,207.

The number of shares outstanding of the registrant's common stock as of March 12, 2002 was 22,667,009.

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement to be delivered to shareholders in connection with the registrant's Annual Meeting of Shareholders to be held on May 31, 2002 are incorporated by reference into Part III of this Annual Report on Form 10-K.

#### AWARE, INC. FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2001

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#### PART I

#### ITEM 1. DESCRIPTION OF THE BUSINESS

#### **Company Overview**

We are a worldwide leader in the development and marketing of intellectual property for broadband communications. We license our intellectual property to semiconductor companies that build integrated circuits based on our technology. Our principal offering to date has been Digital Subscriber Line ("DSL") technology for the telecommunications industry. DSL enables telephone companies to use their existing copper telephone lines to offer broadband services.

Our principal DSL offering is a technology package for Asymmetric Digital Subscriber Line ("ADSL"). ADSL is a broadband service that is primarily targeted at residential telephone customers for high-speed Internet access. ADSL has been standardized for global use by the International Telecommunications Union ("ITU"). Our ADSL technology package is compliant with applicable ITU standards.

We have complemented our core ADSL technology offering with technologies aimed at enhancing the value of ADSL to telephone companies. These complementary technologies enable advanced capabilities such as new voice services and diagnostic testing. We also have projects underway to develop other forms of DSL, as well as other broadband technologies. We play an active role in setting standards for broadband technologies so that we can anticipate and develop technology that meets the needs of changing markets.

During 2001, approximately 78% of our revenue came from licensing ADSL intellectual property. We license our intellectual property worldwide through our direct sales force. Our lead semiconductor customers are Analog Devices, Inc., Infineon Technologies, AG and Intel Corporation. The remainder of our revenue came from the sale of hardware and software products. Our hardware products help customers develop and test their ADSL products. Our software products compress digital images and data for law enforcement and other applications.

We are headquartered in Bedford, Massachusetts. Our telephone number is (781) 276-4000, and our website is www.aware.com. Incorporated in Massachusetts in 1986, we employed 165 people at December 31, 2001. Our stock is traded on the Nasdaq National Market under the symbol AWRE.

#### **Industry Background**

ADSL industry background. Telephone companies began tests and trials of ADSL technology in the mid 1990s. Commercial deployment of ADSL services began in modest volumes in 1999. During 2000 and 2001, the rate of deployment of ADSL services accelerated dramatically, particularly outside of the United States. According to announcements by major telephone companies, there were approximately 17.5 million global ADSL subscribers at the end of 2001, with approximately 11.5 million of those customers being added in 2001 alone. There were approximately 4.4 million U.S. subscribers as compared with 13.1 million non-U.S. subscribers as of December 31, 2001.

Some of the largest suppliers of ADSL service in North America are SBC, Verizon, Bell South, Qwest, and Bell Canada. In Europe, some of the largest providers are Deutsche Telekom, France Telecom, Belgacom, Telecom Italia, and Telia. Large Asian providers include Korea Telecom and Hanaro in Korea; NTT and Yahoo Broadband in Japan; and Chunghwa in Taiwan.

Telephone companies are able to purchase ADSL equipment from a number of telecommunications equipment suppliers. Some of the leading suppliers of ADSL equipment include Alcatel Alsthom S.A. ("Alcatel"), Cisco Systems, Inc., ECI Telecom, LTD, Intel Corporation ("Intel"), Lucent Technologies Inc., Samsung Corporation, Siemens AG, and a number of Asian modem manufacturers. Telecommunications equipment suppliers are able to purchase ADSL chipsets from a number of suppliers, including Alcatel, Analog Devices Inc. ("ADI"), Broadcom Corporation ("Broadcom"), Centillium Communications, Inc. ("Centillium"), GlobespanVirata, Inc. ("GlobespanVirata"), Infineon Technologies AG ('Infineon") and Texas Instruments Incorporated ("TI").

Semiconductor industry background. During the 1980s and 1990s, the semiconductor industry moved from vertically integrated companies to horizontally specialized companies. Vertically integrated semiconductor companies used to perform the entire semiconductor process from design to manufacture to sales. Today the industry consists of separate companies focused on various horizontal processes within the semiconductor industry. Horizontal groups within the semiconductor industry now include capital equipment companies, independent foundries, design automation shops, fabless semiconductor companies, and semiconductor intellectual property ("IP") companies.

The semiconductor intellectual property industry has matured and grown over the last five years. The availability of field-proven technology from independent IP suppliers allows semiconductor manufacturers to achieve greater financial flexibility, reduce engineering development risks, and reduce the time it takes to get products to market.

Semiconductor intellectual property may be classified into four principal categories:

- Simple IP consists of designs for standard chip functions, such as timers and clocks, memory management, hardware controllers, or USB interfaces.
- *Microprocessor IP* consists of processor cores that are used to build general-purpose processors, configurable processors, or digital signal processors.
- Semiconductor Manufacturing Process IP consists of libraries of intellectual property that are used during the semiconductor manufacturing process.
- Complex System-Level IP consists of complete systems solutions for specific applications that are usually based on standards or patents. Examples of Complex System-Level IP include ADSL, Code Division Multiple Access ("CDMA"), Global System for Mobile telecommunications ("GSM"), Global Positioning System ("GPS"), Wireless Local Area Networking ("WLAN"), and chip-connection technology for Dynamic Random Access Memory ("DRAM").

Our intellectual property is focused on Complex System-Level IP for applications involving broadband communications, and in particular ADSL.

#### **Aware ADSL Intellectual Property**

ADSL technology was first created in the late 1980s. ADSL technology expands the useable bandwidth of copper wire so that telephone companies can offer high-speed data services over their existing telephone networks. ADSL is a point-to-point technology that connects the end user to a telephone company's central office. ADSL equipment is deployed at each end of the copper wire in order to enable the service. ADSL is targeted at the residential market and is designed to transmit data at speeds more than 100 times faster than 56 kilobits per second ("Kbps") voiceband modems. Actual transmission speeds depend on the length and condition of the existing wire.

An ADSL system divides the bandwidth on a copper wire into three segments. The first segment is used for plain old telephone service ("POTS"). The second segment is used to transmit data upstream from the user to the central office. The third segment is used to transmit data downstream from the central office to the user.

The ITU has approved standards for ADSL based on a modulation technique known as discrete multitone or DMT. Two types of DMT-based ADSL have been standardized by the ITU: 1) full-rate ADSL and 2) G.Lite.

Full-rate ADSL can transmit data at speeds up to 8 megabits per second ("Mbps") downstream and up to 640 Kbps upstream. Full-rate ADSL was first standardized in 1995 by the American National Standards Institute as T1.413, and then by the ITU in 1999 as G.992.1. Standard compliant full-rate ADSL requires the installation of voice-data "splitters" in residences by telephone company technicians. In order to alleviate the time required to install splitters, telephone companies began providing "microfilters" to their residential customers so that the customers could install one of these devices on every telephone and fax machine in their home. While effective, the alternative microfilter solution is not compliant with the full-rate ADSL standard.

G.Lite can transmit data at speeds up to 1.5 Mbps downstream and up to 512 Kbps upstream without requiring voice-data splitters or microfilters. G.Lite was intended to make the installation of ADSL faster and less expensive for telephone companies. G.Lite was first standardized by the ITU in 1999 as G.992.2.

Today, most ADSL service offerings by telephone companies are based on a hybrid of full-rate ADSL and G.Lite. The hybrid service, while primarily based on the full-rate ADSL standard, uses microfilters installed by end users instead of splitters installed by telephone companies, and operates at data rates ranging from hundreds of Kbps to multiple Mbps depending on the price charged by telephone companies.

The core ADSL technology package that we license to customers includes a complete implementation of the ITU standard for full-rate ADSL and G.Lite. The ITU is currently working on a new standard for both full-rate ADSL and G.Lite. We intend to offer an ADSL technology package for these new standards. We provide patent rights, system designs, hardware designs, software, and engineering services as part of our standard offering. We have complemented our core ADSL technology offering with technologies aimed at enhancing the value of ADSL to telephone companies. Several important innovations that we have developed over the last several years include our "channelized voice" technology and our Dr. DSL® diagnostic testing technology.

Channelized voice technology expands an ADSL service offering so that in addition to ADSL's normal high-speed data service and POTS, it can also deliver multiple lines of digitized voice. All of these services can be offered on a single line of copper wire. Channelized voice transports voice calls within the physical layer of the ADSL link, which eliminates the need for packetization of voice traffic into upper layer protocols such as ATM and IP. This new technology allows telephone companies to offer toll-quality, second-line voice service to residential telephone consumers without the need to install new wires or equipment. We have named our version of channelized voice "VeDSL<sup>TM</sup>" for Voice-enabled DSL. We began licensing a technology package for VeDSL in 2000.

Our Dr. DSL technology is designed to assist service providers with provisioning, monitoring, and maintenance of their DSL services by enabling them to collect important information about their copper loop plant. Dr. DSL also provides subscribers with tools they can use to assist with provisioning and maintenance. The primary goal of Dr. DSL is to reduce the number of calls subscribers make to customer service representatives, as well as the number of visits technicians must make to subscriber locations. Specific Dr. DSL features include loop length measurement, bridged tap measurement, crosstalk disturber detection and management, subscriber self-installation, and in-home diagnostics. We began licensing a technology package for Dr. DSL in 2000.

#### **Aware Business Model & Strategy**

We have adopted an intellectual property business model under which we license our broadband technology on a nonexclusive and worldwide basis to semiconductor companies that manufacture and sell products that incorporate our technology. Our licensees sell integrated circuits to equipment companies that incorporate those integrated circuits into their products.

Our business model and strategy are designed to:

- offer the semiconductor industry an independent source of broadband technology;
- provide multiple and flexible technology solutions for numerous silicon and equipment architectures;
- offer systems-level intellectual property for specific applications that are based on worldwide standards;
- leverage our customers' distribution capabilities;
- contribute to industry standards by offering our expertise, which allows us to anticipate technological changes; and
- generate revenue through a combination of license fees, engineering service fees, and royalties.

#### **Aware ADSL Hardware Products**

In addition to our intellectual property licensing business, we sell ADSL-related hardware products. Our hardware products are intended to support the development of chipsets and equipment that use our technology. We sell these products directly to semiconductor and ADSL equipment companies. These products consist primarily of development systems, test systems, and modules.

Development systems are designed to help our customers build ADSL chipsets by providing them with a means to conduct performance and interoperability testing during product development. Test systems are designed to help ADSL modern manufacturers test their products during production without requiring them to purchase expensive central office equipment. Modules are board-level products that contain all of the components of an ADSL system so that customers can facilitate the rapid integration of ADSL technology into their lab or field test equipment.

#### **Aware Compression Software Products**

We also develop and sell image and data compression products. Since 1988, we have developed intellectual property in the field of wavelet transform-based data compression. Our compression technology enables digital images and certain types of data to be compressed to between 1% and 10% of their original size. Our compression software products are sold to OEMs that integrate the software into their equipment-based solutions. Our principal compression software products are described below.

- WSQ by Aware compresses digital fingerprint data for use by law enforcement agencies such as the Federal Bureau of Investigation.
- Our electronic ID product suite includes *NistPack by Aware, Sequence Check by Aware, CJIS Web by Aware, Accuface by Aware, and Accuprint by Aware.* These products are used by law enforcement agencies to format, edit, validate, store, and print fingerprint and facial images.
- JPEG 2000 Codec by Aware provides a solution for the compression and decompression of still images using the high-quality, wavelet-based method defined by the JPEG 2000 standard.
- SeisPact® is used by companies in the oil and gas industry to store and transmit large amounts of seismic data gathered at sea back to shore-based processing centers.
- We also license radiology compression software, which compresses digital radiographs and other types of medical imagery.

#### **Research and Development**

Semiconductor intellectual property markets are characterized by rapid technological changes and advances. Accordingly, we make substantial investments in the design and development of new technologies, and for significant improvement of existing technologies. Our research and development activities are focused on the further development of our ADSL technology, including incorporating new industry standards that we expect will be adopted. We have also announced several extensions to our core ADSL technology package over the last several years, including VeDSL, Dr. DSL, and Fast ADSL. We have also announced that we are developing technology for G.SHDSL (ITU standard G991.2), wireless local area networking, and powerline communications.

As of December 31, 2001, we had an engineering staff of 129 employees, representing 78% of our total employee staff. During the years ended December 31, 2001, 2000, and 1999, research and development expenses charged to operations were \$10.1 million, \$5.9 million, and \$3.6 million, respectively. In addition, because our license agreements often call for us to provide engineering development services to our customers, a portion of our total engineering costs has been allocated to cost of contract revenue. We expect that we will continue to invest substantial funds in research and development activities.

#### Sales and Marketing

Our principal sales and marketing strategy is to license our ADSL intellectual property to semiconductor manufacturers. We believe that decisions involving the selection of our technology are frequently made at senior levels within a prospective customer's organization. Consequently, we rely significantly on presentations by our senior management to key employees at prospective customers. As of December 31, 2001, we had fourteen people in our broadband sales and marketing organization.

Customers who have licensed our ADSL technology include ADI, Agere Systems, Inc. ("Agere"), Infineon, Intel, Legerity, Inc. (formerly Advanced Micro Devices' Communication Products Division), NEC Corporation, ST Microelectronics ("ST"), Sigmatel, Inc., and 3COM/US Robotics.

In 2001, we derived approximately 52% and 14% of our total revenue from ADI and Intel, respectively. In 2000, we derived approximately 51% of our total revenue from ADI. In 1999, we derived approximately 22%, 12%, 11% and 10% of our total revenue from ADI, Agere, Intel, and Infineon, respectively. All revenue in 2001, 2000, and 1999 was derived from unaffiliated customers.

We sell our software-based compression products primarily through OEMs and systems integrators. As of December 31, 2001, there were three people in our compression software sales organization.

#### Competition

We intend to compete by offering comprehensive packages of standards-based, complex, system-level, broadband technology. Our success as an intellectual property supplier depends on the willingness and ability of semiconductor manufacturers to design, build and sell integrated circuits based on our intellectual property. The semiconductor industry is intensely competitive and has been characterized by:

- price erosion;
- rapid technological change;
- short product life cycles;
- cyclical market patterns; and
- increasing foreign and domestic competition.

As an intellectual property supplier to the semiconductor industry, we face intense competition from internal development teams within potential semiconductor customers. We must convince potential licensees to license from us rather than develop technology internally. Furthermore, semiconductor customers, who have licensed our intellectual property, may choose to abandon joint development projects with us and develop chipsets themselves without using our technology. In addition to competition from internal development teams, we compete against other independent suppliers of intellectual property. We anticipate intense competition from suppliers of intellectual property for DSL, wireless local area networking, and powerline applications.

The market for ADSL chipsets is also intensely competitive. Our success within the ADSL industry requires that ADSL equipment manufacturers buy chipsets from our semiconductor licensees, and that telephone companies buy ADSL equipment from those equipment manufacturers. Our customers' chipsets compete with products from other vendors of standards-based and ADSL chipsets, including Alcatel, Broadcom, Centillium, Conexant Systems, Inc ("Conexant"), GlobespanVirata, and TI.

ADSL services offered over copper telephone networks also compete with alternative broadband transmission technologies that use the telephone network as well as other network architectures. Alternative technologies for the telephone network include symmetric high speed DSL (also known as HDSL, SDSL and G.SHDSL), and very high speed DSL, also known as VDSL. These technologies are based on techniques other than those used by ADSL to transport high-speed data over telephone lines. Alternative technologies that use other network architectures to provide high-speed data service include cable modems using cable networks, and wireless solutions using wireless

networks. We cannot assure you that these alternative broadband technologies will not be more successful than ADSL.

Many of our current and prospective ADSL licensees, as well as chipset competitors that compete with our semiconductor licensees, including Alcatel, Broadcom, Conexant, GlobespanVirata and TI, have significantly greater financial, technological, manufacturing, marketing and personnel resources than we do. We cannot assure you that we will be able to compete successfully or that competitive pressures will not seriously harm our business.

The markets for our wavelet image compression technology are competitive, and are expected to become increasingly more competitive in the near future.

#### **Patents and Intellectual Property**

We rely on a combination of nondisclosure agreements and other contractual provisions, as well as patent, trademark, trade secret and copyright law to protect our proprietary rights. We have an active program to protect our proprietary technology through the filing of patents. As of December 31, 2001, we had 15 issued patents and 49 pending patent applications pertaining to telecommunications and signal processing technology. We also had 12 issued patents and 1 pending patent application pertaining to image compression, video compression, audio compression, seismic data compression and optical applications.

Although we have patented certain aspects of our technology, we rely primarily on trade secrets to protect our intellectual property. We attempt to protect our trade secrets and other proprietary information through agreements with our licensees, suppliers, employees and consultants, and through security measures. Each of our employees is required to sign a non-disclosure and non-competition agreement. Although we intend to protect our rights vigorously, we cannot assure you that these measures will be successful. In addition, effective intellectual property protection may be unavailable or limited in certain foreign countries.

Third parties may assert exclusive patent, copyright and other intellectual property rights to technologies that are important to us. Over the last several years, we have received letters from third parties suggesting that we may be obligated to license such intellectual property rights. While we believe our technology offerings do not infringe the intellectual property rights of others, we cannot assure you that they do not.

#### Manufacturing

Sales of hardware products constitute a relatively small portion of our total revenue. Since our primary strategic focus is IP licensing, we do not intend to produce hardware products in any material quantity for the foreseeable future. Consequently, we rely on third party contract manufacturers to assemble and test substantially all of our products. Our internal manufacturing capacity is limited to final test and assembly of certain products. Other than ADSL chipsets, which are available from our customers, we believe that other components for our equipment-based products are available from a number of suppliers.

#### **Employees**

At December 31, 2001, we employed 165 people, including 129 in engineering, 17 in sales and marketing, 3 in manufacturing and 16 in finance and administration. Of these employees, 161 were based in Massachusetts. None of our employees is represented by a labor union. We consider our employee relations to be good.

We believe that our future success will depend in large part on the service of our technical and senior management personnel and upon our ability to attract and retain highly qualified technical, sales and marketing and managerial personnel. Competition for highly qualified personnel is intense. We cannot assure you that we will be able to retain our key managerial and technical employees or that we will be able to attract and retain additional highly qualified personnel in the future.

#### **ITEM 2. PROPERTIES**

We believe that our existing facilities are adequate for our current needs and that additional space sufficient to meet our needs for the foreseeable future will be available on reasonable terms. We currently occupy:

- 1. 72,000 square feet of office space in Bedford, Massachusetts, which serves as our headquarters. This site is used for our research and development, sales and marketing, and administrative activities. We own this facility.
- 2. 1,265 square feet of research and development space in Lafayette, California. This facility is currently leased for a 3-year term, which expires on August 31, 2004.

#### ITEM 3. LEGAL PROCEEDINGS

From time to time we are involved in litigation incidental to the conduct of our business. We are not party to any lawsuit or proceeding that, in our opinion, is likely to seriously harm our business.

#### ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

There were no matters submitted to a vote of security holders during the fourth quarter ended December 31, 2001.

#### PART II

## ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Our common stock is the only class of stock we have outstanding, and it trades on the Nasdaq National Market under the symbol AWRE. The following table sets forth the high and the low sales prices of our common stock as reported on the Nasdaq National Market from January 1, 2000 to December 31, 2001.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2001				
High	\$21.00	\$10.50	\$9.05	\$8.63
Low	8.50	7.30	3.17	3.76
2000				
High	\$67.00	\$55.00	\$61.44	\$39.75
Low	30.44	24.63	35.00	16.50

As of March 12, 2002, we had approximately 157 shareholders of record. This number does not include shareholders from whom shares were held in a "nominee" or "street" name. We have never paid cash dividends on our common stock and we anticipate that we will continue to reinvest any earnings to finance future operations.

We did not sell any equity securities that were not registered under the Securities Act of 1933 during the three months ended December 31, 2001.

#### ITEM 6. SELECTED FINANCIAL DATA

In the table below, we provide you with our selected consolidated financial data. We have prepared this information using our audited financial statements for the years ended December 31, 2001, 2000, 1999, 1998, and 1997. When you read this selected financial data, it is important that you read it along with Management's Discussion and Analysis of Financial Condition and Results of Operations, our historical consolidated financial statements, and the related notes to the financial statements, which can be found in Item 8.

Year ended December 31,	2001	2000	1999	1998	1997
		(in thousand	ls, except per s	hare data)	
Statements of Operations Data					
Revenue	\$18,547	\$30,667	\$20,527	\$11,796	\$6,198
Income (loss) from operations	(4,823)	9,490	3,321	(3,951)	(6,157)
Cumulative effect of change in					
accounting principle (1)	-	(1,618)	-	-	-
Net income (loss)	(2,520)	13,414	4,898	(2,249)	(4,448)
Net income (loss) per share – basic	(\$0.11)	\$0.60	\$0.23	(\$0.11)	(\$0.23)
Net income (loss) per share – diluted	(\$0.11)	\$0.56	\$0.21	(\$0.11)	(\$0.23)
Balance Sheet Data					
Cash and short-term investments	\$57,284	\$57,503	\$36,265	\$26,567	\$26,104
Working capital	59,608	67,146	41,348	28,813	26,774
Total assets	78,103	81,450	54,482	40,162	39,281
Total liabilities	1,947	3,117	1,514	1,028	1,661
Total stockholders' equity	76,156	78,333	52,968	39,133	37,618

(1) Effective January 1, 2000, we adopted Securities and Exchange Commission Staff Accounting Bulletin No. 101, Revenue Recognition in Financial Statements ("SAB 101") and recorded the impact in 2000. In 1999, the pro forma effect of retroactive application of SAB 101 would have resulted in net income of \$3.280 million and net income per share, basic and diluted, of \$0.15 and \$0.14, respectively. There was no pro forma effect on 1998 and 1997.

## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

#### RESULTS OF OPERATIONS

The following table sets forth, for the years indicated, certain line items from our consolidated statements of operations stated as a percentage of total revenue:

	Year ended December 31,		
	2001	2000	1999
Revenue:			
Product sales	21 %	15 %	27 %
Contract revenue	44	40	52
Royalties	35	45	21
Total revenue	100	100	100
Costs and expenses:			
Cost of product sales	3	3	7
Cost of contract revenue	37	29	34
Research and development	54	19	18
Selling and marketing	16	8	12
General and administrative	16	10	13
Total costs and expenses	126	69	84
Income (loss) from operations	(26)	31	16
Interest income	12	9	8
Income (loss) before benefit from income taxes and			
cumulative effect of change in accounting principle	(14)	40	24
Benefit from income taxes	-	9	-
Income (loss) before cumulative effect of change in accounting principle	(14)	49	24
Cumulative effect of change in accounting principle	-	(5)	-
Net income (loss)	(14) %	44 %	24 %

#### **Product Sales**

Product sales consist primarily of revenue from the sale of ADSL equipment and compression software products. The products that comprise ADSL equipment sales are primarily test and development systems, modules, and modems.

Product sales decreased 18% from \$4.7 million in 2000 to \$3.8 million in 2001. As a percentage of total revenue, product sales increased from 15% in 2000 to 21% in 2001. The dollar decrease was primarily due to a decrease in revenue from the sale of test and development systems, which was partially offset by an increase in revenue from the sale of compression software. Test and development system revenue decreased primarily because our semiconductor and equipment customers curtailed chipset development and manufacturing activities during 2001.

Their curtailment of ADSL activities was a function of difficult economic conditions in the semiconductor and telecommunications industries. Compression software revenue was higher due to a large sale of our electronic identification products in the first quarter of 2001.

Product sales decreased 16% from \$5.5 million in 1999 to \$4.7 million in 2000. As a percentage of total revenue, product sales decreased from 27% in 1999 to 15% in 2000. The dollar decrease was primarily due to lower revenue from the sale of modems. Modem revenue was lower because we phased out the development and sale of our x200 Access Router during 2000.

#### Contract Revenue

Contract revenue consists primarily of license and engineering service fees that we receive under agreements with our customers to develop ADSL chipsets.

Contract revenue decreased 32% from \$12.2 million in 2000 to \$8.3 million in 2001. As a percentage of total revenue, contract revenue increased from 40% in 2000 to 44% in 2001. The dollar decrease was primarily due to a difficult semiconductor industry environment. Both existing and prospective ADSL chipset licensees were reluctant to begin new development projects given the uncertainty in the semiconductor and telecommunications industries. During 2001, customers and potential customers cautiously evaluated new chipset projects or postponed projects as they waited for conditions to improve. We are uncertain when the market conditions we faced in 2001 will improve.

Contract revenue increased 15% from \$10.6 million in 1999 to \$12.2 million in 2000. As a percentage of total revenue, contract revenue decreased from 52% in 1999 to 40% in 2000. The dollar increase was primarily due to new chipset development projects with existing and new semiconductor customers. Our technology package was in higher demand in 2000, because existing and new customers were encouraged by rapid growth of the ADSL market and the potential opportunity it afforded them.

#### Royalties

Royalties consist of royalty payments that we receive under licensing agreements. We receive royalties from customers for the right to use our technology in their chipsets or solutions.

Royalties decreased 53% from \$13.9 million in 2000 to \$6.5 million in 2001. As a percentage of total revenue, royalties decreased from 45% in 2000 to 35% in 2001. The decrease in royalties was primarily due to a decrease in ADSL chipset sales by ADI, our largest customer. We believe there are two principal factors behind the decline in ADI's chipset sales. First, while end user demand for ADSL service remains strong, particularly outside of the United States, more ADSL chipsets were sold in 2000 than were required by new subscribers. Resulting equipment overcapacity at telephone companies' central offices, and excess chipset inventory at ADSL equipment manufacturers slowed industry-wide chipset sales. Second, the glut of ADSL chipsets and central office equipment capacity caused chipset selling prices to drop sharply. We are uncertain when the market conditions we faced in 2001 will improve.

Royalties increased 215% from \$4.4 million in 1999 to \$13.9 million in 2000. As a percentage of total revenue, royalties increased from 21% in 1999 to 45% in 2000. The increase in royalties was primarily due to a sharp increase in ADSL chipset sales in 2000 in general and the success of ADI, our largest customer, in particular. We believe that this increase was driven by growing deployments of ADSL service primarily in the U.S. and Korea.

#### Cost of Product Sales

Since the cost of compression software license sales is minimal, cost of product sales consists primarily of ADSL equipment sales. Cost of product sales decreased 24% from \$0.8 million in 2000 to \$0.6 million in 2001. As a percentage of product sales, cost of product sales decreased from 18% in 2000 to 16% in 2001. In terms of dollars, the decrease in cost of product sales was primarily due to lower sales of ADSL test and development systems. The improvement in product margins was primarily due to a greater proportion of compression software sales in the product sales revenue mix.

Cost of product sales decreased 39% from \$1.4 million in 1999 to \$0.8 million in 2000. As a percentage of product sales, cost of product sales decreased from 25% in 1999 to 18% in 2000. The decrease in cost of product sales dollars and the improvement in product margins were primarily due to a lower percentage of lower margin x200 modem sales in 2000.

#### Cost of Contract Revenue

Cost of contract revenue consists primarily of salaries for engineers and expenses for consultants, recruiting, supplies, equipment, depreciation and facilities associated with customer development projects. Our total engineering costs are allocated between cost of contract revenue and research and development expense. In a given period, the allocation of engineering costs between cost of contract revenue and research and development is a function of the level of effort expended on each. As a particular technology matures from the development stage to integration into customer chips, engineering costs shift from research and development to cost of contract revenue.

Cost of contract revenue decreased 22% from \$8.8 million in 2000 to \$6.8 million in 2001. As a percentage of contract revenue, cost of contract revenue increased from 72% in 2000 to 83% in 2001. In terms of dollars, the decrease in cost of contract revenue was primarily due to fewer customer projects in 2001 as compared with 2000. The increase in cost of contract revenue as a percentage of contract revenue was primarily due to a lack of new customers in 2001, which was caused by economic and industry conditions. The percentage increase is also due to the mix of license fees and engineering service fees in contract revenue in 2001 as compared with 2000.

Cost of contract revenue increased 25% from \$7.1 million in 1999 to \$8.8 million in 2000. As a percentage of contract revenue, cost of contract revenue increased from 67% in 1999 to 72% in 2000. The dollar increase was primarily due to new chipset development projects with existing and new semiconductor customers, and the nature of the customer projects we performed in 2000. We engaged in projects in 2000 that involved ASIC (application specific integrated circuit) core developments, specific DSP-based code developments, and developments involving the combination of ASIC cores and DSP code. These projects had greater development costs associated with them, because they involved a greater degree of engineering services.

#### Research and Development Expense

Research and development expense consists primarily of salaries for engineers and expenses for consultants, recruiting, supplies, equipment, depreciation and facilities related to engineering projects to enhance and extend our broadband intellectual property offerings, and our compression software technology. Research and development expense increased 71% from \$5.9 million in 2000 to \$10.1 million in 2001. As a percentage of total revenue, research and development expense increased from 19% in 2000 to 54% in 2001. The dollar increase was primarily due to increased spending on internal research and development projects, including improvements to our core ADSL technology offering, projects such as VeDSL, Dr. DSL, G.SHDSL, wireless local area network communications, powerline communications, as well as other development projects.

Research and development expense increased 63% from \$3.6 million in 1999 to \$5.9 million in 2000. As a percentage of total revenue, research and development expense increased from 18% in 1999 to 19% in 2000. The dollar increase in spending was primarily due to increased spending on internal research and development projects, including new ADSL technology developments, VeDSL, Dr. DSL and other projects. Higher spending on these projects was partially offset by lower spending on our x200 modem product.

#### Selling and Marketing Expense

Selling and marketing expense consists primarily of salaries for sales and marketing personnel, travel, advertising and promotion, recruiting, and facilities expense. Sales and marketing expense increased 15% from \$2.5 million in 2000 to \$2.9 million in 2001. As a percentage of total revenue, sales and marketing expense increased from 8% in 2000 to 16% in 2001. The dollar increase was primarily due to the addition of sales and marketing staff during 2001

Sales and marketing expense decreased 2% from \$2.6 million in 1999 to \$2.5 million in 2000. As a percentage of total revenue, sales and marketing expense decreased from 12% in 1999 to 8% in 2000. The dollar decrease was primarily due to lower spending on public relations.

#### General and Administrative Expense

General and administrative expense consists primarily of salaries for administrative personnel, facilities costs, and public company, bad debt, legal, and audit expenses. General and administrative expense decreased 6% from \$3.1 million in 2000 to \$2.9 million in 2001. As a percentage of total revenue, general and administrative expense increased from 10% in 2000 to 16% in 2001. The dollar decrease was primarily due to lower provisions for bad debts, which was partially offset by increased spending on salaries.

General and administrative expense increased 20% from \$2.6 million in 1999 to \$3.1 million in 2000. As a percentage of total revenue, general and administrative expense decreased from 13% in 1999 to 10% in 2000. The dollar increase was primarily due to higher administration, investor relations and bad debt expenses.

#### Interest Income

Interest income decreased 19% from \$2.8 million in 2000 to \$2.3 million in 2001. The dollar decrease was primarily due to lower interest rates earned on our cash balances.

Interest income increased 81% from \$1.6 million in 1999 to \$2.8 million in 2000. The dollar increase is primarily due to higher cash balances. Higher cash balances were due to positive cash flows from operations and stock option exercises during 2000.

#### Income Taxes

We made no provision for income taxes in 2001 because we had a net loss. As of December 31, 2001, we had net deferred tax assets of \$7.1 million, which we believed was more likely than not that we would realize based on our projected taxable income in the next two years. The remaining deferred tax assets were fully reserved due to the uncertainty of realization. We will continue to evaluate, on a quarterly basis, the positive and negative evidence affecting the realizability of our deferred tax assets.

In the fourth quarter of 2000, we determined that based on our expected future taxable income, it was more likely than not that we would realize a portion of our tax assets. Accordingly, we recorded a deferred tax asset of \$7.1 million at December 31, 2000, which consisted of an income statement tax benefit of \$2.7 million for tax loss carryforwards and research and development credits, and an adjustment to additional paid-in capital of \$4.4 million for stock option related deductions.

We made no provision for income taxes in 1999 as our historical net losses resulted in tax loss carryforwards that we used to offset any tax expense.

At December 31, 2001, we had federal net operating loss carryforwards of approximately \$56.1 million, which begin to expire in 2003, and federal research and development credit carryforwards of approximately \$6.7 million, which begin to expire in 2003. At December 31, 2001, we also had available state net operating loss carryforwards of approximately \$53.7 million, which begin to expire in 2002, and state research and development and investment tax credit carryforwards of approximately \$3.9 million, which begin to expire in 2003.

Of the total net operating loss and research and development tax credit carryforwards for which a valuation allowance was recorded approximately \$3.0 million will be credited to the statement of operations as a tax benefit, if realized in the future. The remainder of the net operating loss and research and development tax credit carryforwards for which a valuation allowance was recorded are attributable to the exercise of stock options and the tax benefit will be credited to additional paid-in capital, if realized in the future.

#### Cumulative Effect of Change in Accounting Principle

Effective January 1, 2000 we changed our method of revenue recognition in accordance with Securities and Exchange Commission Staff Accounting Bulletin No. 101, Revenue Recognition in Financial Statements. Previously, we recognized contract revenue under multiple element agreements upon completion of contract milestones or upon transfer of intellectual property. Under the accounting method we adopted retroactive to January 1, 2000, we now recognize contract revenue under multiple element agreements by recording total license

and engineering fees for the entire contract on a straight-line basis over the estimated contract performance period, subject to the limitation that cumulative revenue through the end of any period may not exceed cumulative contract payments through that same period. The cumulative effect of the change on prior years resulted in a charge to income of \$1.6 million for the year ended December 31, 2000. For the years ended December 31, 2001 and 2000, we recognized \$0.9 million and \$0.7 million in revenue, respectively, that was included in the cumulative effect adjustment as of January 1, 2000.

#### LIQUIDITY AND CAPITAL RESOURCES

Since our inception in March 1986, we have financed our activities primarily through the sale of stock. In the years ended December 31, 2001, 2000 and 1999, we received net proceeds from the issuance of stock under employee stock plans of \$0.3 million, \$7.6 million and \$8.9 million, respectively. Our operating activities provided net cash of \$1.2 million, \$14.5 million and \$4.3 million in the years ended December 31, 2001, 2000 and 1999, respectively. Cash provided by operations during 2001 was primarily due to the collection of accounts receivables, which was partially offset by a decrease in deferred revenue. Cash provided by operations during 2000 and 1999 was primarily due to our profitability.

In the years ended December 31, 2001, 2000, and 1999, we made capital expenditures of \$1.4 million, \$1.3 million, and \$3.1 million, respectively. Capital expenditures in all three years consisted of spending on computer hardware and software, laboratory equipment, and furniture used principally in engineering activities. Capital spending in 1999 also included the renovation of the third floor of our headquarters building for \$1.5 million. We have no material commitments for capital expenditures.

At December 31, 2001, we had cash, cash equivalents and short-term investments of \$57.3 million. We believe that our cash, cash equivalents and short-term investments will be sufficient to fund our operations for at least the next twelve months.

#### CRITICAL ACCOUNTING POLICIES

We consider certain accounting policies related to revenue recognition and the valuation of deferred tax assets to be critical accounting policies.

**Revenue recognition**. We derive our revenue from three sources (i) product revenue, which includes revenue from the sale of ADSL equipment and compression software products, (ii) contract revenue, which includes license and engineering service fees that we receive under customer agreements, and (iii) royalties that we receive under customer contracts.

As prescribed by Securities and Exchange Commission Staff Accounting Bulletin No. 101, Revenue Recognition in Financial Statements, we recognize revenue when there is persuasive evidence of an arrangement, the sales price is fixed or determinable, collection of the related receivable is reasonably assured, and delivery has occurred or services have been rendered. As described below, we make significant judgments and estimates during the process of determining revenue for any particular accounting period.

In determining revenue recognition, we assess whether fees associated with revenue transactions are fixed or determinable and whether or not collection is reasonably assured. We make a judgment whether fees are fixed or determinable based on the payment terms associated with that transaction. We assess collection based on a number of factors, including past transaction history with the customer and the credit-worthiness of the customer. If we determine that collection of a fee is not reasonably assured, we defer the fee and recognize revenue at the time collection becomes reasonably assured, which is generally upon receipt of cash.

In addition to these general revenue recognition judgments, we make specific judgments and estimates with respect to the recognition of contract revenue. We categorize customer contracts as either single element licensing agreements or multiple element licensing agreements.

Contract revenue under single element licensing agreements is recognized when technology transfers have been delivered or when engineering services have been completed in accordance with defined milestones. Revenue recognized under single element agreements requires us to make judgments regarding the completeness of complex technology or service deliverables. While our customer agreements generally do not contain customer acceptance provisions, we must make judgments that our deliverables have been made in accordance with the terms of underlying agreements.

Contract revenue under multiple element licensing agreements is recognized by recording total license and engineering fees for the entire contract on a straight-line basis over the estimated contract performance period, subject to the limitation that cumulative revenue through the end of any period may not exceed cumulative contract payments through that same period. Revenue recognized under multiple element agreements requires us to make estimates of contract performance periods. The estimate of this period is subject to revision as the product is being developed under a contract, and a revision may result in an increase or decrease to the quarterly revenue for that contract. Revenue recognized under multiple element agreements also involves judgments regarding the completeness of contract milestones as described in the previous paragraph.

Accounting for income taxes. As part of the process of preparing our consolidated financial statements we are required to estimate our current tax expense. We must also estimate temporary and permanent differences that result from differing treatment of certain items for tax and accounting purposes. These differences result in deferred tax assets, which are included in our consolidated balance sheet. We must then assess the likelihood that our deferred tax assets will be recovered from future taxable income and to the extent that we believe that recovery is not likely, we must establish a valuation allowance. To the extent we establish a valuation allowance or increase this allowance in a period, we must include an expense with the tax provision in the statement of operations.

Significant management judgment is required in determining our provision for income taxes, our deferred tax assets, and any valuation allowance recorded against our net deferred tax assets. Our deferred tax assets relate to net operating losses and research and development tax credits that we are carrying forward into future tax periods. As of December 31, 2001, we had a total of \$33.8 million of deferred tax assets for which we had recorded a valuation allowance of \$26.7 million resulting in \$7.1 million of net deferred tax assets. Our net deferred tax assets represent that portion of our total deferred tax assets that we estimated were more likely than not to be realized based on our estimate of projected taxable income in the next two years. In the event that our actual results differ from this estimate or we are able to project taxable income beyond two years, we may need to change our valuation allowance, which could materially affect our financial position and results of operations.

Of the total valuation allowance, approximately \$3.0 million relates to net operating loss and research and development tax credit carryforwards that are attributable to operations and will be credited to the statement of operations as a tax benefit, if realized in the future. The remainder of the valuation allowance relates to net operating loss and research and development tax credit carryforwards that are attributable to the exercise of stock options and the tax benefit will be credited to additional paid-in capital, if realized in the future.

#### RECENT ACCOUNTING PRONOUNCEMENTS

In August 2001, the FASB issued Statement of Financial Accounting Standards No. 144 ("SFAS 144"), "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS 144 supercedes FASB Statement No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long Lived Assets to Be Disposed Of." SFAS 144 applies to all long-lived assets (including discontinued operations) and consequently amends Accounting Principles Board Opinion No. 30, "Reporting Results of Operations - Reporting the Effects of Disposal of a Segment of a Business." SFAS 144 is effective for financial statements issued for fiscal years beginning after December 15, 2001. We will adopt SFAS 144 in the first quarter of 2002. We are currently determining the impact, if any, SFAS 144 will have on our financial position and results of operations.

#### FACTORS THAT MAY AFFECT FUTURE RESULTS

Some of the information in this Form 10-K contains forward-looking statements that involve substantial risks and uncertainties. You can identify these statements by forward-looking words such as "may," "will," "expect," "anticipate," "believe," "estimate," "continue" and similar words. You should read statements that contain these words carefully because they: (1) discuss our future expectations; (2) contain projections of our future operating results or financial condition; or (3) state other "forward-looking" information. However, we may not be able to predict future events accurately. The risk factors listed in this section, as well as any cautionary language in this Form 10-K, provide examples of risks, uncertainties and events that may cause our actual results to differ materially from the expectations we describe in our forward-looking statements. You should be aware that the occurrence of any of the events described in these risk factors and elsewhere in this Form 10-K could materially and adversely affect our business. We assume no obligation to update any forward-looking statements.

Our Quarterly Results Are Unpredictable and May Fluctuate Significantly. Our quarterly revenue and operating results are difficult to predict and may fluctuate significantly from quarter to quarter. Because our revenue components fluctuate and are difficult to predict, and our expenses are largely independent of revenues in any particular period, it is difficult for us to accurately forecast revenues and profitability. We generally recognize contract revenues ratably over the period during which we expect to provide engineering services. While this means that contract revenues from current licenses are generally predictable, changes can be introduced by a reevaluation of the length of the development period. The initial estimate of this period is subject to revision as the product being developed under a contract nears completion, and a revision may result in an increase or decrease to the quarterly revenue for that contract. In addition, accurate prediction of revenues from new licensees is difficult because the development of a business relationship with a potential licensee is a lengthy process, frequently spanning a year or more, and the fiscal period in which a new license agreement will be entered into, if at all, and the financial terms of such an agreement are difficult to predict. Contract revenues also include fees for engineering services, which are dependent upon the varying level of assistance desired by licensees and, therefore, the revenue from these services is also difficult to predict.

It is also difficult for us to make accurate forecasts of royalty revenues. Royalties are recognized in the quarter in which we receive a report from a licensee regarding the shipment of licensed integrated circuits in the prior quarter, and are dependent upon fluctuating sales volumes and/or prices of chips containing our technology, all of which are beyond our ability to control or assess in advance.

Our business is subject to a variety of additional risks, which could materially adversely affect quarterly and annual operating results, including:

- market acceptance of our broadband technologies by semiconductor companies;
- the extent and timing of new license transactions with semiconductor companies;
- changes in our and our licensees' development schedules and levels of expenditure on research and development;
- the loss of a strategic relationship with a licensee;
- equipment companies' acceptance of integrated circuits produced by our licensees;
- the loss by a licensee of a strategic relationship with an equipment company customer;
- announcements or introductions of new technologies or products by us or our competitors;
- delays or problems in the introduction or performance of enhancements or of future generations of our technology;
- delays in the adoption of new industry standards or changes in market perception of the value of new or existing standards;
- competitive pressures resulting in lower contract revenues or royalty rates;
- personnel changes, particularly those involving engineering and technical personnel;

- costs associated with protecting our intellectual property;
- the potential that licensees could fail to make payments under their current contracts;
- ADSL market-related issues, including:
  - o lower ADSL chipset unit demand brought on by excess channel inventory; and
  - o lower average selling prices for ADSL chipsets as a result of market surpluses.
- regulatory developments; and
- general economic trends and other factors.

As a result of these factors, we believe that period-to-period comparisons of our revenue levels and operating results are not necessarily meaningful. You should not rely on our quarterly revenue and operating results to predict our future performance.

We Have Begun to Experience Net Losses. We had a net loss during 2001 after two consecutive years of net income. We expect that we will have a net loss during the first quarter of 2002. We may continue to experience losses beyond the first quarter of 2002 if the semiconductor and telecommunications markets do not recover from the downturn that began in 2001.

We Have a Unique Business Model. The success of our business model depends upon our ability to license our technology to semiconductor and equipment companies, and our customers' willingness and ability to sell products that incorporate our technology so that we may receive significant royalties that are consistent with our plans and expectations.

We face numerous risks in successfully obtaining suitable licensees on terms consistent with our business model, including, among others:

- we must typically undergo a lengthy and expensive process of building a relationship with a
  potential licensee before there is any assurance of a license agreement with such party;
- we must persuade semiconductor and equipment manufacturers with significant resources to rely on us for critical technology on an ongoing basis rather than trying to develop similar technology internally;
- we must persuade potential licensees to bear development costs associated with our technology applications and to make the necessary investment to successfully produce chipsets and products using our technology; and
- we must successfully transfer technical know-how to licensees.

Moreover, the success of our business model also depends on the receipt of royalties from licensees. Royalties from our licensees are often based on the selling prices of our licensees' chipsets and products, over which we have little or no control. We also have little or no control over our licensees' promotional and marketing efforts. Our licensees are not required to pay us royalties unless they use our technology. They are not prohibited from competing against us.

Our business could be seriously harmed if:

- we cannot obtain suitable licensees:
- our licensees fail to achieve significant sales of chipsets or products incorporating our technology; or
- we otherwise fail to implement our business strategy successfully.

We Depend Substantially Upon a Limited Number of Licensees. There are a relatively limited number of semiconductor and equipment companies to which we can license our broadband technology in a manner consistent with our business model. If we fail to maintain relationships with our current licensees or fail to establish a

sufficient number of new licensee relationships, our business could be seriously harmed. We cannot assure you that our prospective customers will not use their superior size and bargaining power to demand license terms that are unfavorable to us.

We Derive a Significant Amount of Revenue from One Customer. In 2000 and 2001, we derived 51% and 52%, respectively of our total revenue from ADI. ADI was the first customer to license ADSL technology from us in 1993 and their chipsets are the most mature implementations of our technology in the market. Our royalty revenues to date have been primarily due to sales of ADI chipsets that use our ADSL technology. While we expect to see an increase in the number of our customers with ADSL chipsets on the market, our revenue in the near term is highly dependent upon ADI's ability to maintain its market share and pricing. The ADSL market has experienced significant price erosion, which has adversely affected ADI's ADSL revenue, which in turn has adversely affected our royalty revenue. To the extent that ADI has lost market share, or loses market share in the future, or experiences further price erosion in its ADSL chipsets, our royalty revenue could continue to decline.

Our Success Requires Acceptance of Our Technology By Equipment Companies. Due to our business strategy, our success is dependent on our ability to generate significant royalties from our licensing arrangements with semiconductor manufacturers. Our ability to generate significant royalties is materially affected by the willingness of equipment companies to purchase integrated circuits that incorporate our technology from our licensees. There are other competitive solutions available for equipment companies seeking to offer broadband communications products. We face the risk that equipment manufacturers will choose those alternative solutions. Generally, our ability to influence equipment companies' decision whether to purchase integrated circuits that incorporates our technology is limited.

We also face the risk that equipment companies that elect to use integrated circuits that incorporate our technology into their products will not compete successfully against other equipment companies. Many factors beyond our control could influence the success or failure of a particular equipment company that uses integrated circuits based on our technology, including:

- competition from other businesses in the same industry;
- market acceptance of its products;
- its engineering, sales and marketing, and management capabilities;
- technical challenges of developing its products unrelated to our technology; and
- its financial and other resources.

Even if equipment companies incorporate our chipsets based on our intellectual property into their products, we cannot be sure that their products will achieve commercial acceptance or result in significant royalties to us.

Our Success Requires Telephone Companies to Install ADSL Service in Volume. The success of our ADSL licensing business depends upon telephone companies installing ADSL service in significant volumes. Factors that affect the volume deployment of ADSL service include:

- the desire of telephone companies to install ADSL service, which is dependent on the development of a viable business model for ADSL service, including the capability to market, sell, install and maintain the service;
- the pricing of ADSL services by telephone companies;
- the quality of telephone companies' networks;
- government regulations; and
- the willingness of residential telephone customers to demand ADSL service in the face of competitive service offerings, such as cable modems.

If telephone companies do not install ADSL service in significant volumes, or if telephone companies install ADSL service in significant volumes, but their service offerings are not based on our technology, our business will be seriously harmed.

We Rely on The ADSL Market; Unit Volumes and Chipset Pricing. The royalties we receive are influenced by many of the risks faced by the ADSL market in general; including reduced average selling prices ("ASPs") during periods of surplus. In 2001, the ADSL industry experienced an oversupply of ADSL chipsets and central office equipment. Excessive inventory levels led to soft chipset demand, which in turn lead to declining ASPs. Such price decreases, and the corresponding decreases in per unit royalties received by us, can be sudden and dramatic. Lower unit demand and pricing pressures may continue during the first half of 2002 and beyond. There can be no assurance that decreases in ADSL chipset prices or in per unit royalties received by us will not seriously harm our business.

Our Intellectual Property is Subject to Limited Protection. Because we are a technology provider, our ability to protect our intellectual property and to operate without infringing the intellectual property rights of others is critical to our success. We regard our technology as proprietary, and we have a number of patents and pending patent applications. We also rely on a combination of trade secrets, copyright and trademark law and non-disclosure agreements to protect our unpatented intellectual property. Despite these precautions, it may be possible for a third party to copy or otherwise obtain and use our technology without authorization.

As part of our licensing arrangements, we typically work closely with our semiconductor and equipment manufacturer licensees, many of whom are also our potential competitors, and provide them with proprietary know-how necessary for their development of customized chipsets based on our ADSL technology. Although our license agreements contain non-disclosure provisions and other terms protecting our proprietary know-how and technology rights, it is possible that, despite these precautions, some of our licensees might obtain from us proprietary information that they could use to compete with us in the marketplace. Although we intend to defend our intellectual property as necessary, we cannot be sure that the steps we have taken will be adequate to prevent misappropriation.

In the future, we may choose to bring legal action to enforce our intellectual property rights. Any such litigation could be costly and time-consuming for us, even if we were to prevail. Moreover, even if we are successful in protecting our proprietary information, we cannot be sure that our competitors will not independently develop technologies substantially equivalent or superior to our technology. The misappropriation of our technology or the development of competitive technology could seriously harm our business.

Our technology may infringe the intellectual property rights of others. A large and increasing number of participants in the telecommunications industry have applied for or obtained patents. Some of these patent holders have demonstrated a readiness to commence litigation based on allegations of patent and other intellectual property infringement. Third parties may assert exclusive patent, copyright and other intellectual property rights to technologies that are important to our business. From time to time, we have received claims from other companies that our technology infringes their patent rights. While we believe our technology offerings do not infringe the intellectual property of others, we cannot be sure. Intellectual property rights can be uncertain and can involve complex legal and factual questions. We may be unknowingly infringing the proprietary rights of others, which could result in significant liability for us. If we were found to have infringed any third party's patents, then we could be subject to substantial damages and an injunction preventing us from conducting our business.

Our Business is Subject to Rapid Technological Change. The semiconductor and telecommunications industries, as well as the market for high-speed network access technologies, are characterized by rapid technological change, with new generations of products being introduced regularly and with ongoing evolutionary improvements. We expect to depend on our ADSL technology for a substantial portion of our revenue for the foreseeable future. Therefore, we face risks that others could introduce competing technology that renders our ADSL technology less desirable or obsolete. Also, the announcement of new technologies could cause our licensees or their customers to delay or defer entering into arrangements for the use of our existing technology. Either of these events could seriously harm our business.

We expect that our business will depend to a significant extent on our ability to introduce enhancements and new generations of our ADSL technology as well as new technologies that keep pace with changes in the telecommunications and broadband industries and that achieve rapid market acceptance. We must continually devote significant engineering resources to achieving technical innovations. These innovations are complex and require long development cycles. Moreover, we may have to make substantial investments in technological innovations before we can determine their commercial viability. We may lack sufficient financial resources to fund future development. Also, our licensees may decide not to share certain research and development costs with us. Revenue from technological innovations, even if successfully developed, may not be sufficient to recoup the costs of development.

One element of our business strategy is to assume the risks of technology development failure while reducing such risks for our licensees. In the past, we have spent significant amounts on development projects that did not produce any marketable technologies or products, and we cannot assure you that it will not occur again.

We Face Intense Competition From a Wide Range of Competitors. Our success as an intellectual property supplier depends on the willingness and ability of semiconductor manufacturers to design, build and sell integrated circuits based on our intellectual property. The semiconductor industry is intensely competitive and has been characterized by price erosion, rapid technological change, short product life cycles, cyclical market patterns and increasing foreign and domestic competition.

As an intellectual property supplier to the semiconductor industry, we face intense competition from internal development teams within potential semiconductor customers. We must convince potential licensees to license from us rather than develop technology internally. Furthermore, semiconductor customers, who have licensed our intellectual property, may choose to abandon joint development projects with us and develop chipsets themselves without using our technology. In addition to competition from internal development teams, we compete against other independent suppliers of intellectual property. We anticipate intense competition from suppliers of intellectual property for DSL, wireless local area networking, and powerline applications.

The market for ADSL chipsets is also intensely competitive. Our success within the ADSL industry requires that ADSL equipment manufacturers buy chipsets from our semiconductor licensees, and that telephone companies buy ADSL equipment from those equipment manufacturers. Our customers' chipsets compete with products from other vendors of standards-based and ADSL chipsets, including Alcatel, Broadcom, Centillium, Conexant, GlobespanVirata, and TI.

ADSL services offered over copper telephone networks also compete with alternative broadband transmission technologies that use the telephone network as well as other network architectures. Alternative technologies for the telephone network include symmetric high speed DSL (also known as HDSL, SDSL and G.SHDSL), and very high speed DSL, also known as VDSL. These DSL technologies are based on techniques other than those used by ADSL to transport high-speed data over telephone lines. Alternative technologies that use other network architectures to provide high-speed data service include cable modems using cable networks, and wireless solutions using wireless networks. We cannot assure you that these alternative broadband technologies will not be more successful than ADSL.

Many of our current and prospective ADSL licensees, as well as chipset competitors that compete with our semiconductor licensees, including Alcatel, Broadcom, Conexant, GlobespanVirata and TI, have significantly greater financial, technological, manufacturing, marketing and personnel resources than we do. We cannot assure you that we will be able to compete successfully or that competitive pressures will not seriously harm our business.

We Require Additional Highly Qualified Engineering Personnel. Our future success will depend significantly on our ability to attract, motivate and retain additional highly qualified engineering personnel. Competition for qualified engineers is intense and there are a limited number of available persons with the necessary knowledge and experience in DSL, chip design and related technologies. Finding, training and integrating additional qualified personnel is likely to be difficult and expensive, and we may be unable to do so successfully. In the past, we were

not able to hire all of the engineers that we wanted to hire. If we are unable to hire and retain a sufficient number of engineers, our business could be seriously harmed.

Our Stock Price May Be Extremely Volatile. Volatility in our stock price may negatively affect the price you may receive for your shares of common stock and increases the risk that we could be the subject of costly securities litigation. The market price of our common stock has fluctuated substantially and could continue to fluctuate based on a variety of factors, including:

- quarterly fluctuations in our operating results;
- changes in future financial guidance that we may provide to investors and public market analysts;
- changes in our relationships with our licensees;
- announcements of technological innovations or new products by us, our licensees or our competitors;
- changes in ADSL market growth rates as well as investor perceptions regarding the investment opportunity that companies participating in the ADSL industry afford them;
- changes in earnings estimates by public market analysts;
- key personnel losses;
- sales of common stock; and
- developments or announcements with respect to industry standards, patents or proprietary rights.

In addition, the equity markets have experienced volatility that has particularly affected the market prices of equity securities of many high technology companies and that often has been unrelated or disproportionate to the operating performance of such companies. These broad market fluctuations may adversely affect the market price of our common stock.

Our Business May Be Affected by Government Regulations. The extensive regulation of the telecommunications industry by federal, state and foreign regulatory agencies, including the Federal Communications Commission, and various state public utility and service commissions, could affect us through the effects of such regulation on our licensees and their customers. In addition, our business may also be affected by the imposition of certain tariffs, duties and other import restrictions on components that our customers obtain from non-domestic suppliers or by the imposition of export restrictions on products sold internationally and incorporating our technology. Changes in current or future laws or regulations, in the United States or elsewhere, could seriously harm affect our business.

#### ITEM 7 (A). QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our exposure to market risk relates primarily to our investment portfolio, and the effect that changes in interest rates would have on that portfolio. Our investment portfolio includes:

- Cash and cash equivalents, which consist of financial instruments with original maturities of three months
  or less; and
- Investments, which consist of financial instruments that meet the high quality standards specified in our investment policy. This policy dictates that all instruments mature in 3 years or less, and limits the amount of credit exposure to any one issue, issuer, and type of instrument.

We do not use derivative financial instruments for speculative or trading purposes. As of December 31, 2001 and 2000, all of our investments matured in twelve months or less. Due to the short duration of the financial instruments we invest in, we do not expect that an increase in interest rates would result in any material loss to our investment portfolio.

#### ITEM 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

#### **Index to Consolidated Financial Statements**

The following consolidated financial statements of Aware, Inc. are filed as part of this Report on Form 10-K:

#### **Consolidated Financial Statements:**

	<u>Page</u>
Report of Independent Accountants	25
Consolidated Balance Sheets as of December 31, 2001 and 2000	26
Consolidated Statements of Operations for each of the three	
years in the period ended December 31, 2001	27
Consolidated Statements of Cash Flows for each of the	
three years in the period ended December 31, 2001	28
Consolidated Statements of Stockholders' Equity for each of	
the three years in the period ended December 31, 2001	29
Notes to Consolidated Financial Statements	30
Financial Statement Schedule:	
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Schedule II - Valuation and Qualifying Accounts	39

#### REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Shareholders of Aware, Inc.:

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of Aware, Inc. and its subsidiary at December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the accompanying index presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statements schedule are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes 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. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 2 to the consolidated financial statements, effective January 1, 2000, the Company changed its method of recognizing revenue.

PricewaterhouseCoopers LLP

Boston, Massachusetts January 28, 2002

# AWARE, INC. CONSOLIDATED BALANCE SHEETS (in thousands, except share and per share data)

	December 31,	
	2001	2000
ASSETS		
Current assets:		
Cash and cash equivalents	\$36,056	\$51,662
Short-term investments	21,228	5,841
Accounts receivable (less allowance for doubtful	21,220	2,011
accounts of \$380 in 2001 and \$402 in 2000)	1,383	5,200
Inventories	282	167
Deferred tax assets	1,811	7,093
Prepaid expenses and other current assets	795	300
Total current assets	61,555	70,263
	10.027	11 107
Property and equipment, net	10,937	11,187
Deferred tax assets	5,282	-
Other assets, net	329	
Total assets	\$78,103	\$81,450
Current liabilities: Accounts payableAccrued expenses	\$353 521	\$483 332
Accrued compensation	948	664
Accrued professional	125	169
Deferred revenue		1,469
Total current liabilities	1,947	3,117
Commitments and contingent liabilities (Note 7)		
Stockholders' equity:		
Preferred stock, \$1.00 par value; 1,000,000 shares authorized, none outstanding	-	-
Common stock, \$.01 par value; 30,000,000 shares authorized; issued and outstanding, 22,657,741 in 2001 and 22,606,277 in 2000	227	226
Additional paid-in capital	77,151	76,809
Retained earnings (accumulated deficit)	(1,222)	1,298
Total stockholders' equity	76,156	78,333
Total liabilities and stockholders' equity	\$78,103	\$81,450
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# AWARE, INC. CONSOLIDATED STATEMENTS OF OPERATIONS (in thousands, except per share data)

	Years ended December 31,		
	2001	2000	1999
Revenue:			
Product sales	\$2.917	¢1 655	\$5,535
_	\$3,817	\$4,655	
Contract revenue	8,253	12,152	10,594
Royalties	6,477	13,860	4,398
Total revenue	18,547	30,667	20,527
Costs and expenses:			
Cost of product sales	629	831	1,363
Cost of contract revenue	6,822	8,800	7,053
Research and development	10,104	5,915	3,636
Selling and marketing	2,916	2,533	2,574
General and administrative	2,899	3,098	2,580
Total costs and expenses	23,370	21,177	17,206
_			
Income (loss) from operations	(4,823)	9,490	3,321
Interest income	2,303	2,826	1,577
Income (loss) before benefit from income taxes and			
cumulative effect of change in accounting principle	(2,520)	12,316	4,898
Benefit from income taxes	-	2,716	-
Income (loss) before cumulative effect of change in			
accounting principle	(2,520)	15,032	4,898
Cumulative effect of change in accounting			
principle (Note 2)	-	(1,618)	-
Net income (loss)	(\$2,520)	\$13,414	\$4,898
Basic net income (loss) per share:			
Income (loss) before cumulative effect of change in accounting principle	(\$0.11)	\$0.67	\$0.23
Cumulative effect of change in accounting principle	-	(\$0.07)	<u>-</u>
Net income (loss) per share	(\$0.11)	\$0.60	\$0.23
Diluted net income (loss) per share:			
Income (loss) before cumulative effect of change in			
accounting principle	(\$0.11)	\$0.63	\$0.21
Cumulative effect of change in accounting principle	- (ΨΟ.11)	(\$0.07)	ψ0.21 -
Net income (loss) per share	(\$0.11)	\$0.56	\$0.21
	(ψ0.11)	ψ0.50	ψ0.21
Waighted average shares heric	22 621	22 454	21 407
Weighted average shares – basic	22,631	22,454	21,497
Weighted average shares – diluted	22,631	23,807	23,585

# AWARE, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS (in thousands)

	Years ended December 31,		31,
	2001	2000	1999
Cash flows from operating activities:			
Net income (loss)	(\$2,520)	\$13,414	\$4,898
Adjustments to reconcile net income (loss) to net cash provided by operating activities:	(, , ,	. ,	. ,
Depreciation and amortization	1,720	1,738	1,775
Provision for doubtful accounts	25	325	100
Increase (decrease) from changes in assets and liabilities:			
Accounts receivable	3,792	181	(2,904)
Inventories	(115)	(45)	(1)
Deferred tax assets	-	(2,716)	-
Prepaid expenses and other current assets	(495)	(31)	(17)
Accounts payable	(130)	(305)	308
Accrued expenses	429	439	190
Deferred revenue	(1,469)	1,469	(13)
Net cash provided by operating activities	1,237	14,469	4,336
Cash flows from investing activities:			
Purchases of property and equipment	(1,424)	(1,305)	(3,075)
Other assets	(375)	500	(500)
Net sales (purchases) of short-term investments	(15,387)	(4,824)	2,038
Net cash used in investing activities	(17,186)	(5,629)	(1,537)
Cash flows from financing activities:			
Proceeds from issuance of common stock	343	7,574	8,937
Net cash provided by financing activities	343	7,574	8,937
Increase (decrease) in cash and cash equivalents	(15,606)	16,414	11,736
Cash and cash equivalents, beginning of year	51,662	35,248	23,512
Cash and cash equivalents, end of year	\$36,056	\$51,662	\$35,248

# AWARE, INC. CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (in thousands)

	Common	Stock	Additional Paid-In	Retained Earnings (Accumulated	Total Stockholders'
_	Shares	Amount	Capital	Deficit)	Equity
Balance at December 31, 1998	20,911	\$209	\$55,938	(\$17,014)	\$39,133
Exercise of common stock options Issuance of common stock under	1,001	10	8,785		8,795
employee stock purchase plan  Net income	6	-	142	4,898	142 4,898
Balance at December 31, 1999	21,918	219	64,865	(12,116)	52,968
Exercise of common stock options Issuance of common stock under	680	7	7,405		7,412
employee stock purchase plan  Tax benefit of stock option exercises	8	-	162 4,377		162 4,377
Net income				13,414	13,414
Balance at December 31, 2000	22,606	226	76,809	1,298	78,333
Exercise of common stock options Issuance of common stock under	24	-	180		180
employee stock purchase plan  Net loss	28	1	162	(2,520)	163 (2,520)
Balance at December 31, 2001	22,658	\$227	\$77,151	(\$1,222)	\$76,156

#### 1. NATURE OF BUSINESS

We are a leader in the development and marketing of intellectual property for broadband communications. Our principal offering to date has been Asymmetric Digital Subscriber Line ("ADSL") technology for the telecommunications industry. ADSL enables telephone companies to use their existing copper telephone lines to offer broadband services. We have adopted an intellectual property business model in which we neither manufacture nor sell integrated circuits incorporating our technology. We license our broadband technology on a nonexclusive and worldwide basis to semiconductor companies that manufacture and sell products that incorporate our technology. Our licensees sell integrated circuits to equipment companies who incorporate those integrated circuits into their products. We also offer ADSL hardware products and image compression software products.

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

**Basis of Presentation** - The consolidated financial statements include the accounts of Aware, Inc. and its subsidiary. All significant intercompany transactions have been eliminated.

*Cash and Cash Equivalents* – Cash and cash equivalents consist primarily of demand deposits, money market funds, commercial paper, and discount notes in highly liquid short-term instruments with original maturities of three months or less from the date of purchase and are stated at cost, which approximates market.

**Short-term Investments** - At December 31, 2001 and 2000, we categorized all securities as "available-for-sale," since we may liquidate these investments currently. In calculating realized gains and losses, cost is determined using specific identification. Unrealized gains and losses on available-for-sale securities are excluded from earnings and reported in a separate component of stockholders' equity. At December 31, 2001 and 2000, unrealized gains and losses were not material.

The amortized cost of securities, which approximates fair value, consists of the following at December 31, 2001 and 2000 (in thousands):

Type of security	2001	2000
Corporate debt securities	\$ 6,869	\$ -
U.S. agency securities	14,359	5,841
Total	\$21,228	\$5,841

Allowance for Doubtful Accounts – Accounts are charged to the allowance for doubtful accounts as they are deemed uncollectible based on a periodic review of the accounts. Bad debt expense was approximately \$25,000, \$325,000, and \$100,000 for 2001, 2000, and 1999, respectively.

*Inventories* – Inventories are stated at the lower of cost or market with cost being determined by the first-in, first-out ("FIFO") method.

**Property and Equipment** – Property and equipment are stated at cost. Depreciation and amortization of property and equipment is provided using the straight-line method over the estimated useful lives of the assets. Upon retirement or sale, the costs of the assets disposed of and the related accumulated depreciation are removed from the accounts and any resulting gain or loss is included in the determination of income or loss. The estimated useful lives of assets used by us are:

Building and improvements	30 years
Furniture and fixtures and office equipment	5 years
Computer & manufacturing equipment	3 years
Purchased software	3 years

Impairment of Long-Lived Assets – We review long-lived assets for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate. Each impairment test is based on a comparison of the undiscounted cash flows to the recorded value of the asset. If an impairment is indicated, the asset is written down to its estimated fair value on a discounted cash flow basis. The cash flow estimates used to determine the impairment, if any, reflect our best estimates using appropriate assumptions and projections at that time. We believe that no significant impairment of our long-lived assets has occurred as of December 31, 2001.

**Revenue Recognition** – Effective January 1, 2000, we adopted Securities and Exchange Commission Staff Accounting Bulletin No. 101, Revenue Recognition in Financial Statements ("SAB 101"). We recognize revenue when there is persuasive evidence of an arrangement, the sales price is fixed or determinable, collection of the related receivable is reasonably assured, and delivery has occurred or services have been rendered as more fully described below.

*Product sales*. Product sales consist primarily of revenue from the sale of transceiver modules, test and development systems, and compression software. Product sales are recognized upon shipment.

Contract revenue. We enter into nonexclusive technology licensing agreements with semiconductor licensees that provide for us to receive fees for: (i) the transfer of intellectual property components and/or (ii) the performance of engineering services to customer specifications. Technology licensing agreements also provide licensees with the right to incorporate our intellectual property components in their products with terms and conditions that have historically varied by licensee. Generally licensing agreements include one or more of the following elements: i) technology license fees; which are payable upon the transfer of intellectual property, ii) engineering service fees, which generally are payable upon our achievement of defined milestones, and iii) royalty payments, which are generally payable when licensees use our intellectual property in their products. We classify license and engineering service fees received under licensing agreements as contract revenue.

Our revenue recognition methodology for contract revenue classifies licensing agreements between those contracts that contain multiple elements of license and engineering service fees and those contracts that contain a single element.

Multiple element licensing agreements. Contract revenue under multiple element agreements is recognized by recording total license and engineering fees for the entire contract on a straight-line basis over the estimated contract performance period, subject to the limitation that cumulative revenue through the end of any period may not exceed cumulative contract payments through that same period.

Single element licensing agreements. Technology license fees are recognized as revenue when technology transfers have been effected and no contingent factors are present. Engineering services are recognized as revenue when the defined milestones are completed. Engineering milestones have historically been formulated to correlate with the estimated level of effort and related costs.

Royalty revenue. Royalty revenue is generally recognized in the quarter in which a report is received from a licensee detailing the shipments of products incorporating our intellectual property components (i.e., in the quarter following the sales of the licensed product by the licensee). The terms of our licensing agreements generally require licensees to give notification to us and to pay royalties within 45 to 60 days of the end of the quarter during which sales of licensed products take place.

Change in Accounting Principle – Effective January 1, 2000 we changed our method of revenue recognition in accordance with Securities and Exchange Commission Staff Accounting Bulletin No. 101, Revenue Recognition in Financial Statements. Previously, we recognized contract revenue under multiple element agreements upon completion of contract milestones or upon transfer of intellectual property. Under the accounting method we adopted retroactive to January 1, 2000, we now recognize contract revenue under multiple element agreements by recording total license and engineering fees for the entire contract on a straight-line basis over the estimated contract performance period, subject to the limitation that cumulative

revenue through the end of any period may not exceed cumulative contract payments through that same period. The cumulative effect of the change on prior years resulted in a charge to income of \$1.6 million for the year ended December 31, 2000. For the years ended December 31, 2001 and 2000, we recognized \$0.9 million and \$0.7 million in revenue, respectively, that was included in the cumulative effect adjustment as of January 1, 2000.

In 1999, the pro forma effect of retroactive application of SAB 101 would have resulted in net income of \$3.280 million and net income per share, basic and diluted, of \$0.15 and \$0.14, respectively.

*Income Taxes* — We compute deferred income taxes based on the differences between the financial statement and tax basis of assets and liabilities using enacted rates in effect in the years in which the differences are expected to reverse. We must establish a valuation allowance to offset temporary deductible differences, net operating loss carryforwards and tax credits when it is more likely than not that the deferred tax assets will not be realized.

Capitalization of Software Costs – We capitalize certain internally generated software development costs after technological feasibility of the product has been established. No software costs were capitalized for the years ended December 31, 2001, 2000 and 1999, because such costs incurred subsequent to the establishment of technological feasibility, but prior to commercial availability, were immaterial.

**Concentration of Credit Risk** – At December 31, 2001 and 2000, we had cash and investments, in excess of federally insured deposit limits of approximately \$57.2 million and \$57.4 million, respectively.

Concentration of credit risk with respect to accounts receivable consists of \$0.7 million, \$0.3 million, \$0.2 million, and \$0.1 million with four customers at December 31, 2001 and of \$3.4 million, \$0.6 million, \$0.5 million, and \$0.5 million with four customers at December 31, 2000.

Stock-Based Compensation – We grant stock options to our employees and directors. Such grants are for a fixed number of shares with an exercise price equal to the fair value of the shares at the date of grant. As permitted by SFAS No. 123, "Accounting for Stock-Based Compensation", we account for stock option grants in accordance with Accounting Principles Board ("APB") Opinion No. 25, "Accounting for Stock Issued to Employees" and FASB Interpretation No. 44 ("FIN 44"), "Accounting for Certain Transactions Involving Stock Compensation." Accordingly, we have adopted the provisions of SFAS No. 123 through disclosure only (Note 6).

Computation of Earnings per Share – Basic earnings per share is computed by dividing income available to common shareholders by the weighted average number of common shares outstanding. Diluted earnings per share is computed by dividing income available to common shareholders by the weighted average number of common shares outstanding plus additional common shares that would have been outstanding if dilutive potential common shares had been issued. For the purposes of this calculation, stock options are considered common stock equivalents in periods in which they have a dilutive effect. Stock options that are antidilutive are excluded from the calculation.

*Use of Estimates* – The preparation of our financial statements in conformity with generally accepted accounting principles requires us 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 amount of revenues and expenses during the reporting period. Significant estimates include revenue recognition, reserves for doubtful accounts, reserves for excess and obsolete inventory, useful lives of fixed assets, valuation allowance for deferred income tax assets, and accrued liabilities. Actual results could differ from those estimates.

*Fair Value of Financial Instruments* – The carrying amounts of cash and cash equivalents, short-term investments, accounts receivable, accounts payable and accrued expenses approximate fair value because of their short-term nature.

**Comprehensive Income** - Comprehensive income 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. For the years ended December 31, 2001, 2000 and 1999, comprehensive income (loss) was not materially different from net income (loss).

Recent Accounting Pronouncements – In August 2001, the FASB issued Statement of Financial Accounting Standards No. 144 ("SFAS 144"), "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS 144 supercedes FASB Statement No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long Lived Assets to Be Disposed Of." SFAS 144 applies to all long-lived assets (including discontinued operations) and consequently amends Accounting Principles Board Opinion No. 30, "Reporting Results of Operations - Reporting the Effects of Disposal of a Segment of a Business." SFAS 144 is effective for financial statements issued for fiscal years beginning after December 15, 2001. We will adopt SFAS 144 in the first quarter of 2002. We are currently determining the impact, if any, SFAS 144 will have on our financial position and results of operations.

**Reclassifications** – Certain prior period amounts have been reclassified to be consistent with the current period presentation.

**Segments** – We organize ourselves as one segment reporting to the chief operating decision-maker. We have sales outside of the United States, which are described in Note 8. All long-lived assets are maintained in the United States.

#### 3. INVENTORIES

Inventories consisted of the following at December 31 (in thousands):

	2001	2000
Raw materials	\$146	\$142
Finished goods	136	25
Total	\$282	\$167

#### 4. PROPERTY AND EQUIPMENT

Property and equipment consisted of the following at December 31 (in thousands):

	2001	2000
Land	\$1,080	\$1,080
Building and improvements	8,757	8,757
Computer equipment	5,272	4,367
Purchased software	2,343	1,907
Furniture and fixtures	923	864
Office equipment	342	319
Manufacturing equipment	268	267
Total	18,985	17,561
Less accumulated depreciation and amortization	(8,048)	(6,374)
Property and equipment, net	\$10,937	\$11,187

Deprecation expense amounted to \$1.7 million, \$1.7 million and \$1.8 million for the years ended December 31, 2001, 2000, and 1999, respectively.

#### 5. INCOME TAXES

Deferred tax assets are attributable to the following at December 31 (in thousands):

	2001	2000
Federal net operating loss carryforwards	\$19,073	\$ 18,090
Research and development and other tax credit carryforwards	10,575	9,481
State net operating loss carryforwards	3,385	3,163
Deferred revenue	-	355
Other	791	489
Total	33,824	31,578
Less valuation allowance	(26,731)	(24,485)
Deferred tax assets, net	\$7,093	\$ 7,093

A reconciliation of the U.S. federal statutory rate to the effective tax rate is as follows:

	Year ended December 31,		
	2001	2000	1999
Federal statutory rate	(34%)	34%	34%
State rate, net of federal benefit	(6)	6	4
Tax credits	(60)	(9)	(69)
Valuation allowance	100	(58)	27
Other	-	5	4
Effective tax rate	-%	(22)%	- %

As of December 31, 2001, we had net deferred tax assets of \$7.1 million, which we believed was more likely than not that we would realize based on our projected taxable income in the next two years. The remaining deferred tax assets were fully reserved due to the uncertainty of realization. We will continue to evaluate, on a quarterly basis, the positive and negative evidence affecting the realizability of our deferred tax assets.

At December 31, 2001, we had federal net operating loss carryforwards of approximately \$56.1 million, which begin to expire in 2003, and federal research and development credit carryforwards of approximately \$6.7 million, which begin to expire in 2003. At December 31, 2001, we also had available state net operating loss carryforwards of approximately \$53.7 million, which begin to expire in 2002, and state research and development and investment tax credit carryforwards of approximately \$3.9 million, which begin to expire in 2003.

Of the total net operating loss and research and development credit carryforwards for which a valuation allowance was recorded approximately \$3.0 million will be credited to the statement of operations as a tax benefit, if realized in the future. The remainder of the net operating losses and research and development credit carryforwards for which a valuation allowance was recorded are attributable to the exercise of stock options and the tax benefit will be credited to additional paid-in capital, if realized in the future.

### 6. EQUITY AND STOCK COMPENSATION PLANS

At December 31, 2001, we have four stock-based compensation plans, which are described below. We adopted SFAS No. 123, but, as permitted, apply APB Opinion No. 25 and related Interpretations in accounting for options granted to employees and directors. We have no performance-based stock option plans. Had compensation cost for our four stock-based compensation plans been determined based on the fair value at the grant dates as prescribed by SFAS No. 123, our net income (loss) and basic and diluted net income (loss) per share would have been adjusted to the pro forma amounts indicated below (in thousands, except per share data):

	Year ended December 31,			
	2001	2000	1999	
Net income (loss) - as reported	(\$2,520)	\$13,414	\$4,898	
	(\$27,773)	(\$3,833)	(\$11,745)	
Basic earnings (loss) per share – as reported  Basic earnings (loss) per share – pro forma	(\$0.11)	\$0.60	\$0.23	
	(\$1.23)	(\$0.17)	(\$0.55)	
Diluted earnings (loss) per share – as reported  Diluted earnings (loss) per share – pro forma	(\$0.11)	\$0.56	\$0.21	
	(\$1.23)	(\$0.17)	(\$0.55)	

The fair value of options on their grant date was measured using the Black-Scholes option pricing model. Key assumptions used to apply this pricing model are as follows:

	Year ended December 31,			
_	2001	2000	1999	
Average risk-free interest rate	4.55%	6.15%	5.54%	
Expected life of option grants	5 years	5 years	5 years	
Expected volatility of underlying stock	104%	106%	98%	
Expected dividend yield	-	=	-	

Fixed Stock Option Plans – We have three fixed option plans. Under the 1990 Incentive and Nonstatutory Stock Option Plan ("1990 Plan"), we may grant incentive stock options or nonqualified stock options to our employees and directors for up to 2,873,002 shares of common stock. Under the 1996 Stock Option Plan ("1996 Plan"), we may grant incentive stock options or nonqualified stock options to our employees and directors for up to 6,100,000 shares of common stock. Under the 2001 Nonqualified Stock Plan ("2001 Plan"), we may grant nonqualified stock options to our employees and directors for up to 3,000,000 shares of common stock. Under all three plans, options are granted at an exercise price as determined by the Board of Directors; have a maximum term of ten years; and generally vest over three to five years. As of December 31, 2001, there were 661,544 shares available for grant under the 2001 Plan, 175,195 shares available for grant under the 1996 Plan, and no shares available under the 1990 Plan.

A summary of the transactions of our three fixed stock option plans for the years ended December 31, 2001, 2000, and 1999 are presented below:

	200	1	2000		1999	
_		Weighted		Weighted		Weighted
		Average		Average		Average
		Exercise		Exercise		Exercise
_	Shares	Price	Shares	Price	Shares	Price
Outstanding at beginning of year	4,083,683	\$29.52	3,538,687	\$22.05	3,097,043	\$9.24
Granted	2,407,423	6.42	1,631,350	37.86	1,562,500	38.14
Exercised	(23,731)	7.60	(680,413)	10.89	(1,000,399)	8.79
Forfeited or cancelled	(199,167)	32.73	(405,941)	29.10	(120,457)	11.54
Outstanding at end of year	6,268,208	\$20.63	4,083,683	\$29.52	3,538,687	\$22.05
Options exercisable at year end	3,358,403	\$21.28	1,711,351	\$23.79	1,595,443	\$16.32

The weighted average grant date fair values of options granted during the years ended December 31, 2001, 2000 and 1999 were \$5.01, \$30.30 and \$29.16, respectively.

The following table summarizes information about stock options outstanding at December 31, 2001:

	Options Outstanding		Options I	Exercisable	
	Number	Weighted-Avg.		Number	
Range of	Outstanding at	Remaining	Weighted-Avg.	Exercisable	Weighted-Avg.
Exercise Prices	12/31/01	Contractual Life	Exercise Price	At 12/31/01	Exercise Price
\$0 to 10	2,812,493	8.8 years	\$6.44	1,243,350	\$7.27
10 to 20	781,466	5.9	\$11.82	628,198	\$11.84
20 to 30	663,305	7.8	\$23.61	464,066	\$24.88
30 to 40	608,850	8.0	\$32.18	321,069	\$32.20
40 to 50	1,392,094	8.0	\$47.49	694,220	\$47.07
50 to 70	10,000	7.8	\$58.06	7,500	\$56.42
	6,268,208	8.1	\$20.63	3,358,403	\$21.28

Employee Stock Purchase Plan - In June 1996, we adopted an Employee Stock Purchase Plan (the "ESPP Plan") under which eligible employees may purchase common stock at a price equal to 85% of the lower of the fair market value of the common stock at the beginning or end of each six-month offering period. Participation in the ESPP Plan is limited to 6% of an employee's compensation, may be terminated at any time by the employee and automatically ends on termination of employment. A total of 100,000 shares of common stock have been reserved for issuance. As of December 31, 2001 there were 50,997 shares available for future issuance under the ESPP Plan. We issued 27,733, 7,808 and 6,269 common shares under the ESPP Plan in 2001, 2000 and 1999, respectively.

**Stockholder Rights Plan** - In October 2001, our board of directors adopted a stockholder rights plan and declared a dividend distribution of one share purchase right (a "Right") for each outstanding share of our common stock to stockholders of record at the close of business on October 15, 2001. Each share of common stock issued after that date also will carry with it one Right, subject to certain exceptions. Each Right, when it becomes exercisable, will entitle the record holder to purchase from us one ten-thousandth of a share of series A preferred stock at an exercise price of \$40.00 subject to adjustment.

The Rights become exercisable upon the earliest of the following dates: (i) the date on which we first publicly announce that a person or group has become an acquiring person, or (ii) the date, if any, that our board of directors may designate following the commencement of, or first public disclosure of an intent to commence, a tender or exchange offer which could result in the potential buyer becoming a beneficial owner of 15% or more of our outstanding common stock. Under these circumstances, holders of Rights will be entitled to purchase, for the exercise price, the preferred stock equivalent of common stock having a market value of two times the exercise price. The Rights expire on October 2, 2011, and may be redeemed by us for \$.001 per Right.

### 7. COMMITMENTS AND CONTINGENT LIABILITIES

**Lease Commitments** – We own our principal office and research facility in Bedford, Massachusetts, which we have occupied since November 1997. We conduct a portion of our research and development activities in leased facilities in Lafayette, California under a non-cancellable operating lease that expires in 2004. The following is a schedule of future minimum rental payments required under the California operating lease (in thousands):

Year ended December 31,	
2002	\$42
2003	44
2004	30
Total minimum lease payments	\$116

Rental expense was approximately \$36,000, \$105,000, and \$14,000 in 2001, 2000 and 1999, respectively.

**Litigation** - There are no material pending legal proceedings to which we are a party or to which any of our properties are subject which, either individually or in the aggregate, are expected to have a material adverse effect on our business, financial position or results of operations.

### 8. BUSINESS SEGMENTS AND MAJOR CUSTOMERS

We organize ourselves as one segment and conduct our operations in the United States.

We sell our products and technology to domestic and international customers. Revenues were generated from the following geographic regions (in thousands):

_	Year ended December 31,			
	2001	2000	1999	
United States	\$17,092	\$26,606	\$14,802	
Europe	717	2,231	3,376	
Asia/Pacific	627	1,567	2,169	
Rest of world	111	263	180	
	\$18,547	\$30,667	\$20,527	

The portion of total revenue that was derived from major customers was as follows:

_	Year ended December 31,			
	2001	2000	1999	
Customer A	52%	51%	22%	
Customer B	14%	9%	11%	
Customer C	2%	7%	10%	
Customer D	=	2%	12%	

### 9. EMPLOYEE BENEFIT PLAN

In 1994, we established a qualified 401(k) Retirement Plan (the "Plan") under which employees are allowed to contribute certain percentages of their pay, up to the maximum allowed under Section 401(k) of the Internal Revenue Code. Our contributions to the Plan are at the discretion of the Board of Directors. Our contributions were \$313,000, \$166,000 and \$148,000 in 2001, 2000 and 1999, respectively.

### 10. NET INCOME (LOSS) PER SHARE

Net income (loss) per share is calculated as follows (in thousands, except per share data):

	Year ended December 31,			
	2001	2000	1999	
Net income (loss)	(\$2,520)	\$13,414	\$4,898	
Weighted average common shares outstanding	22,631	22,454	21,497	
Additional dilutive common stock equivalents	<u>-</u> _	1,353	2,088	
Diluted shares outstanding	22,631	23,807	23,585	
Net income (loss) per share – basic	(\$0.11)	\$0.60	\$0.23	
Net income (loss) per share – diluted	(\$0.11)	\$0.56	\$0.21	

For the year ended December 31, 2001, potential common stock equivalents of 285,427 were not included in the per share calculation for diluted EPS, because we had a net loss and the effect of their inclusion would be anti-dilutive. For the years ended December 31, 2001, 2000 and 1999, options to purchase 3,488,215, 1,508,194 and 897,000 shares of common stock at average weighted prices of \$31.95, \$47.53 and \$46.26 per share, respectively, were outstanding, but were not included in the computation of diluted EPS because the options' exercise prices were greater than the average market price of the common shares and thus would be anti-dilutive.

### 11. QUARTERLY RESULTS OF OPERATIONS - UNAUDITED

The following table presents unaudited quarterly operating results for each of our quarters in the two-year period ended December 31, 2001 (in thousands, except per share data). As discussed in Note 2, we changed our method of revenue recognition effective January 1, 2000. Accordingly, the following unaudited quarterly operating results for the first three quarters of the year ended December 31, 2000 have been adjusted to reflect the impact of the change in accounting method as if adopted on January 1, 2000.

	2001 Quarters Ended			
<u> </u>	March 31	June 30	September 30	December 31
Revenue	\$8,218	\$4,017	\$3,108	\$3,204
Income (loss) from operations	2,633	(1,655)	(2,874)	(2,927)
Net income (loss)	2,056	40	(2,039)	(2,577)
Net income (loss) per share – basic	\$0.09	\$0.00	(\$0.09)	(\$0.11)
Net income (loss) per share – diluted	\$0.09	\$0.00	(\$0.09)	(\$0.11)

_	2000 Quarters Ended			
	March 31	June 30	September 30	December 31
Revenue	\$6,563	\$7,018	\$8,019	\$9,067
Income from operations	1,696	1,738	2,664	3,392
Income before cumulative effect of change in accounting principle  Cumulative effect of change in	2,266	2,408	3,421	6,937
accounting principle	(1,618)	-	-	-
Net income	648	2,408	3,421	6,937
Net income per share – basic Net income per share – diluted	\$0.03 \$0.03	\$0.11 \$0.10	\$0.15 \$0.14	\$0.31 \$0.30

## FINANCIAL STATEMENT SCHEDULE

Schedule II - Valuation and Qualifying Accounts – Years ended December 31, 2001, 2000, and 1999 (in thousands)

Col. A	Col. B	Col. C (1)	Col. C (2)	Col. D	Col. E	
	Additions					
	Balance at Beginning of Period	Charged to Costs and Expenses	Charged to Other Accounts	Deductions Charged to Reserves	Balance At End of Period	
Allowance for doubtful accounts receivable:						
2001	\$402	\$25	-	\$47	\$380	
2000	\$175	\$325	-	\$98	\$402	
1999	\$100	\$100	-	\$25	\$175	
Allowance for sales returns and allowances:						
2001	\$125	=	(\$125)	-	=	
2000	\$35	=	\$90	-	\$125	
1999	\$50	-	(\$15)	-	\$35	
Inventory reserves:						
2001	\$209	\$75	-	_	\$284	
2000	\$159	\$50	-	-	\$209	
1999	\$184	(\$25)	_	_	\$159	

# ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

### PART III

### ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

Our executive officers and directors, and their ages as of March 12, 2002 are as follows:

<u>Name</u>	<u>Age</u>	<b>Position</b>
Michael A. Tzannes	40	Chief Executive Officer and Director
Edmund C. Reiter	38	President and Director
Richard P. Moberg	47	Chief Financial Officer and Treasurer
Richard W. Gross	44	Senior Vice President – Engineering
John K. Kerr	64	Chairman of the Board of Directors
David Ehreth	52	Director
G. David Forney, Jr	61	Director

Michael A. Tzannes has been Aware's chief executive officer since April 1998 and has served as a director of Aware since March 1998. Mr. Tzannes served as Aware's president from April 1998 to March 2001. From September 1997 to April 1998, he served as Aware's chief technology officer and general manager of telecommunications. Mr. Tzannes served as Aware's senior vice president, telecommunications from April 1996 to September 1997, as Aware's vice president, telecommunications from December 1992 to April 1996, as a senior member of Aware's technical staff from January 1991 to November 1992, and as a consultant to Aware from October 1990 to December 1990. From 1986 to 1990, he was a staff engineer at Signatron, Inc., a telecommunications technology and systems developer. Mr. Tzannes received a Ph.D. in electrical engineering from Tufts University, an M.S. from the University of Michigan at Ann Arbor, and a B.S. from the University of Patras, Greece.

Edmund C. Reiter has served as Aware's president since March 2001 and as a director of Aware since December 1999. Mr. Reiter served as a senior vice president from May 1998 to March 2001, as Aware's vice president, advanced products from August 1995 to May 1998, as Aware's manager of product development for still image compression products from June 1994 to August 1995, as a senior member of Aware's technical staff from November 1993 to June 1994, and as a member of Aware's technical staff from December 1992 to November 1993. Mr. Reiter served as senior scientist at New England Research, Inc. from January 1991 to November 1992. Mr. Reiter received a Ph.D. from the Massachusetts Institute of Technology and a B.S. from Boston College.

*Richard P. Moberg* joined Aware in June 1996 as Chief Financial Officer and Treasurer. From December 1990 to June 1996, Mr. Moberg held a number of positions at Lotus Development Corporation, a computer software developer, including Corporate Controller from June 1995 to June 1996, Assistant Corporate Controller from May 1993 to June 1995, and Director of Financial Services from December 1990 to May 1993. Mr. Moberg received an M.B.A. from Bentley College and a B.B.A. in accounting from the University of Massachusetts at Amherst.

Richard W. Gross was appointed Senior Vice President in July 1999. Mr. Gross served as Vice President - Strategic Development from July 1998 to July 1999. Prior to the Vice President position, he held various senior level engineering positions from the time he joined Aware in September 1993 until July 1998. Prior to joining Aware, Mr. Gross was a senior technical staff member at GTE Laboratories from 1987 to 1993; a technical staff member at the Heinrich Hertz Institute from 1984 to 1987; and a programmer for IBM, Federal Systems Division from 1980 to 1984. Mr. Gross received a Ph.D. and M.S. in electrical engineering from the University of Rhode Island and a B.A. in physics from Holy Cross College.

John K. Kerr has been a director of Aware since 1990 and Chairman of the board of directors since March 1999. Mr. Kerr previously served as a director of Aware from 1988 to 1989 and as Chairman of the board of directors from November 1992 to March 1994. Mr. Kerr has been General Partner of Grove Investment Partners, a private investment partnership, since 1990. Mr. Kerr received an M.A. and a B.A. from Baylor University.

David Ehreth has served as a director of Aware since November 1997. Since April 1998, Mr. Ehreth has served as president, chief executive officer and chairman of Westwave Communications, Inc., a telecommunications software company. From June 1992 to August 1998, Mr. Ehreth served as division vice president of the access division of DSC Communications Corporation, a manufacturer of digital switching, access, transport and private network system products for the telecommunications industry. From 1987 to June 1992, Mr. Ehreth served as vice president of engineering of Optilink, Inc., a manufacturer of access systems for the telecommunications industry. Optilink, Inc. was acquired by DSC Communications Corporation in 1990. From 1977 to 1987, Mr. Ehreth held numerous positions in the Digital Telephone Systems division of Harris Corporation. Mr. Ehreth received a degree in electrical engineering from College of Marin.

G. David Forney, Jr. has served as a director of Aware since May 1999. Mr. Forney was a Vice President of Motorola, Inc. from 1977 until his retirement in January 1999. Mr. Forney was previously a Vice President of research and development, and a director of Codex Corporation prior to its acquisition by Motorola in 1977. Mr. Forney is currently Bernard M. Gordon Adjunct Professor in the Department of Electrical Engineering and Computer Sciences at the Massachusetts Institute of Technology. Mr. Forney received an Sc.D. in electrical engineering from Massachusetts Institute of Technology and a B.S.E. in electrical engineering from Princeton University.

### ITEM 11. EXECUTIVE COMPENSATION

The information required by Item 11 of Form 10-K is incorporated by reference from the information contained in the section captioned "Compensation of Directors and Executive Officers" in the Proxy Statement that will be delivered to our shareholders in connection with our May 31, 2002 Annual Meeting of Shareholders.

### ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The information required by Item 12 of Form 10-K is incorporated by reference from the information contained in the section captioned "Security Ownership of Certain Beneficial Owners and Management" in the Proxy Statement that will be delivered to our shareholders in connection with our May 31, 2002 Annual Meeting of Shareholders.

### ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Not applicable.

### **PART IV**

### ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K

- (A) See Item 8 for an index to the consolidated financial statements, supplementary financial information, and financial statement schedule.
- (B) There were no reports on Form 8-K filed during the fourth quarter ended December 31, 2001.

### (C) INDEX TO EXHIBITS

Exhibits have been filed separately with the United States Securities and Exchange Commission in connection with this Annual Report on Form 10-K or have been incorporated into this Report by reference. Copies of such exhibits may be obtained from us upon request.

Exhibit No.	Description of Exhibit
3.1	Amended and Restated Articles of Organization (filed as Exhibit 3.2 to the Company's
	Registration Statement on Form S-1, File No. 333-6807 and incorporated herein by
	reference).
3.2	Amended and Restated By-Laws (filed as Exhibit 3.3 to the Company's Form 10-Q for
	the quarter ended June 30, 1996 and incorporated herein by reference).
4.1	Rights Agreement dated as of October 2, 2001 between Aware, Inc. and Equiserve
	Trust Company, N.A., as Rights Agent (filed as Exhibit 4(a) to the Company's Form 8-
	K filed with the Securities and Exchange Commission on October 3, 2001 and
	incorporated herein by reference).
4.2	Terms of Series A Participating Cumulative Preferred Stock of Aware, Inc. (attached
	as Exhibit A to the Rights Agreement filed as Exhibit 4.1 hereto).
4.3	Form of Right Certificate (attached as Exhibit B to the Rights Agreement filed as
	Exhibit 4.1 hereto).
10.1	1990 Incentive and Non-Statutory Stock Option Plan (filed as Exhibit 10.2 to the
	Company's Registration Statement on Form S-1, File No. 333-6807 and incorporated
	herein by reference).
10.2	1996 Stock Option Plan, as amended and restated (filed as Annex A to the Company's
	Definitive Proxy Statement filed with the Securities and Exchange Commission on
	April 11, 2000 and incorporated herein by reference).
10.3	1996 Employee Stock Purchase Plan (filed as Exhibit 10.4 to the Company's
	Registration Statement on Form S-1, File No. 333-6807 and incorporated herein by
	reference).
10.4	Form of Director Indemnification Agreement (filed as Exhibit 10.13 to the Company's
	Registration Statement on Form S-1, File No. 333-6807 and incorporated herein by
	reference).
10.5	2001 Nonqualified Stock Plan (filed as Exhibit 10.6 to the Company's Form 10-Q for
	the quarter ended March 31, 2001 and incorporated herein by reference).
21.1 *	Subsidiaries of Registrant.
23.1 *	Consent of PricewaterhouseCoopers LLP.

<sup>\*</sup> Filed herewith

### **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.

## AWARE, INC.

By: /s/ Michael A. Tzannes Michael A. Tzannes, Chief Executive Officer

Date: March 20, 2002

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 indicated on the 20th day of March 2002.

<u>Signature</u>	<u>Title</u>
/s/ Michael A. Tzannes Michael A. Tzannes	Chief Executive Officer and Director (Principal Executive Officer)
/s/ Edmund C. Reiter Edmund C. Reiter	President and Director
/s/ Richard P. Moberg Richard P. Moberg	Chief Financial Officer, Treasurer (Principal Financial and Accounting Officer)
/s/ John K. Kerr John K. Kerr	Chairman of the Board of Directors
/s/ David Ehreth David Ehreth	Director
/s/ G. David Forney, Jr. G. David Forney, Jr	Director

# **Corporate Information**

# **Board of Directors**

### John K. Kerr

Chairman of the Board Aware, Inc.

### Michael A. Tzannes, Ph.D.

Chief Executive Officer Aware, Inc.

### Edmund C. Reiter, Ph.D.

President Aware, Inc.

## G. David Forney, Jr., Sc.D.

Adjunct Professor, MIT Vice President (retired), Motorola, Inc.

### **David Ehreth**

Chief Executive Officer
Westwave Communications, Inc.

# Officers

## Michael A. Tzannes, Ph.D.

Chief Executive Officer

## Edmund C. Reiter, Ph.D.

President

### Richard P. Moberg

Chief Financial Officer and Treasurer

### Richard W. Gross, Ph.D.

Senior Vice President Engineering

### **Legal Counsel**

Foley, Hoag & Eliot LLP Boston, MA

## **Independent Accountants**

PricewaterhouseCoopers LLP Boston, MA

### **Transfer Agent**

State Street Bank & Trust c/o EquiServe I 50 Royall Street Canton, MA 02021

## **Annual Meeting**

Friday, 10 a.m. May 31, 2002 Bedford Renaissance Hotel Bedford, MA

### **Stock Listing**

NASDAQ: AWRE

### **Corporate Headquarters**

40 Middlesex Turnpike Bedford, MA 01730 781-276-4000

# **West Coast Location**

3685 Mt. Diablo Boulevard Lafayette, CA 94549

### Web Site

www.aware.com

### **Investor Relations**

Aware, Inc. 40 Middlesex Turnpike Bedford, MA 01730 781-276-4000



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