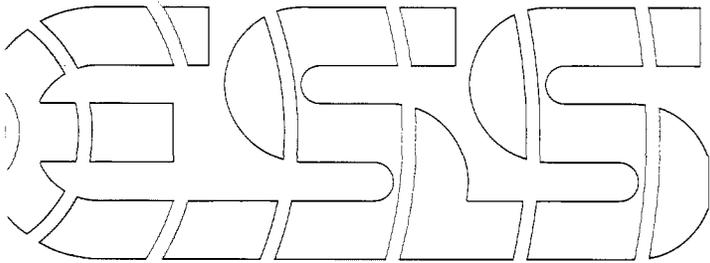


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Technology, Inc.

ESS Technology is a leading global provider of highly integrated system-on-a-chip (SOC) solutions for DVD players, DVD recorders, Video CD players and digital audio players—and is rapidly expanding into the camera phone market. ESS is headquartered in Silicon Valley, in Fremont, California. The company's common stock trades on the NASDAQ National Market under the symbol ESST.

[www.esstech.com](http://www.esstech.com).

## Letter to Shareholders

Dear Shareholders,

In 2004, ESS celebrated its twentieth anniversary. The vision we had when the company was founded of analog entertainment changing to digital entertainment continues to move forward. In the past year, digital entertainment has reached even more homes around the world and continues to transform both the consumer electronics and home entertainment markets.

As the number one supplier of video decoder chips worldwide, ESS continues to play a leading role in this digital revolution. Our innovative products, developed over the course of the company's twenty-year history, have anticipated the development of these trends. In a number of formats and on a variety of platforms – PC Audio, DVD, Video CD, and cameraphones – ESS has provided and continues to provide products that support the ongoing digital revolution in home entertainment.



The boundaries of "home" entertainment have also become revolutionized. For example, DVDs are no longer limited to use in the home. We see the proliferation of portable DVDs as well as DVDs in automobiles, offering features that go beyond movie playback to include music playback and digital navigation systems.

As consumer electronics and digital entertainment evolve and continue to converge into new and innovative new products, ESS is well positioned to offer even more exciting products in several rapidly growing new markets. With our innovative technology, strong customer relationships and committed employees, ESS is ready to continue to deliver on our vision of providing integrated, cost-effective and feature-rich digital solutions for the consumer electronic and home entertainment markets.

All of these accomplishments have relied upon the support of our dedicated employees, our loyal customers and our shareholders. I thank you for your continued support and look forward to an exciting and successful future.

A handwritten signature in black ink, appearing to read "Fred S.L. Chan". The signature is fluid and cursive, with a large, sweeping flourish at the end.

Fred S.L. Chan  
Chairman  
ESS Technology, Inc.

## Letter to Shareholders

Dear Shareholders,



2004 was once again a very busy year for ESS. During the year, ESS Technology continued in its position as the global leader in digital video products in the consumer entertainment industry, while continuing our expansion into the new exciting digital imaging market. During 2004, ESS's annual revenues grew to \$257.3 million, up a solid 32% from \$195.3 million in fiscal 2003. This strong sales growth was driven primarily by our leadership in the market for digital video products. In addition, ESS's balance sheet continues to remain strong with \$126 million in cash and no debt.

In 2004 ESS Technology remained the number one supplier worldwide of video decoder chips, building upon several years of market growth and industry leadership in digital chips for DVDs and video compact disc players. Our products have been successful in large part due to our consistently world-class digital video technology, our close relationships with key consumer electronics companies worldwide and our focus on producing high quality products at attractive prices.

Also in 2004, ESS celebrated its twentieth year in business. Founded in 1984 by our Chairman Fred Chan and Dr. Forest Mozer, ESS now has more than 500 employees globally. The vision of our founders so many years ago of consumer electronics becoming digital continues to be an accurate one that provides ESS with many growth opportunities. Since the company's inception, ESS has demonstrated an ability to identify, explore and capitalize upon these many new opportunities for growth.

By anticipating each successive wave of technological development, ESS has a proven track record of adaptability and technological innovation. We have been successful not only in developing new strategic directions, but also in fostering the vision that has enabled us to develop a technology base that serves as a framework for new products that contain the functionality and features our customers require.

Last year's new product introductions include a high-quality, low-light 1.3 megapixel CMOS sensor and our Dorado2 image processing chip. This 1.3 megapixel sensor and the Dorado2 image processor ramped into volume production in late 2004 and are now shipping to some of the world's leading cellular phone manufacturers. These are two examples from our product portfolio that spans a broad array of feature-rich chips, applications and solutions for the digital imaging and digital entertainment markets. More recently, early in 2005 ESS introduced another technological innovation for CMOS image sensors with the introduction of our 2.0 megapixel sensor.

In recent years, consumer digital entertainment has undergone a series of developments that confirm our vision of the convergence of technologies into the DHS, or digital home system. Today, DVDs and set-top-boxes offer a range of functions that were not possible until recently. In our vision of consumer digital entertainment, multiple digital entertainment capabilities are combined into a single entertainment system, offering not only many exciting new features, but also the highest possible picture and sound quality.

The future holds many exciting new opportunities for ESS. The cameraphone market continues its exponential growth rate, and cameraphone products have become even more feature-rich and elegant in design. Because of the performance of ESS's sensor technology, we have won several significant customers in this market and are very optimistic about cameraphone products becoming an even larger portion of our revenue mix in 2005 and into the future.

Overall, 2004 was a year of strong sales growth in which ESS continued its market leadership in the company's core digital video business while making significant inroads into new products that build upon our technological capabilities. Our goal for 2005 is to continue to provide technological developments to support our digital video and digital imaging products and to introduce new products that promote advancements for the digital home system and for even higher resolution camera products.

In closing, I would like to thank everyone who has contributed to furthering ESS's mission in the past year – our talented employees, our valued customers, and our shareholders. I look forward to working with all of you for additional future successes.



Robert Blair  
*President and CEO*  
*ESS Technology, Inc.*

## The Year in Review

- Notably, we celebrated our twentieth year in business. Founded in 1984 by Fred Chan and Forest Mozer, ESS now has more than 500 employees globally.
- We introduced a high-performance 1.3 megapixel CMOS sensor, the Dorado2 image processing chip and an integrated VGA image sensor/system-on-a chip.
- ESS Technology remained the number one supplier worldwide of video decoder chips.
- We introduced our Vantage II MX integrated MPEG-2 encoder/decoder chip with DivX® and Nero® playback support.
- We introduced our VCD servo chip, the ES3721, adding optical pick-up functionality to our product line.
- We introduced the new, highly integrated Vista chip to our recordable product line. The Vista chip is designed to address the emerging market for mass-market digital video recorders, such as TiVo, as well as recordable DVD and integrated Class-D receiver products.
- And early in 2005, we introduced a 2.0 megapixel CMOS sensor to address the new, higher-resolution cameraphone market.

The most obvious bright spots in our DVD business have been our MPEG-4 and DivX® products. In 2003, ESS was the first supplier to offer a high volume, low cost MPEG4 solution to the market and the first organization to become DivX-certified; we continue to offer DivX functionality in our products. We are seeing a continued strong demand for DivX and MPEG-4 chips from our major customers. Our product innovations, combined with ESS's responsiveness to OEM needs, help ESS to continue to be a leader in the DVD arena.

We have already seen some successes in our newer areas of business. In the cameraphone market, we introduced a 1.3 megapixel CMOS sensor in 2004 and a 2.0 megapixel CMOS sensor in February of 2005. Additionally, we recently gained cameraphone sensor market share due to design wins from major handset manufacturers. Today we have new camera designs in over 15 different models and our customers include several of the top five handset manufacturers in the world.

## The Digital Revolution

Digital technology continues to transform consumer electronics. Digital technology allows a single device to integrate multiple functions while delivering superior performance. The digital revolution is making possible a continuous stream of innovations in consumer electronics and delivering new and exciting entertainment products that are changing the way we live. How we experience sight and sound is being changed dramatically by our core technology and that technology will enable many new electronics products and applications in the future. This will continue to transform our everyday lives-witness the impact of cellular phones, TiVo and automotive navigational systems.

## Channels to Market

ESS has a proven track record of introducing exciting digital entertainment products to our customer base. Our reputation for ramping volume and excellent customer service allows our customers to bring new designs to market. We currently have over 100 field application engineers in Asia giving us one of the largest presences in that important sales region.

Our geographic focus has been diversified in recent years through the addition of customers in Japan, Korea, Singapore, South American and Eastern Europe. As a result, our customer base has become increasingly diversified.

<b>ESS Customers</b>					
<b>USA</b>	<b>China</b>	<b>Korea</b>	<b>Japan</b>	<b>Taiwan</b>	<b>Europe and ROW</b>
Apex Digital	Easttech	Anam	Alpine	GBM	Philips
Audiovox	BBK	BlueTek	Clarion	Mustek	Philips APM
Cisco	ChangHong	Daewoo	Denon	Quanta	Linn Systems
Creative Labs	Malata	DMT	Fujitsu-Ten	Sampo	Pace
GE	Orient Power	LGE	JVC	Ya-Shin	Thomson
Motorola	Shinco	RMC	Kenwood		Vestel
Polaroid	Skyworth	Samsung	Panasonic		Gradiente
TiVo	TCL		Sanyo		CCE
	Webook		Sharp		
	Humax		Sony		
			Totori-Sanyo		
			Toshiba		

### Technology Leadership

ESS began as a supplier of digital audio chips for the toy market in 1984, long before digital technology and consumer electronics were the “hot” markets. We have carried forward and enhanced that technical expertise to our current product offerings and are well positioned to leverage, enhance and diversify this technology and our employee base into many exciting new market segments in the future.

Our workforce is extremely talented and ESS employs 37 PhDs in various technical capacities. Over 70% of our 500-plus employees have technical college-level degrees in fields directly related to hardware or software. That is an exceptionally strong technical base, even for a company based in Silicon Valley. ESS owns 75 U.S. patents and holds an additional 100 patents that are pending. These patents encompass the areas of image processing, video processing, Class-D amplifiers; audio analog to digital and digital to analog; silicon RFs; demodulator DACs; high-speed RF; and power management.

### Third Party Manufacturing

ESS is recognized by its customers and by its suppliers for best-in-class manufacturing capabilities. We have a 20-year history of driving costs out of our silicon products that commands worldwide respect. Quality and cost are a way of life at ESS that starts with a “smart” design philosophy and ends with “pay attention to details” execution. Our customers know we are concerned with their competitive position and know we can supply volume when they want it. Consumer-oriented companies must be able to ramp up volume when the market requires it. We have decades-long relationships with the top foundries and assembly houses and our volume allows us access to low-cost, flexible capacity.

## New Markets, New Technologies — A Proven Approach

Diversifying into new markets that are experiencing rapid growth is something ESS has done successfully several times in the company's history. We first obtained a number one market position in 1989 with sound chips for the toy industry, followed by leading market positions in audio accelerator chips for PCs in the mid-1990's. More recently, ESS has held number one market positions in the markets for VCD chips, DVD chips, and in the market for digital video chips as a whole.

Most recently we have diversified into image sensor and processor chips for the cellular phone market. The worldwide market for cameraphones is exploding, growing from 150 million units last year to the most recent forecast for 2005 of as many as 250 to 300 million units. We plan to introduce even higher performance, lower cost, 1.3 MPEG sensors later this year, utilizing advanced proprietary circuit design and fabrication techniques. By the end of 2005, we anticipate that our cameraphone solutions will be well on their way to becoming a core business for ESS.

We also diversify and grow by focusing on higher margin sub-segments of larger markets. For example, ESS has successfully entered the digital automotive market for DVD products and now holds a leading position in this market. In addition, we have begun work with a large European supplier of automotive components to provide a DVD-based navigational system planned to be sold to major automotive manufacturers worldwide.

Today, ESS' DVD products have been designed into most of the major automotive DVD manufacturers worldwide. These manufacturers include Phillips, Fujitsu – Ten (a joint venture between Fujitsu and Toyota), Sanyo, Alpine, Clarion, Kenwood, Panasonic, Sony, and Orient Power.

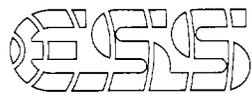
## The Future

Looking to the future, ESS believes that the current trend of digital advances in consumer entertainment will continue to grow and we believe this trend will continue to open up exciting opportunities in new markets for ESS.

Our strong position in the digital video market, the products planned for introduction in the coming months, combined with the significant opportunities in cameraphones will enable us to continue to be a leading player in the consumer digital entertainment and digital imaging markets in 2005 and into the future.

ESS TECHNOLOGY, INC. 2004 FORM 10-K

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

Form 10-K

(Mark One)

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

For the fiscal year ended December 31, 2004

or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 0-26660

**ESS Technology, Inc.**

(Exact name of Registrant as specified in its charter)

**California**

(State or other jurisdiction of  
incorporation or organization)

**94-2928582**

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

**48401 Fremont Blvd., Fremont, California**

(Address of principal executive offices)

**94538**

(Zip Code)

Registrant's telephone number, including area code:

(510) 492-1088

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

None

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

**Common Stock, no par value**

(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  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 the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

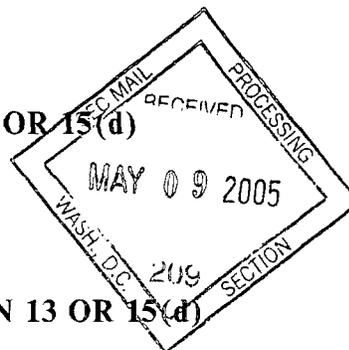
Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes  No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant, computed by reference to \$10.71, the closing price of the registrant's common stock as reported on the NASDAQ National Market on June 30, 2004, the last business day of the registrant's most recently completed second fiscal quarter, was approximately \$347,397,250. Shares of common stock held by each officer and director and by each person who owned 5% or more of the registrant's outstanding common stock on that date have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 22, 2005, registrant had outstanding 39,707,473 shares of common stock.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the Proxy Statement for Registrant's 2005 Annual Meeting of Shareholders are incorporated by reference in Part III of this Report.



**ESS TECHNOLOGY, INC.**  
**2004 FORM 10-K**  
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*Certain information contained in or incorporated by reference in this Report contains forward-looking statements that involve risks and uncertainties. The statements contained in this Report that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding our expectations, beliefs, intentions or strategies regarding the future. All forward-looking statements included in this Report are based on information available to us on the date hereof, and we assume no obligation to update any such forward-looking statements. Our actual results could differ materially from those discussed herein. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in "Factors That May Affect Future Results," in the section captioned "Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this Report. References herein to "ESS," "the Company," "we," "our," "us" and similar words or phrases are references to ESS Technology, Inc. and its subsidiaries, unless the context otherwise requires. Unless otherwise provided in this Report, trademarks identified by Registered Trademark- and -TM- are registered trademarks or trademarks, respectively, of ESS Technology, Inc. or its subsidiaries. All other trademarks are the properties of their respective owners.*

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## PART I

### Item 1. *Business*

We design, develop and market highly integrated analog and digital processor chips, imaging sensor chips, digital amplifiers, and camera lens modules. Our digital processor chips are the primary processors driving digital video and audio devices, including DVD, Video CD ("VCD"), consumer digital audio players, and digital media players. Our imaging sensor chips utilize advanced Complimentary Metal Oxide Semiconductor ("CMOS") sensor technology to capture an image for cellular camera phone applications. Our digital amplifiers boost the digital sound to a level required to drive loudspeakers, in such applications as DVD and CD players, home theater systems, audio receivers, boom boxes and television sets. Our camera lens modules provide camera capabilities to electronic devices such as cellular phones and Personal Digital Assistants ("PDAs"). We have also developed and marketed encoding processors to address the growing demand for digital video recorders ("DVRs") and recordable DVD players. We believe that multi-featured DVD, DVR and recordable DVD players will serve as a platform for the digital home system ("DHS"), integrating various digital home entertainment and information delivery products into a single box. We are also a supplier of chips for use in modems, other communication devices, and PC audio products. Our chips use multiple processors and a programmable architecture that enable us to offer a broad array of features and functionality. We focus on our design and development strengths and outsource all of our chip fabrication and assembly as well as the majority of our test operations.

We market our products worldwide through our direct sales force, distributors and sales representatives. Substantially all of our sales are to customers in China, Hong Kong, Taiwan, Japan, Korea, Turkey and Singapore. We employ sales and support personnel located outside of the United States in China, Taiwan, Hong Kong, Korea and Japan to support these international sales efforts. We expect that international sales will continue to represent a significant portion of our net revenues. In addition, substantially all of our products are manufactured, assembled and tested by independent third parties in Asia. We also have a number of employees engaged in research and development efforts outside of the United States. There are special risks associated with conducting business outside of the United States. See Item 7, "Factors That May Affect Future Results — We have significant international sales and operations that are subject to the special risks of doing business outside the United States."

We were incorporated in California in 1984 and became a public company in 1995. On June 9, 2003, we acquired 100% of the outstanding shares of Pictos Technologies, Inc., a Delaware corporation ("Pictos"). On August 15, 2003, we acquired 100% of the outstanding shares of Divio, Inc., a California corporation ("Divio"). See Note 3, "Significant Business Combinations," to the consolidated financial statements in Item 8 of this Report.

### **Industry Background**

The conversion of analog to digital technology is creating a revolution in audio and video consumer electronics. Digital technology continues to improve the consumer entertainment experience with such products as large screen televisions, multi-featured DVD players, home theater systems, navigational systems, digital still cameras, camera enabled cellular phones, and digital camcorders. Technology advancements have enhanced the clarity, color, sound, functionality and convenience of consumer entertainment products. In particular, the transition from analog to digital formats has allowed audio and video data to be compressed with little or no perceptible audio and image degradation, improving storage and transmission efficiency. Digital formats provide users with several benefits, including greatly expanded content selection, accelerated transmission of video and audio content, random access to data, superior editing capabilities and enhanced security features such as protection against unauthorized copying.

The television, the telephone and the personal computer ("PC") have emerged as the three principal systems that manage digital entertainment and information. The television and the PC are the principal devices for viewing and manipulating digital content. Digital Set-Top Boxes, DVD players and game consoles connected to televisions are emerging as the principal platforms for viewing and listening to entertainment,

while PCs remain the principle platform for storing, and manipulating data and accessing the internet. The cellular phone is emerging as the principal mobile device for viewing and transmitting digital content. However, because of size limitations for screens and keypads other mobile devices such as PDAs, MPEG Audio Players ("MP3s"), and portable DVD players also enjoy sizable end markets.

Increasing advances in semiconductor technology are allowing digital products to converge, resulting in cost savings and added convenience for consumers. At the same time, advances in communication allow better distribution of information and entertainment content and provide opportunities for further development of multimedia products. As digital processing and transmission technology improves, we believe additional entertainment products will continue to be introduced.

Some of the more significant digital entertainment products available today include:

- *DVD Players.* DVD players provide significantly higher quality playback than is possible with VCR or VCD technology through the use of Motion Picture Experts Group ("MPEG") 2 and MPEG4 video decoding and high quality digital audio technologies.
- *Video CD ("VCD") Players.* VCD players are music CD players that have been modified to display video on a television and typically sell for less than a low end VCR. VCD offers quality comparable to VCR, but is limited to approximately 73 minutes of video information, using an MPEG1 format standard for compression. The VCD market is divided into the standard VCD market, and the subsequently developed super VCD ("SVCD") market. VCD is popular in many developing countries while SVCD is almost exclusively sold in China.
- *Digital Set-Top Boxes ("STBs").* Digital STBs enable subscriber-based television through cable, terrestrial broadcast, digital subscriber line, or DSL, and satellite transmissions.
- *Digital Video Recorders ("DVRs").* DVRs provide local hard disk memory storage and enable storage and playback of live video streams on a real-time basis. DVRs can be in the form of standalone players or be incorporated into digital STBs to enhance their functionality.
- *Recordable DVD Players.* Recordable DVD players add high quality video and audio recording capabilities to the DVD disc through the addition of a writable optical drive.
- *Consumer Digital Audio Players.* Consumer digital audio players include multi-channel surround sound products with movie theater quality sound systems. Our chips incorporate this digital audio processor as components of a home entertainment system.
- *Digital Amplifiers.* Consumer video and audio players require an amplifier to boost the sound signal to drive loudspeakers in automobiles, homes and mobile devices. Our chips convert the digital sound into Pulse Width Modulation ("PWM") digital pulses enabling them to be directly and digitally amplified without sacrificing sound quality while drastically reducing size and power requirements. Our digital amplifier chips interface directly with digital audio sources such as DVD and CD players, surround sound systems, audio receivers, boom boxes and televisions sets.
- *Camera Enabled Cellular Phones.* Camera enabled cellular phones use a lens module made up of a lens, CMOS image sensor, housing and flex cable to enable cellular phones to have image capture and processor capabilities and display those images on the cell phone display or transmit them to someone else. Camera enabled cell phones may use either a stand-alone image processor chip or a broadband processor chip to process the image.

As digital entertainment products converge and become increasingly complex, makers of these consumer electronic devices increasingly require sophisticated semiconductor chips that are multi-featured, adaptable and cost-effective. Companies, such as ESS, which provide a highly integrated chip with multiple processors and a programmable architecture to address the needs of the latest entertainment products, are well positioned to benefit from growth in these markets.

## **Our Solution**

Our chips are the primary processors driving multi-featured video, audio and imaging products, and incorporate the latest video standards including MPEG1, MPEG2 and MPEG4. Our chips use multiple processors and a programmable architecture that enable us to offer a broad array of features and functionality. Our decoder chips play DVD, VCD, MPEG4, DivX, CD, MP3, WMA (Windows media audio) and other video formats and support high quality audio formats, including full-featured karaoke, Dolby Digital, DTS Surround, DVD audio and Sony's Super Audio CD ("SACD") audio. Our decoder chips also allow consumers to view digital photo CDs with the music slideshow feature on their televisions.

We also have MPEG2 and MPEG4 encoder chips that provide the digital recording function that enable DVD players to become DVR and recordable DVD players. We believe that multi-featured DVD, DVR and recordable DVD players will serve as a platform integrating various digital home entertainment and information delivery products into a single box, which we call the Digital Home System ("DHS"). Our digital encoding products include a digital camcorder, a DVR and a recordable DVD player.

We also supply digital image processors and image sensors used to manufacture camera enabled cellular phones. Our CMOS image sensors integrate several functions including image capture, image processing, color processing and the conversion and output of a fully processed image or video stream. Our image processors can be connected directly to a CMOS sensor, process the video information in real time, compress the captured image to a flash memory, and interface to a LCD or micro display. We are also a supplier of chips for use in PC audio products and modems and other communication products.

We believe we have the following competitive advantages:

- Our highly programmable chips offer a flexible architecture, allowing us to efficiently add new capabilities that address advances in entertainment technologies and enable our customers to accelerate their time to market;
- Our digital processor chips offer a broad array of advanced features and functionality;
- Our MPEG2 and MPEG4 encoder chips offer very high video and audio recording quality for DVR, recordable DVD, and SD camcorder products;
- Our image sensor chips have a CMOS process and architecture that enable low light sensitivity at small lens sizes;
- Our large workforce of engineers (over 50% of our employees), together with our team of over 100 sales and support personnel worldwide, are continually developing sophisticated solutions and enhancing feature sets custom tailored to our customers' evolving needs;
- We work closely with our customers to develop cost-effective design solutions incorporating our high-functionality chips that enable our customers to lower their total manufacturing cost;
- We work closely with our suppliers to improve yields, ensure capacity and strengthen supply chain reliability, thereby continuously reducing the manufacturing cost of our products and improving the quality and reliability of our products; and

- Our longstanding strategic relationships in China position us to capture additional business as consumer electronics manufacturing continues to grow in China.

## Our Strategy

Our objective is to become a leading supplier of digital semiconductor chips to the consumer electronics entertainment product market. To achieve our objective, we are pursuing the following strategies:

*Leverage Our Proprietary Technology.* Our chips are based on a programmable architecture that uses multiple processors working independently, which provides us with several advantages:

- *Multiple Processors.* We believe our design approach of using multiple processors allows us to provide efficient, cost-effective solutions for our customers. We believe this design approach will allow us to develop digital entertainment processors that integrate multiple functions on a single chip in order to reduce cost and time-to-market while producing smaller products with reduced power consumptions.
- *Highly Programmable Chips.* Our highly programmable chips enable us to add or modify features more quickly than competitors whose chips are less programmable. In the past we have successfully added significant features such as MP3 and Kodak picture CD capabilities through software enhancements without the need for hardware redesign and refabrication. This programmability also enables us to tailor our chips to meet our customers' specific needs by making minor modifications that allow our customers to enhance features and improve time-to-market with new products.
- *Continuously Introduce New Products and Features To Drive Growth.* We focus our research and development efforts on products and features we believe are going to drive demand in the marketplace for consumer electronic entertainment products. We work closely with our various Original Design Manufacturers ("ODMs") and Original Equipment Manufacturers ("OEMs") customers to identify those products and features.
- *Single Chip DVD Decoder Solution.* We are continuing to integrate DVD functionality, enhance the feature set and reduce the cost of our single-chip DVD player solution that integrates the front-end servo capability with the high performance back-end DVD processor. This chip targets the low cost DVD player market and is intended to entice large volume manufacturers with an attractive selling price.
- *MPEG4 DVD and VCD Decoder Solutions.* We recently introduced new families of MPEG4 playback chips for the DVD and VCD markets to take advantage of MPEG4's greater compression rates to deliver multimedia content over broadband connectivity and to increase the amount of multimedia content archived on a given amount of optical or magnetic storage.
- *State of the Art Codec Solutions for the Recordable DVD.* We recently introduced integrated DVD encoder and decoder ("codec") into a single chip for both DVR and recordable DVD players.
- *Digital Amplifier Solution.* We recently introduced our class-D multi-channel digital amplifier chip for home theater applications. The chip provides eight channels of high performance processing for digital audio amplification and is specifically designed to work with our video chips to provide a low-cost, totally digital DVD receiver solution.
- *Develop the Next Generation Processor Chip for the DHS.* We are developing the next generation DVD chip that will incorporate many new advanced capabilities. We are designing this chip with a third independent processor to enable us to support the following standard operating systems: Linux, PocketPC (formerly WinCE) and VxWorks. By supporting standard operating systems, we can leverage third-party software applications, such as standard web browsers, and third-party software drivers to support printers, digital cameras and other consumer electronics products. The development of this product includes network functionality, which may be incorporated into other DVD products.
- *Video Graphic Adaptor ("VGA") Resolution 1.3 and 2.0 Megapixel Image Sensors.* We are continuing to develop our expertise in mixed-signal implementation, advanced pixel design, feature

integration, and manufacturing processes and controls. We are continuing to develop improved quality, cost-down VGA resolution products and enhancing our current 1.3 Megapixel product for the cellular phone market and are working on the development of future generations of higher Megapixel image sensor and our recently introduced 2.0 Megapixel sensor for the cellular camera phone market.

*Leverage Expertise Across Multiple Mass Market Applications.* We intend to continue to focus on the DVD, VCD, digital camcorder, and cellular camera phone market applications. We believe additional market application will emerge as digital media technology and products converge. We plan to share and leverage our expertise in audio, video and imaging technology to strengthen and broaden our product offerings in existing markets, to expand into other existing digital media markets and to introduce new products into new markets as they emerge in the field of digital entertainment. Past examples of such expansion include, digital media players, MP3 players, boom boxes, audio receivers, digital television products, and cellular camera phones.

*Offer a Low-Cost Total Solution.* Our engineers have significant system design expertise at the consumer product level. We design our chips to either work with lower-cost components or to decrease the number of components in our customers' products to lower their total manufacturing cost. We also work in close collaboration with our customers in their product development processes to reduce the cost of our semiconductor products. By helping our customers design their products using our chips, we can lower their total bill of material. We believe this approach enables us to provide our customers with a low-cost total solution and drive up total demand by reducing the cost to consumer.

*Leverage Our Relationships with Low-Cost OEMs and ODMs to Capture Additional Worldwide Market Share.* We believe that consumer electronics companies will continue to move contract manufacturing to lower-cost manufacturers located in Asia. We are a leading supplier of video system processor chips to OEMs and to ODMs, located in Asia. Our customers in Asia manufacture and sell DVD and VCD players both as contract manufacturers for well-known brand labels and under their own brands.

*Expand Relationships with Leading Consumer Electronics Companies.* We are increasing our sales efforts to, and actively pursuing key design wins with, leading consumer electronics companies located in Asia, Europe and South America.

*Employ Our Software Expertise to Develop New Technologies.* More than 50% of our employees are engineers, a significant number of whom are software engineers. We have a diversified base of technologies and a strong track record for developing new technologies in-house. We intend to leverage our software expertise to continue to develop new technologies and add features to our products.

*Leverage Our Relationships with Large Suppliers to Be One of the Low-Cost Providers.* We believe consumer electronics markets are so competitive and rapidly changing that a manufacturer of fabless semiconductor products must focus on being one of the low-cost providers of digital media chips in the world. To do so, our products must have a relatively small die size and achieve high yields throughout the manufacturing process. We utilize long-standing and close relationships with some of the largest third party fabrication companies and assemblers in the world. We are one of the larger customers of many of these companies.

*Pursue Acquisitions of Complementary and Advanced Technologies.* We have in the past acquired and will continue to consider acquiring complementary technologies or product lines to enhance our own product offerings and to accelerate our time to market.

*Pursue Licenses of Complementary Technologies.* We have in the past licensed and will continue to consider licensing complementary technologies or product lines to enhance our own product offerings and to accelerate our time to market.

## **Products**

We offer an array of DVD decoder chips, Video CD chips, image sensor chips, image processor chips, DVD encoder chips, consumer digital audio chips, communication chips and PC audio chips.

*DVD Decoder Chips.* Our customers can choose from a wide variety of DVD chips with various feature combinations and price points. We provide highly integrated chips using multiple processors and a programmable architecture that enables us to offer a broad array of features and functionality. Our DVD chips enable consumers to play DVD, CD, VCD, DivX, MP3, JPEG, WMA (Windows Media Audio), DVD audio, full-featured karaoke and other audio and video formats. Our DVD chips support high quality video formats such as Progressive Scan, and high quality audio formats, including Dolby Digital, DTS Surround, and DVD audio. These chips can also be used as the primary processor in digital media players. With the popularity of digital media such as Smart Media, Compact Flash, Memory Stick and Secure Digital, there is a growing demand for digital media players that incorporate digital media interface and thereby allow consumers to view digital media content on their consumer electronics devices. We offer both MPEG2 and MPEG4 decoding products and various levels of integrated products incorporating such capabilities as TV encoder, RF, and servo controller.

*Video CD Chips.* Our VCD products consist of both standard VCD chips and an enhanced version known as SVCD chips. Our customers can choose from a variety of VCD and SVCD chip products, each with various feature combinations and price points. Our VCD chips include an MPEG1 video and audio system decoder. They deliver full-screen, full-motion video at 30 frames per second with selectable CD-quality audio. The video quality of SVCD is roughly comparable to that of a high-quality VCR, and VCDs have slightly lower quality video. These chips are used in relatively low-cost VCD players that are sold primarily in China, South East Asia, India and other emerging countries.

*Image Sensor Chips.* Our CMOS image sensors provide excellent low light sensitivity for a given lens size. Our VGA and Megapixel products are used in camera enabled cellular phones.

*Image Processor Chips.* We also offer image processor chips that perform the image processing, color processing and the conversion and output of a fully processed image or video stream. These products are used in camera enable cellular phones.

*DVD Encoder Chips.* We are leveraging our existing DVD relationships with our customers to offer our DVD encoder chips to enable them to build DVR or recordable DVD players to broaden their products range. We recently introduced our Vantage II product, an integrated encoder and decoder solution in a simple package. A recordable DVD can record the video and audio signal to an optical drive where the content is stored on a DVD disk while a DVR records the video and audio signal to a magnetic drive (typically referred to as a hard drive) with video editing, instant replay and time delay features. We offer both MPEG2 and MPEG4 encoding products as well as non-integrated and integrated encode and decode versions of our chips.

*Consumer Digital Audio Chips.* With the advancement in the high quality audio formats such as Dolby Digital, Dolby ProLogic, Dolby ProLogic II, Dolby Ex, Dolby Virtual Speaker, DTS Surround, DTS ES, MP3, WMA, DVD audio and Sony's SACD audio, our consumer digital audio chips enable consumer electronics manufacturers to build high quality, low cost 5.1 channel audio video receivers ("AVR") that compliment the existing installed base of DVD players. Our newly introduced class-D multi-channel digital audio amplifier chip further enables us to deliver a total solution for the home theater systems.

*Communication Chips.* Internet-related applications, such as voice e-mail, internet radio and audio home pages and news-on-demand, are increasing the demand for integrated audio and computer fax, modem and network functions on the PC. Our modem chips comply with worldwide modem standards and have various feature combinations and price points. We are no longer emphasizing this business and expect that sales of modem chips will continue to decline.

*PC Audio Chips.* Our PC audio chips enable PC manufacturers to provide audio capabilities on add-in sound cards and directly on the motherboards of desktop and notebook computers. We were the pioneers in this market by offering the first single-chip PC audio solution with high-quality sound reproduction. We provide PC audio chips with various feature combinations and price points, but we are no longer emphasizing this business and expect that sales of PC audio chips will continue to decline.

Sales of these products accounted for the following percentages of our net revenues in the past three years:

	Percentage of Net Revenues for Years Ended December 31,		
	2004	2003	2002
DVD.....	54%	40%	59%
VCD.....	27%	38%	31%
Digital imaging.....	6%	8%	—
Recordable.....	3%	6%	—
Royalty.....	8%	3%	—
Other.....	2%	5%	10%
Total.....	<u>100%</u>	<u>100%</u>	<u>100%</u>

### Technology and Research and Development

Our DVD decoder chips incorporate a digital signal processor (“DSP”) and a reduced instruction set computer processor (“RISC”). The two processors work in parallel on separate tasks, which allows us to build a highly integrated chip. In 2001, we integrated a TV encoder into our DVD decoder engine (labeled the Vibratto family of products) to cut down the number of components required to build a DVD player. In 2003, we enhanced the decoder engine to handle MPEG4 technology. The enhanced architecture formed the basis of all our current DVD product offerings, including the integrated front-end, back-end or single chip decoder chip called the Vibratto II, and our newest integrated encoder/decoder chip called the Vantage II.

We are developing the next generation DVD chip that will incorporate many new advanced capabilities. We are designing this chip with a third independent processor to enable us to support the following standard operating systems: Linux, PocketPC (formerly WinCE) and VxWorks. By supporting standard operating systems, we can leverage third-party software applications, such as standard web browsers, and third-party software drivers to support printers, digital cameras and other consumer electronics products. We believe this product will evolve into a second intelligent and commutative platform in the home and share a home networking backbone and files with the PC.

Our digital imaging chips are manufactured using the CMOS process, the most widely used method of producing modern integrated circuits and thus also the lowest cost method. Recent advances in manufacturing processes and design techniques have led to increased performance and quality. Our products are produced by a proprietary CMOS process and have a unique architecture and design that produces excellent low light sensitivity at comparative lens sizes. Our digital imaging chips are highly integrated and fully programmable, allowing us to quickly add features and adapt the chip to each customer’s unique requirements.

In the digital media marketplace we must continually design, develop and introduce new products that take advantage of market opportunities and address emerging technical standards. We intend to leverage our base of design expertise, analog, digital and mixed-signal design capabilities and process technologies, and software and systems expertise to continue to develop audio, video imaging and communication solutions for the consumer electronics marketplace.

Our design environment is based on workstations, dedicated product simulators, system simulation with hardware and software modeling, and a high-level, design-description language. We invest regularly in new advanced equipment and software tools and we intend to maintain and enhance our library of core cells.

On research and development activities, we spent approximately \$37.5 million during 2004, \$33.2 million during 2003, and \$27.0 million during 2002, excluding charges of \$2.7 million in 2003 for acquired in-process research and development.

## Customers

We sell our chips to distributors and OEMs of DVD, VCD, MP3, digital camcorders, consumer digital audio players, digital media players, cellular phones, modem and PC products. Our customers manufacture and sell these products both as contract manufacturers for well-known brand labels and under their own brands. As a result, our chips can be found in a diverse array of DVD, VCD, cell phone, and PC products on store shelves in the United States, Asia and Europe.

A substantial portion of our net revenues have been derived from sales to a small number of our customers. Sales to our top five end-customers accounted for approximately 42% of our net revenues in 2004 compared to 34% of our net revenues in 2003. ATLM, one of our top end-customers, accounted for approximately 15% and 12% of our net revenues for 2004 and 2003, respectively. Rikai, another one of our top end-customers, accounted for approximately 7% and 11% of our net revenues for 2004 and 2003, respectively. No other end-customers accounted for more than 10% of our net revenues during 2004 and 2003. Information on net sales from external customers and long lived assets attributable to our geographic regions is included in Note 13, "Business Segment Information and Concentration of Certain Risks," to the consolidated financial statements in Item 8 of this Report.

## Sales and Distribution

We market our products worldwide through our direct sales force, distributors and sales representatives. We have sales and support offices in the United States, China, Hong Kong, Taiwan, Japan and Korea.

We believe customer service and technical support are important competitive factors in selling to major customers. Sales representatives and distributors supplement our efforts by providing additional customer service at the local level. We believe close contact with our customers not only improves the customer's level of satisfaction, but also provides important insight into future market direction.

International sales comprised approximately 99% of our net revenues in 2004, 2003 and 2002. International sales are based upon destination of the shipment. Our international sales in 2004, 2003 and 2002 were derived primarily from Asian customers who manufacture DVD, VCD, cameras, cell phones, communications and PC audio products. Companies in Asia manufacture a large percentage of the worldwide supply of these products. We believe a significant portion of our chip products are incorporated into consumer electronic devices that are ultimately sold into the United States. We have direct sales personnel and technical staff located in Hong Kong, Taiwan, China, Korea and Japan where significant portions of our sales have historically been derived. Our products are also sold internationally through distributors and sales representatives located in Hong Kong, Korea, Japan and Singapore. For fiscal year 2004, net sales to customers (including distributors) in each region as a percentage of our total net sales were: Hong Kong 53%, Taiwan 15%, Japan 9%, China 6%, Korea 5%, Turkey 4%, and Singapore 4%. All of our international sales are denominated in U.S. dollars. Our business is usually seasonal due to the Christmas holiday season in America and Europe, and the Chinese New Year season in China and Asia. Our sales representatives and distributors are not subject to minimum purchase requirements and can discontinue marketing any of our products at any time. In addition, certain of our distributors have rights of return for unsold product and rights to pricing allowances to compensate for rapid, unexpected price changes.

We rely on our largest distributor, Dynax Electronics (HK) ("Dynax Electronics"), for a significant portion of our revenues. Sales through Dynax Electronics were approximately 51%, 63% and 57% of our net revenues in 2004, 2003 and 2002, respectively. Dynax Electronics is not subject to any minimum purchase requirements and can discontinue marketing any of our products at any time. In addition, Dynax Electronics has rights of return for unsold product and rights to pricing allowances to compensate for rapid, unexpected price changes, therefore we do not recognize revenue until Dynax Electronics sells through to our end-customers.

## **Manufacturing**

We contract with third parties for all of our fabrication and assembly as well as the majority of our test operations. This manufacturing strategy enables us to focus on our design and development strengths, minimize fixed costs and capital expenditures and gain access to advanced manufacturing capabilities. Semiconductor manufacturing consists of foundry activity where wafer fabrication takes place, as well as chip assembly and testing activities. We use several independent foundries that use advanced manufacturing technologies to fabricate our chips. Substantially all of our products are manufactured by Taiwan Semiconductor Manufacturing Company ("TSMC"), which has manufactured products for us since 1989, United Microelectronics Corporation ("UMC"), which is also located in Taiwan, and other independent Asian foundries. Most of our products are currently fabricated using both mixed-signal and logic CMOS 0.25 to 0.18 micron process technologies. Manufacturing requires raw materials and a variety of components to be manufactured to our specifications. We depend on a limited number of suppliers to obtain adequate supplies of quality raw materials on a timely basis. We do not generally have guaranteed supply arrangements with our suppliers, and we depend on foundries such as TSMC, UMC and others for foundry capacity to produce products of acceptable quality and with acceptable manufacturing yields in a timely manner. As of December 31, 2004, we believe we have sufficient foundry capacity to meet our forecasted needs for the next 12 months.

After wafer fabrication by the foundry, all of our semiconductor products and lens modules are assembled and tested by third-party vendors, primarily Advanced Semiconductor Engineering and Amkor Technology. We have internally designed and developed our own test software and purchased certain test equipment, which are provided to our test vendors. See Item 7, "Factors That May Affect Future Results — Our products are manufactured by independent third parties."

## **Competition**

Our markets are intensely competitive and are characterized by rapid technological change, price reductions and rapid product obsolescence. Competition typically occurs at the design stage, where the customer evaluates alternative design approaches that require integrated circuits. Because of shortened product life cycles, there are frequent design win competitions for next-generation systems. We expect competition to remain intense from existing competitors and from companies that may enter our existing or future markets. In general, product prices in the semiconductor industry have decreased over the life of a particular product. The markets for our products are characterized by intense price competition. As the markets for our products mature and competition increases, we anticipate that prices for our products will continue to rapidly decline.

Our existing and potential competitors consist of medium and large domestic and international companies, many of whom have substantially greater financial, manufacturing, technical, marketing, distribution and other resources, greater intellectual property rights, broader product lines and longer-standing relationships with customers than we have. Our competitors also include a number of smaller and emerging companies.

Our principal competitors in the DVD market include MediaTek Incorporation ("MediaTek"), Zoran, Sony, Panasonic, STMicroelectronic, LSI Logic, Sunplus and Cirrus Logic. In addition, we expect that the DVD platform will face competition from other platforms including STBs, as well as multi-function game boxes. Some of our competitors may supply chips for multiple platforms, such as LSI Logic and STMicroelectronics, each of which makes chips for both DVD players and STBs. We also face strong competition from Sunplus, a competitor in the VCD and DVD market. Our competitors in the digital imaging market include Omnivision, as well as other emerging companies.

Many of our current and potential competitors have longer operating histories as well as greater name recognition than we have. Any of these competitors may be able to respond more quickly to new or emerging technologies and changes in customer requirements and to devote greater resources to the development, promotion and sale of their products than we can.

In addition, as the market for the digital home system develops, a number of companies with significantly greater resources than us could attempt to increase their presence in the market by acquiring or forming strategic alliances with our competitors resulting in increased competition to us. In the past years, LSI Logic acquired C-Cube Microsystems; Cirrus Logic acquired LuxSonor Semiconductors; Oak Technology acquired TeraLogic; and Zoran acquired Oak Technology.

### **Proprietary Technology**

We rely on a combination of patents, trademarks, copyrights, trade secret laws and confidentiality procedures to protect our intellectual property rights. As of December 31, 2004, we had 81 patents granted in the U.S., and at least 84 applications on file with the United States Patent and Trademark Office (USPTO). In addition, as of December 31, 2004 we had approximately 15 corresponding foreign patents granted and 59 applications pending. We intend to seek further U.S. and international patents on our technology whenever possible.

The semiconductor industry is characterized by vigorous protection and pursuit of intellectual property rights or positions, which have resulted in significant and often protracted and expensive litigation. As of December 31, 2004, there was one intellectual property litigation matter pending against us which we are vigorously defending and believe will not have a material adverse effect on our business. See Item 3, "Legal Proceedings."

We currently license certain of the technology we use in our products, and we expect to continue to do so in the future. We have, in the past, granted limited licenses to certain of our technology, some of which have expired. See Item 7, "Factors That May Affect Future Results — We may not be able to adequately protect our intellectual property rights from unauthorized use and we may be subject to claims of infringement of third-party intellectual property rights."

### **Backlog**

Our products are generally sold pursuant to standard purchase orders, which are often issued only days in advance of shipment and are frequently revised to reflect changes in the customers' requirements. Product deliveries are scheduled when we receive purchase orders. Generally, these purchase orders allow customers to reschedule delivery dates and cancel purchase orders without significant penalties. For these reasons, we believe that our backlog, while useful for scheduling production, is not necessarily a reliable indicator of future revenues. Delays in delivery schedules and/or a reduction of backlog during any particular period could have a material adverse effect on our business and results of operations. As of December 31, 2004, our backlog amounted to approximately \$19.3 million.

### **Employees**

As of December 31, 2004, we had 536 full-time employees, including 191 in research and development, 207 in marketing, sales and support, 74 in finance and administration and 64 in manufacturing. Over 50% of our employees are engineers, and a significant number of them are software engineers. Our future success will depend, in part, on our ability to continue to attract, retain and motivate highly qualified technical and management personnel, particularly highly-skilled semiconductor design personnel and software engineers involved in new product development, for whom competition can be intense, particularly in the Silicon Valley. Our employees are not represented by any collective bargaining unit, and we have never experienced a work stoppage. We believe our relationship with our employees is good.

### **Available Information**

Our website address is <http://www.ESSTECH.com>. We make available free of charge, on or through our website, our annual, quarterly and current reports, and any amendments to those reports, as soon as reasonably practicable after electronically filing such reports with the Securities and Exchange Commission (the "SEC"). In addition, our Code of Ethics as well as the respective charters for the Audit, Compensation and

Corporate Governance and Nominating Committees of our Board of Directors are available on our website. Information contained on our website is not part of this Report.

### Executive Officers of the Registrant

The following table sets forth certain information regarding our current executive officers:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Fred S.L. Chan .....	58	Chairman of the Board of Directors
Robert L. Blair .....	57	President, Chief Executive Officer and Director
James B. Boyd .....	52	Chief Financial Officer, Senior Vice President and Assistant Secretary

*Fred S.L. Chan* has been a director since January 1986 and has served as Chairman of the Board since October 1992. Mr. Chan is also the Chairman of the Board for Vialta, Inc. and has served in that capacity since September 1999. Mr. Chan served as President and Chief Executive Officer of Vialta from September 1999 to August 2001. Mr. Chan served as our President from November 1985 until October 1996 and from February 1997 to September 1999. He served as our Chief Executive Officer from June 1994 until September 1999. Mr. Chan served as our Chief Financial Officer from October 1992 to May 1995. From 1984 to 1985, Mr. Chan was founder, President and Chief Executive Officer of AC Design, Inc., a VLSI chip design center providing computer aided design (CAD), engineering and other design services. From 1982 to 1984, he was co-founder, President and Chief Executive Officer of CAD/CAM Technology, Inc., a company in the business of computer aided engineering (CAE) systems development. Mr. Chan holds B.S.E.E. and M.S.C. degrees from the University of Hawaii.

*Robert L. Blair* has been our President and Chief Executive Officer since September 1999. Mr. Blair was elected as a director in 1999. Mr. Blair served as our Executive Vice President of Operations and member of the Office of the President from April 1997 to September 1999. From December 1994 to March 1997, he was our Vice President of Operations. From December 1991 to November 1994, he was Senior Vice President of Operations (Software Packaging & Printing Division) of Logistix Corporation, a software turnkey company, and from 1989 to November 1991, he was Vice President and co-owner of Rock Canyon Investments, a real estate development-planning firm in California. From 1986 to 1989, he held various positions at Xidex Corporation, a computer diskette manufacturer, including President and General Manager at XEMAG, a division of Xidex Corporation. From 1973 to 1986, he held several positions including Vice President, High Reliability Operations at Precision Monolithics, Inc.

*James B. Boyd* has been our Chief Financial Officer and Assistant Secretary since August 2000. Mr. Boyd was further elected as a Senior Vice President in 2003. Prior to joining ESS, Mr. Boyd served from 1998 until 2000 as Chief Financial Officer of Gatefield Corporation, a Fremont-based manufacturer of field programmable electronic circuits used in PCs and consumer electronics. From 1997 until 1998, he was Chief Financial Officer of AirMedia, a developer of wireless communications software and from 1996 until 1997, he was Corporate Controller at Farallon Communications, a manufacturer and developer of internet hardware and software products. He has also held senior management positions with Fritz Companies, GTE Sprint Communications and Southern Pacific Companies. Mr. Boyd holds B.S. and MBA degrees from the University of Wisconsin — Madison and a J.D. from Golden Gate University.

The information concerning compliance with Section 16 of the Securities Exchange Act of 1934 is incorporated by reference from the section in the proxy statement for the 2005 Annual Shareholders' Meeting entitled "Compliance under Section 16(a) of the Securities Exchange Act of 1934."

### Item 2. Properties

We own nearly 12 acres of land in Fremont, California, on which we built our two-story, 93,000 square-foot corporate headquarters as well as a 77,000 square-foot building next to our corporate headquarters, 40% of which is currently leased to Vialta, Inc. (our former subsidiary) under a Real Estate Matters Agreement entered into in connection with our spin-off of Vialta. On July 1, 2003, we entered into the First Amendment

to the Amended and Restated Commercial Lease Agreement with Vialta to reduce the size of the Fremont facility subject to the lease and to adjust the rental amount. See Note 14, "Related Party Transactions with Vialta, Inc.," to the consolidated financial statements in Item 8 of this Report.

In addition we own an adjacent 11,000 square-foot dormitory building used to house visitors and guest workers. We also maintain leased office space in various locations. Additionally, we have an approximately 5,000 square-foot warehouse next to our corporate headquarters in Fremont, California.

We are productively utilizing most of the above facilities and we consider the above facilities suitable and adequate to meet our current requirements. There are no liens on any of our owned land and buildings.

### **Item 3. *Legal Proceedings***

On March 12, 2001, we filed a complaint in the U.S. District Court for the Northern District of California (Case No. C01-20208) against Brent Townshend, alleging unfair competition and patent misuse. The complaint seeks specific performance of contractual obligations and declarations of patent misuse, unenforceability, and estoppels against asserting patent rights. All of the claims relate to the refusal of Mr. Townshend to provide us with a license on reasonable and nondiscriminatory terms, as is required by applicable law. The patents relate to the manufacture and sale of high-speed modems. On April 30, 2002, we filed an amended complaint. On September 27, 2002, Townshend filed an answer and counterclaims, alleging patent infringement. We filed our answer to the counterclaims on October 17, 2002, Townshend also filed patent infringement actions against Agere Systems Inc., Analog Devices, Inc., Cisco Systems, Inc., and Intel Corporation, alleging infringement of the same patents. On March 7, 2003, the court issued an order finding that the cases are related and should be tried together. Analog Devices, Inc. has individually settled their claims with Townshend. As of December 31, 2004, the remaining parties were involved with discovery and claim construction proceedings. The estimated trial date is July 2005. We believe we have meritorious claims and intend to pursue them vigorously.

The DVD Copy Control Association (DVD CCA) licenses the CSS anti-piracy system for use in DVD players. The Motion Picture Association of America (MPAA) filed suit in California Superior Court, Los Angeles County (Case No. BC 313276) against us on April 5, 2004, alleging that we had failed to ensure that all of our customers were duly licensed by DVD CCA. The MPAA plaintiffs requested an injunction against future sales to non-licensees, damages of no more than \$100,000, and their attorneys' fees. On June 25, 2004, the MPAA plaintiffs moved for a preliminary injunction against us, seeking to have us enjoined from selling DVD products to customers not licensed by DVD CCA. On July 23, 2004, the court ruled that ESS must follow these revised procedures by selling only to DVD CCA licensees. The suit is proceeding and discovery has begun. The parties are engaged in settlement discussions at present. If those discussions do not yield a settlement, we believe we have meritorious claims and defenses and intend to pursue them vigorously.

On September 12, 2002, following our downward revision of revenue and earnings guidance for the third fiscal quarter of 2002, a series of putative federal class action lawsuits were filed against us in the United States District Court, Northern District of California. The complaints alleged that we and certain of our present and former officers and directors made misleading statements regarding our business and failed to disclose certain allegedly material facts during an alleged class period of January 23, 2002 through September 12, 2002, in violation of federal securities laws. These actions were consolidated and are proceeding under the caption "In re ESS Technology Securities Litigation." The plaintiffs seek unspecified damages on behalf of the putative class. Plaintiffs amended their consolidated complaint on November 3, 2003, which we then moved to dismiss on December 18, 2003. On December 1, 2004, the Court granted in part and denied in part our motion to dismiss, and struck from the complaint allegations arising prior to February 27, 2002. On December 22, 2004, based on the Court's order, we moved to strike from the complaint all remaining claims and allegations arising prior to September 10, 2002. On February 22, 2005, the Court granted our motion in part and struck all remaining claims and allegations arising prior to August 1, 2002 from the complaint. Discovery is now proceeding in the case. A trial date has tentatively been set for early 2007.

On September 12, 2002, following the same downward revision of revenue and earnings guidance for the third fiscal quarter of 2002, several holders of our common stock, purporting to represent us, filed a series of derivative lawsuits in California state court, County of Alameda, against us as a nominal defendant and against certain of our present and former directors and officers as defendants. The lawsuits allege certain violations of the federal securities laws, including breaches of fiduciary duty and insider trading. These actions have been consolidated and are proceeding as a Consolidated Derivative Action with the caption "ESS Cases." The derivative plaintiffs seek compensatory and other damages in an unspecified amount, disgorgement of profits, and other relief. On March 24, 2003, we filed a demurrer to the consolidated derivative complaint and moved to stay discovery in the action pending resolution of the initial pleadings in the related federal action, described above. The Court denied the demurrer but stayed discovery. That stay has since been lifted in light of the procedural progress of the federal action. Discovery is now proceeding in the case. No trial date has been set.

Although we believe that we and our present and former officers and directors have meritorious defenses to both actions and intend to defend these suits vigorously, we cannot predict with certainty the outcome of these lawsuits. Our defense against these lawsuits may be costly and may require a significant commitment of time and resources by our senior management. Management believes that these lawsuits are subject to coverage under our directors' and officers' liability insurance policies, although to date our carriers have reserved their rights with respect to coverage for these claims. In the event of a determination adverse to us, either with respect to coverage or with respect to the underlying merits of the lawsuits, we may incur substantial monetary liability, which could have a material adverse effect on our financial position, results of operations and cash flows.

We are subject to various other legal proceedings and claims, either asserted or unasserted, that arise in the ordinary course of business. In addition, from time to time, we may receive notification from customers claiming that such customers are entitled to indemnification or other obligations from us related to infringement claims made against the customers by third parties. Although the outcome of claims cannot be predicted with certainty, we do not believe that any of these other existing legal proceedings will have a material adverse effect on our financial condition or results of operations.

**Item 4. *Submission of Matters to a Vote of Security Holders***

The Annual Meeting of Shareholders of ESS Technology, Inc. was held on November 5, 2004 in Fremont, California. Of the total of 39,567,848 shares outstanding as of the record date, 37,003,722 were present or represented by proxies at the meeting. The table below presents the results of the election of our board of directors.

<u>Nominee</u>	<u>For</u>	<u>Withheld</u>
Fred S. L. Chan .....	35,014,969	1,988,753
Robert Blair .....	35,043,716	1,960,006
Gary L. Fischer .....	33,577,945	3,425,777
David S. Lee .....	33,371,836	3,631,886
Peter T. Mok .....	33,410,063	3,593,659
Alfred J. Stein .....	33,488,321	3,515,401

The shareholders approved amendments to the 1995 Directors Stock Option Plan to extend the termination date of such plan from 2005 to 2015 and to increase the number of shares of our common stock authorized for issuance to non-employee directors under such plan by 400,000. The proposal received 20,143,409 affirmative votes, 6,934,270 negative votes, and 34,638 abstentions.

The shareholders approved the material terms of the 2004 Management Incentive Plan under Section 162(m) of the Internal Revenue Code. The proposal received 34,064,834 affirmative votes, 2,883,532 negative votes, and 55,356 abstentions.

The shareholders also ratified the selection of PricewaterhouseCoopers LLP as the independent registered public accounting firm of the Company for the fiscal year ending December 31, 2004. The proposal received 33,124,549 affirmative votes, 3,853,411 negative votes, and 25,762 abstentions.

## PART II

### Item 5. *Market for the Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities*

Our common stock has been trading on the NASDAQ National Market under the symbol "ESST" since October 6, 1995. The following table sets forth the high and low sales prices for our common stock as reported by the NASDAQ National Market during the periods indicated.

	High	Low
<b>Fiscal 2004:</b>		
First Quarter ended March 31, 2004 .....	\$19.23	\$12.40
Second Quarter ended June 30, 2004 .....	\$15.90	\$10.28
Third Quarter ended September 30, 2004.....	\$ 9.88	\$ 6.35
Fourth Quarter ended December 31, 2004 .....	\$ 7.75	\$ 6.54
<b>Fiscal 2003:</b>		
First Quarter ended March 31, 2003 .....	\$ 7.09	\$ 5.40
Second Quarter ended June 30, 2003 .....	\$ 9.75	\$ 6.04
Third Quarter ended September 30, 2003.....	\$11.22	\$ 8.54
Fourth Quarter ended December 31, 2003 .....	\$17.40	\$11.11

As of February 22, 2005, there were approximately 199 record holders of our common stock. Since most shareholders are listed under their brokerage firm's names, the actual number of beneficial shareholders is higher.

The remaining information called for by this item relating to "Equity Compensation Plan Information" is reported in Item 12 of this Report.

### ISSUER PURCHASES OF EQUITY SECURITIES

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs	Maximum Number of Shares that may yet be Purchased under Programs (1) (2)
October 1, 2004 — October 31, 2004 .....	—	—	—	5,202,000
November 1, 2004 — November 30, 2004 .....	—	—	—	5,202,000
December 1, 2004 — December 31, 2004.....	—	—	—	5,202,000
Total.....	—	—	—	

(1) We announced on August 8, 2002 that our Board of Directors authorized us to repurchase up to 5.0 million shares of our common stock. As of December 31, 2004, we have approximately 202,000 shares remaining available for repurchase under this program.

(2) We announced on April 16, 2003 that our Board of Directors authorized us to repurchase up to 5.0 million shares of our common stock. As of December 31, 2004, we had an aggregate 5.0 million shares remaining available for repurchase under this program.

## Dividend Policy

We have never declared or paid cash dividends. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any cash dividends in the foreseeable future.

## Item 6. Selected Financial Data

The following data should be read in conjunction with "Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations" and the financial statements and related notes thereto included in Item 8 of this Report.

We derived the selected consolidated statement of operations data for the years ended December 31, 2004, 2003 and 2002 and the selected consolidated balance sheet data as of December 31, 2004 and 2003 from our audited consolidated financial statements appearing elsewhere in this Report. We derived the selected consolidated statement of operations data for the years ended December 31, 2001 and 2000 and the selected consolidated balance sheet data as of December 31, 2002, 2001 and 2000 from our audited consolidated financial statements, which are not included in this Report.

	Years Ended December 31,				
	2004	2003	2002	2001	2000
	(In thousands, except per share data)				
<b>Statement of Operations Data:</b>					
Net revenues .....	\$257,278	\$195,273	\$273,442	\$271,380	\$303,436
Cost of revenues .....	219,397	132,690	176,454	180,231	192,452
Gross profit .....	37,881	62,583	96,988	91,149	110,984
Operating expenses:					
Research and development .....	37,467	33,184	26,964	27,957	27,832
In-process research and development(1) .....	—	2,690	—	—	2,625
Selling, general and administrative .....	41,056	31,761	34,170	40,689	36,225
Operating income (loss) .....	(40,642)	(5,052)	35,854	22,503	44,302
Non-operating income (loss), net .....	3,360	45,946	2,407	(18,780)	41,810
Income before provision for income taxes .....	(37,282)	40,894	38,261	3,723	86,112
Provision for (benefit from) income taxes .....	(1,732)	15,603	984	(7,262)	22,946
Net income from continuing operations .....	(35,550)	25,291	37,277	10,985	63,166
Discontinued operation, net of minority interest(2) .....	—	—	—	(12,802)	(14,860)
Net income (loss) .....	<u>\$ (35,550)</u>	<u>\$ 25,291</u>	<u>\$ 37,277</u>	<u>\$ (1,817)</u>	<u>\$ 48,306</u>
Net income (loss) per share:					
Basic					
Continuing operations .....	\$ (0.90)	\$ 0.64	\$ 0.85	\$ 0.26	\$ 1.49
Discontinued operations .....	—	—	—	(0.30)	(0.35)
	<u>\$ (0.90)</u>	<u>\$ 0.64</u>	<u>\$ 0.85</u>	<u>\$ (0.04)</u>	<u>\$ 1.14</u>
Diluted					
Continuing operations .....	\$ (0.90)	\$ 0.61	\$ 0.80	\$ 0.24	\$ 1.37
Discontinued operations .....	—	—	—	(0.28)	(0.32)
	<u>\$ (0.90)</u>	<u>\$ 0.61</u>	<u>\$ 0.80</u>	<u>\$ (0.04)</u>	<u>\$ 1.05</u>
Shares used in calculating net income per share:					
Basic .....	39,476	39,517	44,044	42,274	42,548
Diluted .....	<u>39,476</u>	<u>41,238</u>	<u>46,731</u>	<u>45,262</u>	<u>45,943</u>

	Years Ended December 31,				
	2004	2003	2002	2001	2000
	(In thousands, except per share data)				
<b>Balance Sheet Data:</b>					
Cash, cash equivalents and short-term investments .....	\$126,688	\$164,846	\$199,102	\$129,034	\$ 58,838
Working capital excluding net assets of discontinued operation(2) .....	\$107,305	\$145,221	\$210,001	\$156,966	\$138,541
Total assets .....	\$283,744	\$352,593	\$281,602	\$237,965	\$294,391
Current liabilities .....	\$ 90,384	\$113,804	\$ 44,558	\$ 54,056	\$ 73,901
Total shareholders' equity .....	\$192,912	\$227,081	\$229,368	\$176,978	\$211,429

- (1) See Note 3, "Significant Business Combinations," to the consolidated financial statements in Item 8 of this Report.
- (2) Effective as of August 21, 2001, we spun off Vialta by distributing to our shareholders all the Vialta common stock then held by us. For the years ended 2001 and 2000 presented, Vialta is accounted for as a discontinued operation in our financial statements.

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

Certain information contained in or incorporated by reference in the following Management's Discussion and Analysis of Financial Condition and Results of Operations, in "Factors that May Affect Future Results" below and elsewhere in this Report, contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements include statements concerning the future of our industry, our product development, our business strategy, our future acquisitions, the continued acceptance and growth of our products, and our dependence on significant customers. Actual results may differ materially from those projected in the forward-looking statements as a result of various factors including those discussed in "Factors that May Affect Future Results" below and elsewhere in this Report. In some cases, these statements can be identified by terminologies such as "may," "will," "expect," "anticipate," "estimate," "continue," other similar terms or the negative of these terms. Although we believe that the assumptions underlying the forward-looking statements contained in this Report are reasonable, they may be inaccurate. In light of the significant uncertainties inherent in the forward-looking statements included herein, the inclusion of such statements should not be regarded as a representation by us or any other person that the results or conditions described in such statements will be achieved. We undertake no obligation to revise or update publicly any forward-looking statements for any reason.

#### **Executive Overview**

We design, develop and market highly integrated analog and digital processor chips, imaging sensor chips, digital amplifiers, and camera lens modules. Our digital processor chips are the primary processors driving digital video and audio devices, including DVD, Video CD ("VCD"), consumer digital audio players, and digital media players. Our imaging sensor chips utilize advanced Complimentary Metal Oxide Semiconductor ("CMOS") sensor technology to capture an image for cellular camera phone applications. Our digital amplifiers boost the digital sound to a level required to drive loudspeakers, in such applications as DVD and CD players, home theater systems, audio receivers, boom boxes and television sets. Our camera lens modules provide camera capabilities to electronic devices such as cellular phones and Personal Digital Assistants ("PDAs"). We have also developed and marketed encoding processors to address the growing demand for digital video recorders ("DVRs") and recordable DVD players. We believe that multi-featured DVD, DVR and recordable DVD players will serve as a platform for the digital home system ("DHS"), integrating various digital home entertainment and information delivery products into a single box. We are also a supplier of chips for use in modems, other communication devices, and PC audio products. Our chips use multiple processors and a programmable architecture that enable us to offer a broad array of features and functionality.

We focus on our design and development strengths and outsource all of our chip fabrication and assembly as well as the majority of our test operations.

We market our products worldwide through our direct sales force, distributors and sales representatives. Substantially all of our sales are to customers in China, Hong Kong, Taiwan, Japan, Korea, Turkey and Singapore. We employ sales and support personnel located outside of the United States in China, Taiwan, Hong Kong, Korea and Japan to support these international sales efforts. We expect that international sales will continue to represent a significant portion of our net revenues. In addition, substantially all of our products are manufactured, assembled and tested by independent third parties in Asia. We also have a number of employees engaged in research and development efforts outside of the United States. There are special risks associated with conducting business outside of the United States. See Item 7, "Factors That May Affect Future Results — We have significant international sales and operations that are subject to the special risks of doing business outside the United States."

We were incorporated in California in 1984 and became a public company in 1995. On June 9, 2003, we acquired 100% of the outstanding shares of Pictos Technologies, Inc., a Delaware corporation ("Pictos"). On August 15, 2003, we acquired 100% of the outstanding shares of Divio, Inc., a California corporation ("Divio"). See Note 3, "Significant Business Combinations," to the consolidated financial statements in Item 8 of this Report.

Our financial results for the fourth quarter and fiscal year ended December 31, 2004 were impacted by the fact that demand for digital media products continued to be slower in the fourth quarter of 2004 than expected. Consequently, we booked additional excess and obsolete reserves of \$3.7 million and additional lower-of-cost-or-market inventory reserves of \$7.4 million in the fourth quarter. The discussion in this section should be read in conjunction with the audited consolidated financial statements and notes thereto included in Item 8 of this Report.

## **Critical Accounting Policies and Estimates**

### *Use of Estimates*

Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States ("GAAP"). These accounting principles require us to make certain estimates, judgments and assumptions. We believe that the estimates, judgments and assumptions upon which we rely are reasonable based upon information available to us at the time that these estimates, judgments and assumptions are made. These estimates, judgments and assumptions can affect the reported amounts of assets and liabilities as of the date of the financial statements, as well as the reported amounts of revenues and expenses during the periods presented. To the extent there are material differences between these estimates, judgments or assumptions and actual results, our financial statements will be affected. The significant accounting policies that we believe are the most critical in understanding and evaluating our reported financial results include the following:

- Revenue Recognition
- Inventories and Inventory Reserves
- Goodwill and Other Intangible Assets
- Impairment of Long-lived Assets
- Income Taxes
- Legal Contingencies

In many cases, the accounting treatment of a particular transaction is specifically dictated by GAAP and does not require management's judgment in its application. There are also cases in which management's judgment is required in selecting appropriate accounting treatment among available alternatives under GAAP. Our management has reviewed these critical accounting policies and related disclosures with our Audit

Committee. See notes to consolidated financial statements in Item 8 of this Report for additional information regarding our accounting policies and other disclosures required by GAAP.

### ***Revenue Recognition***

Except for sales to distributors, revenue from product sales is generally recognized at the time of shipment when persuasive evidence of an arrangement exists, the price is fixed or determinable and collection of the resulting receivable is reasonably assured. For products sold to certain distributors with certain rights of return and allowances, revenue is deferred until the distributor resells the products to a third party.

We provide for rebates based on current contractual terms and future returns based on historical experiences at the time revenue is recognized as reductions to product revenue. Actual amounts may be different from management's estimates. Such differences, if any, are recorded in the period they become known.

Income from MediaTek royalties for the sale of products utilizing licensed technology is reported as revenue based on the number of units sold as reported to us by MediaTek.

### ***Inventories and Inventory Reserves***

Our inventory is comprised of raw materials, work-in-process and finished goods, all of which are manufactured by third-party contractors. Inventory is valued at the lower of standard cost (which approximates actual cost on a first-in, first-out basis) or market. We reduce the carrying value of inventory for estimated slow-moving, excess, obsolete, damaged or otherwise unmarketable products by an amount that is the difference between cost and estimated market value based on forecasts of future demand and market conditions.

We evaluate excess or obsolete inventory primarily by estimating demand for individual products within specific time horizons, typically one year or less. We generally provide a 100% reserve for the cost of products with on-hand and committed quantities in excess of the estimated demand after considering factors such as product life cycles. Once established, reserves for excess or obsolete inventory are only released when the reserved products are scrapped or sold. We also evaluate the carrying value of inventory at the lower of standard cost or market on an individual product basis, and these evaluations are based on the difference between net realizable value and standard cost. Net realizable value is the forecasted selling price of the product less the estimated costs of completion and disposal. When necessary, we reduce the carrying value of inventory to net realizable value.

The estimates of future demand, forecasted sales prices and market conditions used in the valuation of inventory form the basis for our published and internal revenue forecast. If actual results are substantially lower than the forecast, we may be required to record additional write-downs of product inventory in future periods and this may have a negative impact on gross margins.

### ***Impairment of Goodwill, Intangible Assets and Other Long-Lived Assets***

We assess the impairment of long-lived assets whenever events or changes in circumstances indicate that their carrying value may not be recoverable from the estimated future cash flows expected to result from their use and eventual disposition. Our long-lived assets subject to this evaluation include property, plant and equipment and amortizable intangible assets. We assess the impairment of goodwill annually in our fourth fiscal quarter and whenever events or changes in circumstances indicate that it is more likely than not that an impairment loss has been incurred. We are required to make judgments and assumptions in identifying those events or changes in circumstances that may trigger impairment. Some of the factors we consider include:

- Significant decrease in the market value of an asset.
- Significant changes in the extent or manner for which the asset is being used or in its physical condition.
- A significant change, delay or departure in our business strategy related to the asset.

- Significant negative changes in the business climate, industry or economic conditions.
- Current period operating losses or negative cash flow combined with a history of similar losses or a forecast that indicates continuing losses associated with the use of an asset.

The impairment evaluation of long-lived assets includes an analysis of estimated future undiscounted net cash flows expected to be generated by the assets over their remaining estimated useful lives. If the estimated future undiscounted net cash flows are insufficient to recover the carrying value of the assets over the remaining estimated useful lives, we will record an impairment loss in the amount by which the carrying value of the assets exceeds the fair value. If we determine that our amortizable intangible assets or other long-lived assets have been impaired, we will recognize an impairment loss in the period in which the impairment is determined. Any such impairment charge could be significant and could have a material adverse effect on our financial position and results of operations. Major factors that influence our cash flow analysis are our estimates for future revenue and expenses associated with the use of the asset. Different estimates could have a significant impact on the results of our evaluation.

We completed the annual goodwill impairment review during the fourth quarter of 2004 and found no impairment. Our impairment evaluation of goodwill is based on comparing the fair value to the carrying value. Unless there are indicators of impairment, our next impairment review will be completed in the fourth quarter of 2005. If our revenue and cost forecasts are not achieved, we may incur charges for goodwill impairment, which could be significant and could have a material adverse effect on our net equity and results of operations.

#### *Income Taxes*

We account for income taxes under an asset and liability approach that requires the recognition of deferred tax liabilities and assets for the expected future tax consequences of timing differences between the carrying amounts and the tax bases of assets and liabilities. U.S. deferred income taxes are not provided on un-remitted earnings of our foreign subsidiaries as such earnings are considered permanently invested. Assumptions underlying recognition of deferred tax assets and non-recognition of U.S. income tax on un-remitted earnings can change if our business plan is not achieved or if Congress adopts changes in the Internal Revenue Code of 1986, as amended.

#### *Legal Contingencies*

From time to time, we are subject to legal proceedings and claims, including claims of alleged infringement of patents, trademarks, copyrights and other intellectual property rights and other claims arising out of the ordinary course of business. Further, we are currently engaged in certain shareholder class action and derivative lawsuits.

These contingencies require management judgment in order to assess the likelihood of any adverse judgments or outcomes and the potential range of probable losses. Liabilities for legal matters are accrued for when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated, based upon current law and existing information. Estimates of contingencies may change in the future due to new developments or changes in legal approach.

#### **Recent Accounting Pronouncements**

On December 16, 2004, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 123R (revised 2004), "Share-Based Payment," which is a revision of SFAS No. 123, "Accounting for Stock-Based Compensation". SFAS No. 123R supersedes APB Opinion No. 25, "Accounting for Stock Issued to Employees," and amends SFAS No. 95, "Statement of Cash Flows." Generally, the approach in SFAS No. 123R is similar to the approach described in SFAS No. 123. However, SFAS No. 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro forma disclosure is no longer an alternative. The new standard will be effective for our quarter ending September 30,

2005. We are in the process of assessing the impact of adopting this new standard, including the transition method and option pricing model to select.

In December 2004, the FASB issued SFAS No. 151, "Inventory Costs," which adopts wording from the International Accounting Standards Board's IAS 2 "Inventories" in an effort to improve the comparability of international financial reporting. The new standard indicates that abnormal freight, handling costs, and wasted materials (spoilage) are required to be treated as current period charges rather than as a portion of inventory cost. Additionally, the standard clarifies that fixed production overhead should be allocated based on the normal capacity of a production facility. The provisions of SFAS No. 151 are effective for fiscal years beginning after June 15, 2005. Adoption of SFAS No. 151 is not expected to have a material impact on our financial position or results of operations.

On October 22, 2004, the President signed the American Jobs Creation Act of 2004 (the "Act"). The Act creates a temporary incentive for U.S. corporations to repatriate accumulated income earned abroad by providing an 85 percent dividends received deduction for certain dividends from controlled foreign corporations. The deduction is subject to a number of limitations and, as of today, uncertainty remains as to how to interpret numerous provisions in the Act. As such, we are not yet in a position to decide on whether, and to what extent, we might repatriate foreign earnings that have not yet been remitted to the U.S.

In June 2004, the FASB ratified Emerging Issues Task Force Issue No. 03-1 ("EITF 03-1"), "The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments." EITF 03-1 includes new guidance for evaluating and recording impairment losses on debt and equity investments, as well as new disclosure requirements for investments that are deemed to be temporarily impaired. Adoption of the recognition and measurement guidance of EITF 03-1 has been temporarily deferred by the FASB, but the disclosure requirements of EITF 03-1 are effective for our 2004 annual consolidated financial statements. Accordingly, additional disclosures as required by EITF 03-1 are included in Note 6 to consolidated financial statements.

## Comparison of Twelve Months ended December 31, 2004 and December 31, 2003

### Results of Operations

The following table sets forth our results of operations for the fiscal years ended December 31, 2004 and 2003:

	Year Ended December 31,				2004 over 2003
	2004		2003		% of Change
	(In thousands, except percentage data)				
Net revenues	\$257,278	100.0%	\$195,273	100.0%	31.8%
Cost of revenues	219,397	85.3	132,690	68.0	65.3%
Gross profit	37,881	14.7	62,583	32.0	(39.5)%
Operating expenses:					
Research and development	37,467	14.5	33,184	17.0	12.9%
In-process research and development	—	—	2,690	1.4	n/a
Selling, general and administrative	41,056	16.0	31,761	16.2	29.3%
Operating loss	(40,642)	(15.8)	(5,052)	(2.6)	704.5%
Non-operating income, net	3,360	1.3	45,946	23.5	(92.7)%
Income (loss) before income taxes	(37,282)	(14.5)	40,894	20.9	(191.2)%
Provision for (benefit from) income taxes	(1,732)	(0.7)	15,603	8.0	(111.1)%
Net income (loss) from continuing operations	<u>\$ (35,550)</u>	<u>(13.8)%</u>	<u>\$ 25,291</u>	<u>12.9%</u>	<u>(240.6)%</u>

Inflation has not had any material impact on our business to date.

### Net Revenues

Net revenues were \$257.3 million in 2004 and \$195.3 million in 2003. Net revenues increased by \$62.0 million, or 31.8%, from 2003 to 2004 primarily due to the increases in DVD revenue and MediaTek royalty, partially offset by the decreases in VCD, recordable and other products.

The following table summarizes percentage of net revenue by our major product categories.

	Year Ended December 31,		2004 over 2003
	2004	2003	% of Change
DVD.....	54%	40%	76.8%
VCD.....	27%	38%	(6.8)%
Digital imaging.....	6%	8%	2.1%
Recordable.....	3%	6%	(41.7)%
Royalty.....	8%	3%	300.0%
Other.....	2%	5%	(31.4)%
Total.....	<u>100%</u>	<u>100%</u>	31.8%

DVD revenue includes revenue from sales of DVD decoder chips. DVD revenues were \$138.6 million in 2004, an increase of \$60.2 million, or 76.8%, from 2003 to 2004, primarily due to higher unit sales. Unit sales increased by 71.3% as compared to 2003. We sold approximately 23.3 million of DVD chip products in 2004 as compared to approximately 13.6 million units in 2003. We continue to win new designs, especially with our MPEG 4 products.

VCD revenue includes revenue from sales of VCD and SVCD chips. VCD revenues were \$69.7 million in 2004, a decrease of \$5.1 million, or 6.8%, from 2003 to 2004, primarily due to lower unit sales, partially offset by higher average selling price ("ASP") per unit. Unit sales decreased by 9.6% while ASP per unit increased by 3.0%. The ASP increase in 2004 was primarily due to higher unit sales of Visba3 integrated chips, which have a higher ASP. We sold approximately 40.5 million units of our VCD chip products in 2004 as compared to approximately 44.8 million units in 2003.

Digital imaging revenue is primarily revenue from sales of image sensor chips and image processor chips. Digital imaging revenues were \$14.9 million in 2004, an increase of \$0.3 million, or 2.1%, from 2003 to 2004, primarily due to higher ASP, partially offset by lower unit sales. The ASP increased by 37.4% while unit sales decreased by 23.1%. Digital imaging revenues are derived from the sale of products of Pictos, a company that we acquired in June 2003. We sold approximately 1.0 million units of digital imaging chip products in 2004 as compared to approximately 1.3 million units in 2003.

Recordable revenue includes revenue from sales of integrated encoder and decoder chips, and encoder and decoder chips sold together as a chipset. Recordable revenues were \$7.0 million, a decrease of \$5.0 million, or 41.7%, from 2003 to 2004 due primarily to lower ASP. ASP decreased by 42.4% from 2003 to 2004.

Royalty revenue consists of MediaTek royalty payments. Under the settlement agreement between ESS and MediaTek dated June 11, 2003 for a non-exclusive license to our proprietary DVD user interface and other key DVD software, MediaTek is obligated to pay us ongoing royalties with a quarterly cap of \$5.0 million and lifetime cap of \$45.0 million. Royalty revenue was \$20.0 million and \$5.0 million for the year ended December 31, 2004 and December 31, 2003, respectively. We expect that MediaTek royalty payment will end after the fourth quarter of 2005.

Other revenue includes revenue from sales of PC Audio chips, communication modem and other chips, consumer digital media chips and other miscellaneous chips. Other revenue was \$7.2 million in 2004, a decrease of \$3.3 million, or 31.4%, from 2003 to 2004 primarily due to lower unit sales, partially offset by higher ASP. Unit sales decreased by 57.0% while ASP increased by 60.3%.

International revenues accounted for approximately 99% of net revenues in both 2004 and 2003. All of our international sales are denominated in U.S. dollars. We expect that international sales will continue to remain a high percentage of our net revenues in the future.

### ***Gross Profit***

Gross profit decreased to \$37.9 million in 2004 from \$62.6 million in 2003. Gross margins were 14.7% in 2004 and 32.0% in 2003. The decrease in gross margin was primarily due to a provision for excess and obsolete inventories of approximately \$33.1 million in 2004, partially offset by a higher volume in our DVD business and \$15.0 million of additional MediaTek royalty revenue at 100% gross margin. The \$20.0 million of MediaTek royalty revenue in 2004 had a positive impact on our gross margin of 7.2%. Although ASP generally increased in 2004 as compared to the preceding year, in the third quarter of 2004, we began experiencing increased competition and pricing pressures for both our DVD and VCD products resulting in an adverse effect on our margins in the second half of the year.

As a result of intense competition in our markets, we expect the overall ASP per unit for our existing products to decline over their product lives, and in 2005 overall gross margins may continue to decrease. We believe that in order to maintain or increase gross profit in 2005, we must achieve higher unit volume in shipments, reduce costs, add new features as well as introduce new products at higher ASP.

### ***Research and Development***

Research and development expenses were \$37.5 million, or 14.5% of net revenues, in 2004 and \$33.2 million, or 17.0% of net revenues in 2003. Research and development expenses increased by \$4.3 million, or 12.9%, from 2003 to 2004, primarily due to the increases in research and development expenses of \$6.1 million and \$2.3 million from our subsidiaries Pictos (digital imaging products) and Divio (encoding products), which we acquired in June 2003 and August 2003, respectively.

### ***In-Process Research and Development***

In-process research and development expenses were \$2.7 million, or 1.4% of net revenues, in 2003. This expense related to the write-off of in-process research and development expenses related to the digital imaging products of Pictos and the encoding products of Divio. There were no in-process research and development expenses in 2004. To date, there have been no significant differences between the actual and estimated results of the in-process research and development projects. We expect to complete the projects within the time frame as originally estimated.

### ***Selling, General and Administrative Expenses***

Selling, general and administrative expenses were \$41.1 million, or 16.0% of net revenues, in 2004 and \$31.8 million, or 16.2% of net revenues, in 2003. Selling, general and administrative expenses increased by \$9.3 million, or 29.3%, from 2003 to 2004, primarily due to the \$4.8 million increase in legal expenses related to royalty agreements and general services, \$2.3 million increase in salaries and fringe benefits due to higher headcount, \$0.9 million increase in amortization expense related to Pictos and Divio acquisitions, \$0.7 million increase in consulting and services for Sarbanes-Oxley Act compliance, \$0.5 million increase in third party commission due to higher sales, and partially offset by \$1.3 million decrease in general liability and officer and director insurance premiums.

### ***Non-operating Income, Net***

Net non-operating income was \$3.4 million in 2004 and \$45.9 million in 2003. In 2004, net non-operating income consisted primarily of interest income of \$2.0 million and rental income of \$0.5 million. In 2003, net non-operating income consisted primarily of net license income of \$44.5 million from the MediaTek settlement, interest income of \$2.5 million and rental income of \$1.2 million, partially offset by the \$2.0 million write-off of an investment in Broadmedia and a \$1.5 million fee paid to MediaTek for the

successful application for exemption from the Taiwan withholding tax on the \$45.0 million license income from MediaTek.

***Provision for (Benefit from) Income Taxes***

Our effective tax rate was a benefit of 4.7% for 2004 compared to a 38% effective tax rate for 2003. The primary reason for the decrease in our effective tax rate for 2004 was the impact of foreign losses which could not be benefited, partially offset by tax benefits related to U.S. tax losses and R&D credits. Further, 2003 included the accrual of income taxes on approximately \$48.0 million of MediaTek license fees and royalty payments compared to \$20 million in 2004.

Our 4.7% tax rate for 2004 was lower than the combined federal and state statutory rate of 40% primarily as a result of foreign losses which could not be benefited, partially offset by benefits related to U.S. tax losses and R&D credits. Our 38% tax rate for 2003 was lower than the combined federal and state statutory rate of 40% primarily as a result of a release of tax reserves related to the expiration of the statute of limitations on our 1999 return, offset in part by nondeductible expenses.

Our general policy is to permanently reinvest the net earnings of our foreign subsidiaries. Accordingly, these earnings have not been subject to U.S. income taxes. Under certain circumstances, if we were to repatriate this cash, or a portion thereof, to the U.S., we could be required to pay U.S. income taxes on the transfer.

**Comparison of Twelve Months ended December 31, 2003 and December 31, 2002**

The following table sets forth our results of operations for the fiscal years ended December 31, 2003 and 2002:

	<u>Year Ended December 31,</u>				<u>2003 over 2002</u>
	<u>2003</u>	<u>2002</u>		<u>% of Change</u>	
	(In thousands, except percentage data)				
Net revenues .....	\$195,273	100.0%	\$273,442	100.0%	(28.6)%
Cost of revenues .....	<u>132,690</u>	<u>68.0</u>	<u>176,454</u>	<u>64.5</u>	(24.8)%
Gross profit .....	62,583	32.0	96,988	35.5	(35.5)%
Operating expenses:					
Research and development .....	33,184	17.0	26,964	10.0	23.1%
In-process research and development ...	2,690	1.4	—	—	—
Selling, general and administrative .....	<u>31,761</u>	<u>16.2</u>	<u>34,170</u>	<u>12.5</u>	(7.1)%
Operating income (loss) .....	(5,052)	(2.6)	35,854	13.0	(114.1)%
Non-operating income, net .....	<u>45,946</u>	<u>23.5</u>	<u>2,407</u>	<u>0.9</u>	1,808.8%
Income before income taxes .....	40,894	20.9	38,261	13.9	6.9%
Provision for income taxes .....	<u>15,603</u>	<u>8.0</u>	<u>984</u>	<u>0.3</u>	1,485.7%
Net Income .....	<u>\$ 25,291</u>	<u>12.9%</u>	<u>\$ 37,277</u>	<u>13.6%</u>	(32.2)%

***Net Revenues***

Net revenues were \$195.3 million in 2003 and \$273.4 million in 2002. Net revenues decreased by \$78.1 million, or 28.6%, from 2002 to 2003 primarily due to the decreases in DVD, VCD, PC audio and communication and other revenue, partially offset by the increases in consumer digital media revenue and the revenue from the digital imaging and recordable products which were introduced through the acquisitions of Pictos and Divio in 2003.

The following table summarizes percentage of net revenue by our major product categories.

	Year Ended December 31,		2004 over 2003
	2003	2002	% of Change
DVD.....	40%	59%	(51.5)%
VCD.....	38%	31%	(11.7)%
Digital imaging.....	8%	—	n/a
Recordable.....	6%	—	n/a
Royalty.....	3%	—	n/a
Other.....	5%	10%	(61.4)%
Total.....	<u>100%</u>	<u>100%</u>	(28.6)%

DVD revenues were \$78.4 million in 2003, a decrease of \$83.3 million, or 51.5%, from 2002 to 2003, primarily due to lower unit sales and lower ASP per unit. Unit sales decreased by 36.8% and ASP per unit decreased by 18.4%. We believe this decrease resulted from the entry in the third quarter of 2002 of MediaTek, who introduced to the marketplace a DVD chip that we believed infringed our intellectual property rights. We filed a lawsuit in the United States against MediaTek requesting both damages and an injunction to stop the importation into the United States of DVD players containing products we believe infringed our intellectual property rights. On June 11, 2003, we entered into the Settlement Agreement with MediaTek relating to this lawsuit. Under the terms of the Settlement Agreement, both sides terminated all claims against each other and MediaTek received a non-exclusive worldwide license of our proprietary DVD user interface and other key DVD software. We sold approximately 13.6 million units of our DVD chip products in 2003 as compared to approximately 21.6 million units in 2002.

VCD revenues were \$74.8 million in 2003, a decrease of \$9.9 million, or 11.7%, from 2002 to 2003, primarily due to lower ASP per unit. ASP per unit decreased by 44.1% while unit sales increased by 58.1%. The changes were primarily due to the change in the product mix of the VCD group from 2002 to 2003. Beginning in 2003, the VCD chipsets were being phased out and replaced by Visba3 integrated chips. As a result, unit sales of the Visba3 increased significantly while the unit sales of the VCD chipsets declined. However, ASP per unit of the Visba3 was lower than the ASP per unit of the VCD chipsets. Therefore, the overall ASP per unit dropped. We sold approximately 44.8 million units of our VCD chip products in 2003 as compared to approximately 28.3 million units in 2002. We continue to target the market for this product line by lowering our product costs.

Digital imaging revenues were \$14.6 million in 2003 and \$0 in 2002. Digital imaging revenues derived from the sale of products of Pictos, a company that we acquired in June 2003. We sold approximately 1.3 million units of digital imaging chip products in 2003.

Recordable revenues were \$12.0 million in 2003 and \$0 in 2002. The revenue of the encoding products of Divio, which we acquired in August 2003, was approximately 27% of the total recordable revenues. We sold approximately 0.4 million units of recordable chip products in 2003.

Under the settlement agreement between ESS and MediaTek dated June 11, 2003, for a non-exclusive license to our proprietary DVD user interface and other key DVD software, MediaTek is obligated to pay us ongoing royalties with a quarterly cap of \$5.0 million and lifetime cap of \$45.0 million. Royalty revenue was \$5.0 million and \$0 for the year ended December 31, 2003 and 2002, respectively.

Other revenue includes revenue from PC Audio, communication, consumer digital media and others. Other revenue was \$10.5 million in 2003, a decrease of \$16.5 million, or 61.4%, from 2002 to 2003 primarily due to lower unit sales. We sold approximately 3.7 million units in 2003 as compared to 7.1 million units in 2002, or 47.9% decrease.

International revenues accounted for approximately 99% of net revenues in both 2003 and 2002. Our international sales are denominated in U.S. dollars. We expect that international sales will continue to remain a high percentage of our net revenues in the future.

### ***Gross Profit***

Gross profit decreased to \$62.6 million in 2003 from \$97.0 million in 2002. Gross margins were 32.0% in 2003 and 35.5% in 2002. The decrease in gross margin was primarily due to lower volume in our higher margin DVD business in 2003, and a higher volume of lower margin VCD and digital imaging products, partially offset by a net decrease in the provision for excess and obsolete inventories and \$5.0 million of MediaTek royalty revenue at 100% gross margin. The \$5.0 million of MediaTek royalty revenue in 2003 had a positive impact on our gross margin of 1.7%. Excess and obsolete reserves of \$5.3 million were provided during the twelve months ended December 31, 2002.

### ***Research and Development***

Research and development expenses were \$33.2 million, or 17.0% of net revenues, in 2003 and \$27.0 million, or 10.0% of net revenues in 2002. Research and development expenses increased by \$6.2 million, or 23.1%, from 2002 to 2003, primarily due to the research and development expenses of Pictos of \$4.6 million and Divio of \$1.7 million, which we acquired in June 2003 and August 2003, respectively.

### ***In-Process Research and Development***

In-process research and development expenses were \$2.7 million, or 1.4% of net revenues, in 2003 and \$0 in 2002. This increase related to the write-off of in-process research and development expenses related to the digital imaging products of Pictos and the encoding products of Divio.

### ***Selling, General and Administrative Expenses***

Selling, general and administrative expenses were \$31.8 million, or 16.2% of net revenues, in 2003 and \$34.2 million, or 12.5% of net revenues, in 2002. Selling, general and administrative expenses decreased by \$2.4 million, or 7.1%, from 2002 to 2003, primarily due to the decrease of commissions by \$1.0 million as the result of decreased sales, the decrease of our marketing development fund ("MDF") by \$6.5 million due to the cancellation of our MDF program with some customers, partially offset by the increase of legal expense by \$1.0 million related to the MediaTek lawsuit and the increase of insurance expense by \$1.4 million due to increased director and officer insurance premiums, as well as the increase of \$3.3 million of selling, general and administrative expenses of Pictos and Divio. The selling, general and administrative expenses in 2003 included the amortization of intangibles of \$1.2 million and \$0.3 million for Pictos and Divio, respectively.

### ***Non-operating Income, Net***

Net non-operating income was \$45.9 million in 2003 and \$2.4 million in 2002. In 2003, net non-operating income consisted primarily of net license income of \$44.5 million from the MediaTek settlement, interest income of \$2.5 million and rental income of \$1.2 million from Vialta, partially offset by the \$2.0 million write-off of an investment in Broadmedia and a \$1.5 million fee paid to MediaTek for the successful application for exemption from the Taiwan withholding tax on the \$45.0 million of license income from MediaTek. In 2002, net non-operating income consisted primarily of interest income of \$3.6 million and rental income of \$1.9 million from Vialta, partially offset by the \$3.6 million write-down of and sale of our investment in the stock of Cisco Systems, Inc.

### ***Provision for (Benefit from) Income Taxes***

Our effective tax rate was 38% for 2003 compared to a 3% effective tax rate for 2002. The primary reason for the increase in our effective tax rate for 2003 was an accrual of income taxes for the MediaTek license fee and royalty payments.

Our 38% tax rate for 2003 was lower than the combined federal and state statutory rate of 40% primarily as a result of a release of tax reserves related to the expiration of the statute of limitations on our 1999 return offset in part by nondeductible expenses. Our 3% tax rate for 2002 was lower than the combined federal and state statutory rate primarily as a result of the lower foreign tax rate on earnings from our foreign subsidiary, which were considered to be permanently reinvested, and tax credits.

## **Acquisitions and Related Charges**

### *Divio*

On August 15, 2003, we acquired 100% of the outstanding shares of Divio for \$27.1 million in cash plus transaction costs. Divio, formerly a privately held company based in Sunnyvale, California, designed, manufactured and marketed digital encoding semiconductor products. The estimated fair value of assets acquired and liabilities assumed were included in our consolidated balance sheet as of August 15, 2003, the effective date of the purchase. The results of operations of Divio have been included in our consolidated results of operations since the effective date of the purchase. See Note 3, "Significant Business Combinations," to the consolidated financial statements in Item 8 of this Report.

### *Pictos*

On June 9, 2003, we acquired 100% of the outstanding shares of Pictos for \$27.0 million in cash plus transaction costs. Pictos, formerly a privately held company based in Newport Beach, California, designed, manufactured and marketed digital imaging semiconductor products. The estimated fair value of assets acquired and liabilities assumed were included in our consolidated balance sheet as of June 9, 2003, the effective date of the purchase. The results of operations of Pictos have been included in our consolidated results of operations since the effective date of the purchase. See Note 3, "Significant Business Combinations," to the consolidated financial statements in Item 8 of this Report.

## **Liquidity and Capital Resources**

Since inception, we have financed our cash requirements from cash generated by operations, the sale of equity securities, and short-term and long-term debt. At December 31, 2004, we had cash, cash equivalents and short-term investments of \$126.7 million and working capital of \$107.3 million. After assessing our need for a line of credit, on November 9, 2004, we terminated our \$10 million line of credit with U.S. Bank National Association, which was originally scheduled to expire on June 5, 2007. We currently have no outstanding borrowings.

On August 15, 2003, we acquired 100% of the outstanding shares of Divio for \$27.1 million in cash plus transaction costs. On June 9, 2003, we acquired 100% of the outstanding shares of Pictos for \$27.0 million in cash plus transaction costs.

Net cash used in operating activities was \$31.2 million for the year ended December 31, 2004, net cash provided by operating activities was \$56.2 million for the year ended December 31, 2003, and \$64.8 million for the year ended December 31, 2002. The net cash used in operating activities for the year ended December 31, 2004 was primarily attributable to a net loss of \$35.6 million, a decrease in accounts payable and accrued expenses of \$33.8 million due to a decrease in production activities in the fourth quarter of 2004 specifically, an increase in inventories of \$12.1 million due to the increases in digital imaging and video product inventories and offset by the increase in excess and obsolete inventory reserve, partially offset by a decrease in accounts receivable of \$36.1 million due to lower sales in the fourth quarter of 2004 and depreciation and amortization of \$10.3 million. The net cash provided by operating activities for the year ended December 31, 2003 was primarily attributable to a net income of \$25.3 million, depreciation and amortization of \$6.8 million, an increase in accounts payable and accrued expenses of \$41.0 million, primarily due to an increase in inventory purchases, an increase in income tax payable and deferred income taxes of \$14.1 million, and charges for purchased in-process research and development of \$2.7 million, partially offset by an increase in accounts receivable of \$27.4 million due to significantly increased sales in the fourth quarter of 2003 as compared to sales during the fourth quarter of 2002, and an increase in inventories of \$6.4 million primarily due to

inventories resulting from the Pictos and Divio acquisitions. The net cash provided by operating activities for the year ended December 31, 2002 was primarily attributable to a net income of \$37.3 million, depreciation and amortization of \$6.1 million, write-down of investments of \$3.6 million, a decrease in accounts receivable of \$14.2 million, a decrease in inventories of \$13.3 million, and an increase in income tax payable and deferred income taxes of \$4.2 million, partially offset by a decrease in accounts payable and accrued expenses of \$14.0 million.

Net cash provided by investing activities was \$13.8 million for the year ended December 31, 2004, \$10.5 million for the year ended December 31, 2003, and net cash used in investing activities was \$159.2 million for the year ended December 31, 2002. The net cash provided by investing activities for the year ended December 31, 2004 was primarily attributable to the proceeds from sales of short-term investments of \$152.4 million, partially offset by the purchase of short-term and long-term investments of \$129.5 million and \$5.2 million, respectively, and the purchase of property, plant and equipment of \$3.9 million. The net cash provided by investing activities for the year ended December 31, 2003 was primarily attributable to proceeds from sales of short-term investments of \$237.0 million, partially offset by the purchase of short-term and long-term investments of \$161.2 million and \$5.3 million, respectively, cash paid for acquisitions of Pictos and Divio, net of cash acquired of \$52.1 million, and the purchase of property, plant and equipment of \$8.0 million mainly for CAD software and testers. The net cash used in investing activities for the year ended December 31, 2002 was primarily attributable to the purchase of short-term and long-term investments of \$295.3 million and \$5.2 million, respectively, and the purchase of property, plant and equipment of \$2.1 million, partially offset by proceeds from sales of short-term and long-term investments of \$143.1 million and \$0.4 million, respectively.

Net cash provided by financing activities was \$2.5 million for the year ended December 31, 2004, net cash used in financing activities was \$24.7 million for the year ended December 31, 2003 and net cash provided by financing activities was \$11.9 million for the year ended December 31, 2002. The net cash provided by financing activities for the year ended December 31, 2004, was attributable to the proceeds from the issuance of common stock under the employee stock purchase plan and stock option plans of \$2.5 million. The net cash used in financing activities for the year ended December 31, 2003 was primarily attributable to cash paid for repurchase of common stock of \$29.3 million, partially offset by the proceeds from the issuance of common stock under the employee stock purchase plan and stock option plans of \$4.6 million. The net cash provided by financing activities for the year ended December 31, 2002 was primarily attributable to proceeds from the sale of common stock in the secondary public offering of \$45.2 million and proceeds from the issuance of common stock under the employee stock purchase plan and stock option plans of \$9.4 million, partially offset by cash paid for repurchase of common stock of \$42.7 million.

To date, we have not declared or paid cash dividends to our shareholders and do not anticipate paying any dividend in the foreseeable future due to a number of factors, including the volatile nature of the semiconductor industry and the potential requirement to finance working capital in the event of a significant upturn in business. We reevaluate this practice from time to time but are not currently contemplating the payment of a cash dividend.

We have no long-term debt. Our capital expenditures for the next twelve months are anticipated to be approximately \$6.3 million. We may also use cash to acquire or invest in complementary business or products or to obtain the right to use complementary technologies. From time to time, in the ordinary course of business, we may evaluate potential acquisitions of, or investment in, such businesses, products or technologies owned by third parties. Also, from time to time the Board of Directors may approve the expenditure of cash resources to repurchase our common stock as market conditions warrant. Based on past performance and current expectations, we believe that our existing cash and short-term investments as of December 31, 2004, together with funds expected to be generated by operations will be sufficient to satisfy our working capital needs, capital expenditures, mergers and acquisitions, strategic investment requirements, acquisitions of property and equipment, stock repurchases and other potential needs for the next twelve months.

### *Contractual Obligations, Commitments and Contingencies*

The following table sets forth the amounts of payments due under specified contractual obligations, aggregated by category of contractual obligation, as of December 31, 2004.

<u>Contractual Obligations</u>	<u>Payment Due by Periods</u>				
	<u>Total</u>	<u>Less than 1 Year</u>	<u>1-3 Years</u>	<u>3-5 Years</u>	<u>More than 5 Years</u>
	(In thousands)				
Operating lease obligations .....	\$ 3,837	\$ 2,854	\$967	\$16	—
Purchase order commitments .....	<u>31,716</u>	<u>31,716</u>	—	—	—
Total .....	<u>\$35,553</u>	<u>\$34,570</u>	<u>\$967</u>	<u>\$16</u>	—

We are not a party to any agreements with, or commitments to, any special purpose entities that would constitute material off-balance sheet financing other than the operating lease obligations listed above.

As of December 31, 2004, our commitments to purchase inventory from the third-party contractors aggregated approximately \$25.5 million of which approximately \$5.0 million was adverse purchase order commitments that we have recorded as other accrued liabilities. Under these contractual agreements, we may order inventory from time to time, depending on our needs. There is no termination date to these agreements. Additionally, in the ordinary course of business, we enter into various arrangements with vendors and other business partners, principally for service, license and other operating supplies. As of December 31, 2004, commitments under these arrangements totaled \$6.2 million. There are no material commitments for these arrangements extending beyond 2007.

From time to time, we are subject to legal proceedings and claims, including claims of alleged infringement of trademarks, copyrights and other intellectual property rights and other claims arising out of the ordinary course of business. Further, we are currently engaged in certain shareholder class action and derivative lawsuits. We intend to defend these suits vigorously and we may incur substantial expenses in litigating claims against third parties and defending against existing and future third-party claims that may arise. In the event of a determination adverse to us, we may incur substantial monetary liability and be required to change our business practices. Either of these results could have a material adverse effect on our financial position, results of operations and cash flows. See Part I, Item 3, "Legal Proceedings."

#### **Factors That May Affect Future Results**

##### *We operate in highly competitive markets.*

The markets in which we compete are intensely competitive and are characterized by rapid technological changes, price reductions and short product life cycles. Competition typically occurs at the design stage, when customers evaluate alternative design approaches requiring integrated circuits. Because of short product life cycles, there are frequent design win competitions for next-generation systems.

We expect competition to increase in the future from existing competitors and from other companies that may enter our existing or future markets with products that may be provided at lower costs or provide higher levels of integration, higher performance or additional features. In some cases, our competitors have been acquired by even larger organizations, giving them access to even greater resources with which to compete with us. Advancements in technology can change the competitive environment in ways that may be adverse to us. For example, today's high-performance central processing units in PCs have enough excess computing capacity to perform many of the functions that formerly required a separate chip set, which has reduced demand for our PC audio chips. The announcements and commercial shipments of competitive products could adversely affect sales of our products and may result in increased price competition that would adversely affect the ASP and margins of our products.

The following factors may affect our ability to compete in our highly competitive markets:

- The timing and success of our new product introductions and those of our customers and competitors;
- The timely shipment of our Vibratto II chip with our own servo IP in it;
- The timely shipment of a recordable servo product;
- The timely shipment of our new VCD chip;
- The timely shipment of our new 2.0 Megapixel sensor chip;
- The timely shipment of our new UNIVGA and new UNI Megapixel products;
- The timely shipment of our new Vibratto II CL and Vibratto III products;
- The price, quality and performance of our products and the products of our competitors;
- The emergence of new multimedia standards;
- The development of technical innovations;
- The ability to obtain adequate foundry capacity and sources of raw materials;
- The rate at which our customers integrate our products into their products;
- The number and nature of our competitors in a given market; and
- The protection of our intellectual property rights.

***Our business is highly dependent on the expansion of the consumer electronics market.***

Our primary focus has been developing products primarily for the consumer electronics market. Currently, our sales of video system processor chips to the DVD and VCD (including VCD and SVCD) player markets account for a majority of our revenues. We expect these products will continue to account for a significant portion of our net revenues for the foreseeable future. Given the current economic environment, consumer spending on DVD players and cellular camera phones may not increase as expected or may even weaken or fall. Consequently, we continue to invest in new product lines for the consumer electronics market. Nonetheless, our strategy in these new markets may not be successful. If the markets for these products and applications decline or fail to develop as expected, or if we are not successful in our efforts to market and sell our products to manufacturers who incorporate our chip into their products. It could have a material adverse effect on our business financial conditions and results of operations.

In addition, the potential decline in consumer confidence and consumer spending that may be occasioned by natural disasters, epidemics, terrorist attacks or armed conflict could have a material adverse effect on our business, financial condition and results of operations.

***Our quarterly operating results are subject to fluctuations that may cause volatility or a decline in the price of our stock.***

Historically, our quarterly operating results have fluctuated significantly. Our future quarterly operating results will likely fluctuate from time to time and may not meet the expectations of securities analysts and investors in a particular future period. The price of our common stock could decline due to such fluctuations. The following factors may cause significant fluctuations in our future quarterly operating results:

- Charges related to the net realizable value of inventories and/or excess inventories;
- Changes in demand for our products;
- Changes in the mix of products sold and our revenue mix;
- Increasing pricing pressures and resulting reduction in the ASP of any or all of our products;
- Gain or loss of significant customers;

- Seasonal customer demand;
- The cyclical nature of the semiconductor industry;
- The timing of our and our competitors' new product announcements and introductions and the market acceptance of new or enhanced versions of our and our customers' products;
- The timing of significant customer orders;
- Loss of key employees which could impact sales or the pace of product development;
- The "turns" basis of most of our orders, which makes backlog a poor indicator of the next quarter's revenue;
- The lead time we normally receive for our orders, which makes it difficult to predict sales until the end of the quarter;
- Availability and cost of raw materials;
- Significant increases in expenses associated with the expansion of operations;
- Availability and cost of foundry capacity; and
- A shift in manufacturing of consumer electronic products away from China.

***We often purchase inventories based on sales forecasts and if anticipated sales do not materialize, we may continue to experience significant inventory charges.***

We currently place non-cancelable orders to purchase our products from independent foundries and other vendors on an approximately three-month rolling basis, while our customers generally place purchase orders (frequently with short lead times) with us that may be cancelled without significant penalty. Some of these customers may require us to demonstrate our ability to deliver in response to their short lead-time. In order to accommodate such customers, we have to commit to certain inventories before we have a firm commitment from our customers. If anticipated sales and shipments in any quarter are cancelled or do not occur as quickly as expected, expense and inventory levels could be disproportionately high and we may be required to record significant inventory charges in our statement of operations in a particular period. In accordance with our accounting policy, we reduce the carrying value of our inventories for estimated slow-moving, excess, obsolete, damaged or otherwise unmarketable products by an amount that is the difference between cost and estimated market value based on forecasts of future demand and market conditions. As our business grows, we may increasingly rely on distributors, which may further impede our ability to accurately forecast product orders. Additionally, we may venture into new products with different supply chain and logistics requirements which may in turn cause excess or shortage of inventory. For the year ended December 31, 2004, we recorded a net inventory provision of \$33.1 million and we may continue to experience these charges in future periods.

***We may need to acquire other companies or technologies to successfully compete in our industry and we may not be successful acquiring key targets or integrating our acquisitions into our business.***

We will continue to regularly consider the acquisition of other companies or the products and technologies of other companies to complement our existing product offerings, improve our market coverage and enhance our technological capabilities. There may be technologies that we need to acquire or license in order to remain competitive. However, we may not be able to identify and consummate suitable acquisitions and investments or be able to acquire them at costs that are competitive. Acquisitions and investments carry risks that could have a material adverse effect on our business, financial condition and results of operations, including:

- The failure of the acquired products or technology to attain market acceptance, which may result from our inability to leverage such products and technology successfully;
- The failure to integrate acquired products and business with existing products and corporate culture;

- The inability to retain key employees from the acquired company;
- Diversion of management attention from other business concerns;
- The potential for large write-offs;
- Issuances of equity securities dilutive to our existing shareholders;
- The incurrence of substantial debt and assumption of unknown liabilities; and
- Our ability to properly access and maintain an effective internal control environment over an acquired company in order to comply with the recently adopted and pending public reporting requirements.

***Our operating results could be adversely affected as a result of purchase accounting treatment and the impact of amortization and impairment of intangible assets relating to business combinations.***

In accordance with generally accepted accounting principles, we accounted for our acquisitions of Divio and Pictos using the purchase method of accounting. Under the purchase method of accounting, we have allocated the cost of the individual assets acquired and liabilities assumed, including various identifiable intangible assets (such as existing and core technology and customer and distributor relationships) and in-process research and development, based on their respective fair values at the date of the completion of the business combinations. Intangible assets are required to be amortized prospectively over their estimated useful lives. Any excess of the purchase price over those fair market values will be accounted for as goodwill. We are not required to amortize goodwill against income but will be subject to periodic reviews for impairment. If we are required to recognize impairment charges, the charges will negatively impact reported earnings in the period of the charges.

***Our research and development investments may fail to enhance our competitive position.***

We invest a significant amount of time and resources in our research and development activities to maintain and enhance our competitive position. Technical innovations are inherently complex and require long development cycles and the commitment of extensive engineering resources. We incur substantial research and development costs to confirm the technical feasibility and commercial viability of a product that in the end may not be successful. If we are not able to successfully complete our research and development projects on a timely basis, we may face competitive disadvantages. There is no assurance that we will recover the development costs associated with these projects or that we will be able to secure the financial resources necessary to fund future research and development efforts.

Some of our significant projects include the development of a next generation DVD chip that will incorporate our servo technology and a recordable product that will incorporate our encoder technology. This will require a new architecture and a complete system on a chip design, which is extremely complex and may not ultimately be feasible. If we are unable to successfully develop this next generation DVD processor chip, or complete other significant research and development projects, our business, financial condition and results of operations could be materially adversely affected.

***Our sales may fluctuate due to seasonality and changes in customer demand.***

Since we are primarily focused on the consumer electronics market, we are likely to be affected both by changes in consumer demand and by seasonality in the sales of our products. Historically, over half of consumer electronic products are sold during the holiday seasons. Consumer electronic product sales have historically been much higher during the holiday shopping seasons than during other times of the year, although the manufacturers' shipments vary from quarter to quarter depending on a number of factors, including retail levels and retail promotional activities. In addition, consumer demand often varies from one product to another in consecutive holiday seasons and is strongly influenced by the overall state of the economy. Because the consumer electronic market experiences substantial seasonal fluctuations, seasonal trends may cause our quarterly operating results to fluctuate significantly and our inability to forecast these trends may adversely affect the market price of our common stock. For instance, in the future, as ASPs for

DVD products decline, customer demands for VCD products may shift to DVD products and ultimately render our VCD products, from which we enjoy a healthy product margin, obsolete. In the future, if the market for our products is not as strong during the holiday seasons, whether as a result of changes in consumer tastes or because of an overall reduction in consumer demand due to economic conditions, we may fail to meet expectations of securities analysts and investors which could cause our stock price to fall.

***Our success within the semiconductor industry depends upon our ability to develop new products in response to rapid technological changes and evolving industry standards.***

The semiconductor industry is characterized by rapid technological changes, evolving industry standards and product obsolescence. Our success is highly dependent upon the successful development and timely introduction of new products at competitive prices and performance levels. The success of new products depends on a number of factors, including:

- Anticipation of market trends;
- Timely completion of product development, design and testing;
- Market acceptance of our products and the products of our customers;
- Offering new products at competitive prices;
- Meeting performance, quality and functionality requirements of customers and OEMs; and
- Meeting the timing, volume and price requirements of customers and OEMs.

Our products are designed to conform to current specific industry standards, however, we have no control over future modifications to these standards. Manufacturers may not continue to follow the current standards, which would make our products less desirable to manufacturers and reduce our sales. Our success is highly dependent upon our ability to develop new products in response to these changing industry standards.

***Our products are subject to increasing pricing pressures.***

The markets for most of the applications for our chips are characterized by intense price competition. The willingness of OEMs to design our chips into their products depends, to a significant extent, upon our ability to sell our products at cost-effective prices. We expect the ASP of our existing products (particularly our DVD decoder chip products) to decline significantly over their product lives as the markets for our products mature, new products or technology emerge and competition increases. During the fiscal year ended December 31, 2004, we recorded a charge of \$16.4 million for lower of cost and market reserves. If we are unable to reduce our costs sufficiently to offset declines in product prices or are unable to introduce more advanced products with higher margins, our gross margins may decline in the future.

***We may lose business to competitors who have significant competitive advantages.***

Our existing and potential competitors consist, in part, of large domestic and international companies that have substantially greater financial, manufacturing, technical, marketing, distribution and other resources, greater intellectual property rights, broader product lines and longer-standing relationships with customers than we have. Our competitors also include a number of independent and emerging companies who may be able to better adapt to changing market conditions and customer demand. In addition, some of our current and potential competitors maintain their own semiconductor fabrication facilities and could benefit from certain capacity, cost and technical advantages. We expect that market experience to date and the predicted growth of the market will continue to attract and motivate more and stronger competitors.

DVD and VCD players face significant competition from video-on-demand, VCRs and other video formats. In addition, we expect that the DVD platform for the DHS will face competition from other platforms including set-top-boxes, as well as multi-function game boxes being manufactured and sold by large companies. Some of our competitors may be more diversified than us and supply chips for multiple platforms. A decline in DVD sales may have a disproportionate effect on us as it is currently our most important product

line. Any of these competitive factors could reduce our sales and market share and may force us to lower our prices, adversely affecting our business, financial condition and results of operations.

***Our business is dependent upon retaining key personnel and attracting new employees.***

Our success depends to a significant degree upon the continued contributions of Fred S.L. Chan, our Chairman of the Board, and Robert L. Blair, our President and CEO. In the past, Mr. Chan has served as our President and Chief Executive Officer in addition to being our Chairman of the Board. Mr. Chan is critical to maintaining many of our key relationships with customers, suppliers and foundries in Asia. The loss of the services of Mr. Chan, Mr. Blair, or any of our other key executives could adversely affect our business. On October 4, 2004, Patrick Ang resigned as our Executive Vice President and Chief Operating Officer. While in the case of Mr. Ang, it was for reasons unrelated to the Company's business, we may not be able to retain our other key personnel and searching for key personnel replacements could divert the attention of other senior management and increase our operating expenses. We currently do not maintain any key person life insurance.

Additionally, to manage our future operations effectively, we will need to hire and retain additional management personnel, design personnel and software engineers. We may have difficulty recruiting these employees or integrating them into our business. The loss of services of any of our key personnel, the inability to attract and retain qualified personnel in the future, or delays in hiring required personnel, particularly design personnel and software engineers, could make it difficult to implement our key business strategies, such as timely and effective product introductions.

***We rely on a single distributor for a significant portion of our revenues and if this relationship deteriorates our financial results could be adversely affected.***

Sales through our largest distributor Dynax Electronics (a Hong Kong based company) were approximately 51%, 63% and 57% of our net revenues as of the fiscal years ended December 31, 2004, 2003 and 2002, respectively. Dynax Electronics is not subject to any minimum purchase requirements and can discontinue marketing any of our products at any time. In addition, Dynax Electronics has rights of return for unsold product and rights to pricing allowances to compensate for rapid, unexpected price changes, therefore we do not recognize revenue until Dynax Electronics sells through to our end-customers. If our relationship with Dynax Electronics deteriorates, our quarterly results could fluctuate significantly as we experience short-term disruption to our sales and collection processes, particularly in light of the fact that we maintain significant accounts receivable from Dynax Electronics. As our business grows, we may increasingly rely on distributors, which may reduce our exposure to future sales opportunities. Although we believe that we could replace Dynax Electronics as our distributor for the Hong Kong and China markets, there can be no assurance that we could replace Dynax Electronics in a timely manner or if a replacement were found that the new distributor would be as effective as Dynax Electronics in generating revenue for us.

***Our customer base is highly concentrated, so the loss of a major customer could adversely affect our business.***

A substantial portion of our net revenues has been derived from sales to a small number of our customers. During the fiscal year December 31, 2004, sales to our top five end-customers (including end-customers that buy our products from our largest distributor Dynax Electronics) accounted for approximately 42% of our net revenues. This risk is particularly acute in our digital imaging business, which currently has few customers and low sales volume. We expect this concentration of sales to continue along with other changes in the composition of our customer base. The reduction, delay or cancellation of orders from one or more major customers or the loss of one or more major customers could materially and adversely affect our business, financial condition and results of operations. In addition, any difficulty in collecting amounts due from one or more key customers could harm our financial condition.

***We may continue to expand into new businesses and product lines in which there may be a concentrated customer base and for which we may be required to purchase custom inventories to meet our customers' needs.***

We have in the past and will continue to regularly consider the expansion into new businesses and product lines by acquisition or otherwise. As a result of our prior expansions into new businesses and new product lines, we may continue to sell our products to a highly concentrated customer base. The reduction, delay or cancellation of orders from one or more major customers or the loss of one or more major customers in these new businesses or product lines could render our venture in a new product line, such as digital imaging, unsuccessful, and resulting in a material adverse effect on our business, financial condition and results of operations.

As a result of our acquisitions such as Pictos, we currently purchase custom inventories for certain of our product lines such as image sensor modules for camera enabled cellular phones. This custom inventory is highly tailored to each customer's specifications. In the event that these customers reduce or cancel their orders for these products, we may not be able to re-sell the custom inventory to any of our other customers. We may also be forced to write off such custom inventory, which may result in a material adverse effect on our business, financial condition and results of operations.

***We may not be able to adequately protect our intellectual property rights from unauthorized use and we may be subject to claims of infringement of third-party intellectual property rights.***

To protect our intellectual property rights we rely on a combination of patents, trademarks, copyrights and trade secret laws and confidentiality procedures. We have numerous patents granted in the United States with some corresponding foreign patents. These patents will expire at various times. We cannot assure you that patents will be issued from any of our pending applications or applications in preparation or that any claims allowed from pending applications or applications in preparation will be of sufficient scope or strength. We may not be able to obtain patent protection in all countries where our products can be sold. Also, our competitors may be able to design around our patents. The laws of some foreign countries may not protect our products or intellectual property rights to the same extent, as do the laws of the United States. We cannot assure you that the actions we have taken to protect our intellectual property will adequately prevent misappropriation of our technology or that our competitors will not independently develop technologies that are substantially equivalent or superior to our technology.

The semiconductor industry is characterized by vigorous protection and pursuit of intellectual property rights or positions. Litigation by or against us could result in significant expense and divert the efforts of our technical and management personnel, whether or not such litigation results in a favorable determination for us. Any claim, even if without merit, may require us to spend significant resources to develop non-infringing technology or enter into royalty or cross-licensing arrangements, which may not be available to us on acceptable terms, or at all. We may be required to pay substantial damages or cease the use and sale of infringing products, or both. In general, a successful claim of infringement against us in connection with the use of our technologies could adversely affect our business and our results of operations could be significantly harmed. See Part I, Item 3, "Legal Proceedings." We may initiate claims or litigation against third parties for infringement of our proprietary rights or to establish the validity of our proprietary rights. In the event of an adverse result in any such litigation our business could be materially harmed.

***We have significant international sales and operations that are subject to the special risks of doing business outside the United States.***

Substantially all of our sales are to customers (including distributors) in Hong Kong, Taiwan, China, Japan, Singapore, Korea and Turkey. During the fiscal year December 31, 2004, sales to customers in Hong Kong, Taiwan and China were approximately 74% of our net revenues. If our sales in one of these countries or territories, such as Hong Kong, were to fall, our financial condition could be materially impaired. We expect that international sales will continue to represent a significant portion of our net revenues. In addition,

substantially all of our products are manufactured, assembled and tested by independent third parties in Asia. There are special risks associated with conducting business outside of the United States, including:

- Unexpected changes in legislative or regulatory requirements and related compliance problems;
- Political, social and economic instability;
- Lack of adequate protection of our intellectual property rights;
- Changes in diplomatic and trade relationships, including changes in most favored nations trading status;
- Tariffs, quotas and other trade barriers and restrictions;
- Longer payment cycles and greater difficulties in accounts receivable collection;
- Potentially adverse tax consequences, including withholding in connection with the repatriation of earnings and restrictions on the repatriation of earnings;
- Difficulties in obtaining export licenses for technologies;
- Language and other cultural differences, which may inhibit our sales and marketing efforts and create internal communication problems among our U.S. and foreign counterparts; and
- Currency exchange risks.

***Our products are manufactured by independent third parties.***

We rely on independent foundries to manufacture all of our products. Substantially all of our products are currently manufactured by Taiwan Semiconductor Manufacturing Company, Ltd., United Microelectronics Corporation and other independent Asian foundries in Asia. Our reliance on these or other independent foundries involves a number of risks, including:

- The possibility of an interruption or loss of manufacturing capacity;
- Reduced control over delivery schedules, manufacturing yields and costs; and
- The inability to reduce our costs as rapidly as competitors who perform their own manufacturing and who are not bound by volume commitments to subcontractors at fixed prices.

Any failure of these third-party foundries to deliver products or otherwise perform as requested could damage our relationships with our customers and harm our sales and financial results.

To address potential foundry capacity constraints in the future, we may be required to enter into arrangements, including equity investments in or loans to independent wafer manufacturers in exchange for guaranteed production capacity, joint ventures to own and operate foundries, or “take or pay” contracts that commit us to purchase specified quantities of wafers over extended periods. These arrangements could require us to commit substantial capital or to grant licenses to our technology. If we need to commit substantial capital, we may need to obtain additional debt or equity financing, which could result in dilution to our shareholders.

***Because we are dependent upon a limited number of suppliers, we could experience delivery disruptions or unexpected product cost increases.***

We depend on a limited number of suppliers to obtain adequate supplies of quality raw materials on a timely basis. We do not generally have guaranteed supply arrangements with our suppliers. If we have difficulty in obtaining materials in the future, alternative suppliers may not be available, or if available, these suppliers may not provide materials in a timely manner or on favorable terms. If we cannot obtain adequate materials for the manufacture of our products, we may be forced to pay higher prices, experience delays and our relationships with our customers may suffer.

In addition, we license certain technology from third parties that is incorporated into many of our key products. If we are unable to obtain or license the technology on commercially reasonable terms and on a timely basis, we will not be able to deliver products to our customers on competitive terms and in a timely manner and our relationships with our customers may suffer.

***We have extended sales cycles, which increase our costs in obtaining orders and reduce the predictability of our earnings.***

Our potential customers often spend a significant amount of time to evaluate, test and integrate our products. Our sales cycles often last for several months and may last for up to a year or more. These longer sales cycles require us to invest significant resources prior to the generation of revenues and subject us to greater risk that customers may not order our products as anticipated. In addition, orders expected in one quarter could shift to another because of the timing of customers' purchase decisions. Any cancellation or delay in ordering our products after a lengthy sales cycle could adversely affect our business.

***Our products are subject to recall risks.***

The greater integration of functions and complexity of our products increase the risk that our customers or end users could discover latent defects or subtle faults in our products. These discoveries could occur after substantial volumes of product have been shipped, which could result in material recalls and replacement costs. Product recalls could also divert the attention of our engineering personnel from our product development needs and could adversely impact our customer relationships. In addition, we could be subject to product liability claims that could distract management, increase costs and delay the introduction of new products.

***The semiconductor industry is subject to cyclical variations in product supply and demand.***

The semiconductor industry is subject to cyclical variations in product supply and demand, the timing, length and volatility of which are difficult to predict. Downturns in the industry have been characterized by abrupt fluctuations in product demand, production over-capacity and accelerated decline of ASP. Upturns in the industry have been characterized by rising costs of goods sold and lack of production capacity at our suppliers. These cyclical changes in demand and capacity, upward and downward, could significantly harm our business. Our quarterly net revenues and gross margin performance could be significantly impacted by these cyclical variations. A prolonged downturn in the semiconductor industry could materially and adversely impact our business, financial condition and results of operations. We cannot assure you that the market will improve from a cyclical downturn or that cyclical performance will stabilize or improve.

***We may need additional funds to execute our business plan, and if we are unable to obtain such funds, we may not be able to expand our business, and if we do raise such funds, your ownership in ESS may be subject to dilution.***

We may be required to obtain substantial additional capital to finance our future growth, fund our ongoing research and development activities and acquire new technologies or companies. To the extent that our existing sources of liquidity and cash flow from operations are insufficient to fund our activities, we may need to seek additional equity or debt financing from time to time. If our performance or prospects decrease, we may need to consummate a private placement or public offering of our capital stock at a lower price than you paid for your shares. If we raise additional capital through the issuance of new securities at a lower price than you paid for your shares, you will be subject to additional dilution. Further, such equity securities may have rights, preferences or privileges senior to those of our existing common stock. Additional financing may not be available to us when needed or, if available, it may not be available on terms favorable to us.

***The value of our common stock may be adversely affected by market volatility.***

The price of our common stock fluctuates significantly. Many factors influence the price of our common stock, including:

- Future announcements concerning us, our competitors or our principal customers, such as quarterly operating results, changes in earnings estimates by analysts, technological innovations, new product introductions, governmental regulations, or litigation;
- Changes in accounting rules, particularly those related to the expensing of stock options;
- The liquidity within the market for our common stock;
- Sales by our officers, directors, other insiders and large shareholders;
- Investor perceptions concerning the prospects of our business and the semiconductor industry;
- Market conditions and investor sentiment affecting market prices of equity securities of high technology companies; and
- General economic, political and market conditions, such as recessions or international currency fluctuations.

***We are incurring additional costs and devoting more management resources to comply with increasing regulation of corporate governance and disclosure.***

We are spending an increased amount of management time and external resources to analyze and comply with changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, new SEC regulations and NASDAQ Stock Market rules and listing requirements. Devoting the necessary resources to comply with evolving corporate governance and public disclosure standards may result in increased general and administrative expenses and attention to these compliance activities and divert management's attention from our on-going business operations.

***Failure to maintain effective internal controls could have a material adverse effect on our business, operating results and stock price.***

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we are required to include an internal controls report of management's assessment of the design and effectiveness of our internal controls as part of our Annual Report on Form 10-K. Our independent registered public accounting firm is required to attest to, and report on, our management's assessment. In order to issue our report, our management must document both the design for our internal controls and the testing processes that support management's evaluation and conclusion. During the course of testing our internal controls each year, we may identify deficiencies which we may not be able to remediate, document and retest in time, due to difficulties including those arising from turnover of qualified personnel, to meet the deadline for management to complete its report and our independent registered public accounting firm may not have sufficient time to retest those remediated deficiencies for its attestation of management's report. Upon the completion of our testing and documentation, certain deficiencies may be discovered that will require remediation, the costs of which could have a material adverse effect on our results of operations. Moreover, our independent registered public accounting firm may not agree with our management's assessment and may send us a deficiency notice that we are unable to remediate on a timely basis. In addition, if we fail to maintain the adequacy of our internal controls, as such standards are modified, supplemented or amended from time to time we may not be able to ensure that our management can conclude on an ongoing basis that we have effective internal controls over financial reporting in accordance with Section 404 and we may not be able to retain our independent registered public accounting firm with sufficient resources to attest to and report on our internal control. In the future, if we are unable to assert that our internal control over financial reporting is effective, if our independent registered public accounting firm is unable to attest that our management's report is fairly stated, if our independent registered public accounting firm is unable to express an opinion on our management's evaluation or on the effectiveness of the internal controls, or if our independent registered public accounting firm expresses an adverse opinion on

our internal controls, we could lose investor confidence in the accuracy and completeness of our financial reports, which in turn could have an adverse effect on our stock price.

***Changes in stock option accounting rules may adversely impact our reported operating results prepared in accordance with generally accepted accounting principles, our stock price and our competitiveness in the employee marketplace.***

Technology companies like ours have a history of using broad based employee stock option programs to hire, incentivize and retain our workforce in a competitive marketplace. Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123") allowed companies the choice of either using a fair value method of accounting for options, which would result in expense recognition for all options granted, or using an intrinsic value method, as prescribed by Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25"), with a pro forma disclosure of the impact on net income (loss) of using the fair value option expense recognition method. We have previously applied APB 25 and accordingly we generally have not recognized any expense with respect to employee stock options as long as such options were granted at exercise prices equal to the fair value of our common stock on the date of grant.

On December 16, 2004, the FASB issued Statement of SFAS No. 123R (revised 2004), "Share-Based Payment", which is a revision of SFAS No. 123, "Accounting for Stock-Based Compensation." SFAS No. 123R supersedes APB Opinion No. 25, "Accounting for Stock Issued to Employees," and amends SFAS No. 95, "Statement of Cash Flows." Generally, the approach in SFAS No. 123R is similar to the approach described in SFAS No. 123. However, SFAS No. 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro forma disclosure is no longer an alternative. The new standard will be effective for our quarter ending September 30, 2005 and will apply to all share-based awards granted after the effective date and to awards modified, repurchased, or cancelled after that date. SFAS 123R will have a significant impact on our consolidated statement of operations as we will be required to expense the fair value of our stock options rather than disclosing the impact on our consolidated result of operations within our footnotes in accordance with the disclosure provisions of SFAS 123. This may result in lower reported earnings per share which could negatively impact our future stock price. In addition, this could impact our ability to utilize broad based employee stock plans to reward employees and could result in a competitive disadvantage to us in the employee marketplace.

#### **Item 7A. *Quantitative and Qualitative Disclosures about Market Risk***

We are exposed to the impact of foreign currency fluctuations and interest rate changes which may lead to changes in the market values of our investments.

#### **Foreign Exchange Risks**

We fund our operations with cash generated by operations, the sale of marketable securities and short and long-term debt. As we operate primarily in Asia, we are exposed to market risk from changes in foreign exchange rates, which could affect our results of operations and financial condition. In order to reduce the risk from fluctuation in foreign exchange rates, our product sales and all of our arrangements with our foundries and test and assembly vendors are denominated in U.S. dollars. We have not entered into any currency hedging activities. We performed a sensitivity analysis assuming a hypothetical 10% adverse movement in foreign exchange rates to the foreign subsidiaries and the underlying exposures described above. As of December 31, 2004, the analysis indicated that these hypothetical market movements would not have a material effect.

#### **Interest Rate Risks**

We also invest in short-term investments. Consequently, we are exposed to fluctuation in rates on these investments. Increases or decreases in interest rates generally translate into decreases and increases in the fair

value of these investments. In addition, the credit worthiness of the issuer, relative values of alternative investments, the liquidity of the instrument, and other general market conditions may affect the fair values of interest rate sensitive investments. In order to reduce the risk from fluctuation in interest rates, we invest in highly liquid governmental notes and bonds with contractual maturities of less than two years. All of the investments have been classified as available-for-sale, and at December 31, 2004, the fair value of our investments approximated their costs.

### **Investment Risk**

We are exposed to market risk as it relates to changes in the market value of our investments in public companies. We invest in equity instruments of public companies for business and strategic purposes and we have classified these securities as available-for-sale. These available-for-sale equity investments, primarily in technology companies, are subject to significant fluctuations in fair market value due to the volatility of the stock market and the industries in which these companies participate. Our objective in managing our exposure to stock market fluctuations is to minimize the impact of stock market declines to our earnings and cash flows. There are, however, a number of factors beyond our control. Continued market volatility, as well as mergers and acquisitions, have the potential to have a material impact on our results of operations in future periods.

We are also exposed to changes in the value of our investments in non-public companies, including start-up companies. These long-term equity investments in technology companies are subject to significant fluctuations in fair value due to the volatility of the industries in which these companies participate and other factors.

**Item 8. Financial Statements and Supplementary Data**

The following documents are filed as part of this Report:

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1. Financial Statements:	
Consolidated Balance Sheets as of December 31, 2004 and 2003 .....	44
Consolidated Statements of Operations for the years ended December 31, 2004, 2003 and 2002 ..	45
Consolidated Statements of Shareholders’ Equity for the years ended December 31, 2004, 2003 and 2002 .....	46
Consolidated Statements of Cash Flows for the years ended December 31, 2004, 2003 and 2002 ..	47
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2. Financial statement schedule:	
Valuation and Qualifying Accounts for each of the three years ended December 31, 2004, 2003 and 2002 .....	76
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Selected Quarterly Financial Data .....	77

## MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of the compliances with the policies or procedures may deteriorate.

With the participation of the Chief Executive Officer and the Chief Financial Officer, management conducted an evaluation of the effectiveness of the Company's internal control over financial reporting based on the framework and criteria established in *Internal Control — Integrated Framework*, issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management has concluded that the Company's internal control over financial reporting was effective as of December 31, 2004.

Management's assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2004 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

By: /s/ ROBERT L. BLAIR  
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ROBERT L. BLAIR  
President and Chief Executive Officer

By: /s/ JAMES B. BOYD  
\_\_\_\_\_  
JAMES B. BOYD  
Vice President and Assistant Secretary

March 15, 2005

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of ESS Technology, Inc.:

We have completed an integrated audit of ESS Technology, Inc.'s 2004 consolidated financial statements and of its internal control over financial reporting as of December 31, 2004 and audits of its 2003 and 2002 consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Our opinions, based on our audits, are presented below.

### **Consolidated financial statements and financial statement schedule**

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of ESS Technology, Inc. and its subsidiaries at December 31, 2004 and 2003, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2004 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 statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and the financial statement schedule based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit of financial statements 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.

### **Internal control over financial reporting**

Also, in our opinion, management's assessment, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 8, that the Company maintained effective internal control over financial reporting as of December 31, 2004 based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), is fairly stated, in all material respects, based on those criteria. Furthermore, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on criteria established in *Internal Control — Integrated Framework* issued by the COSO. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express opinions on management's assessment and on the effectiveness of the Company's internal control over financial reporting based on our audit. We conducted our audit of internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. An audit of internal control over financial reporting includes obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we consider necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of

the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ PricewaterhouseCoopers LLP

San Jose, California  
March 15, 2005

1. Financial Statements:

**ESS TECHNOLOGY, INC.**  
**CONSOLIDATED BALANCE SHEETS**

	December 31,	
	2004	2003
	(In thousands)	
<b>ASSETS</b>		
Cash and cash equivalents .....	\$ 41,527	\$ 56,517
Short-term investments .....	85,161	108,329
Accounts receivable, net .....	21,094	49,326
Related party receivable — Vialta .....	128	281
Other receivables .....	234	8,067
Inventories .....	45,669	33,546
Prepaid expenses and other assets .....	3,876	2,959
Total current assets .....	197,689	259,025
Property, plant and equipment, net .....	23,009	24,629
Goodwill .....	43,391	43,789
Other intangible assets, net .....	6,414	11,510
Other assets .....	13,241	13,640
Total assets .....	<u>\$283,744</u>	<u>\$352,593</u>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Accounts payable and accrued expenses .....	\$ 50,646	\$ 84,414
Income tax payable and deferred income taxes .....	39,738	29,390
Total current liabilities .....	90,384	113,804
Non-current deferred tax liability .....	448	11,708
Total liabilities .....	90,832	125,512
Commitments and contingencies (Note 15)		
Shareholders' equity:		
Preferred stock, no par value, 10,000 shares authorized; none issued and outstanding .....	—	—
Common stock, no par value, 100,000 shares authorized; 39,681 and 39,246 shares issued and outstanding at December 31, 2004 and 2003, respectively .....	178,030	175,546
Accumulated other comprehensive income (loss) .....	(174)	929
Retained earnings .....	15,056	50,606
Total shareholders' equity .....	192,912	227,081
Total liabilities and shareholders' equity .....	<u>\$283,744</u>	<u>\$352,593</u>

The accompanying notes are an integral part of these consolidated financial statements.

**ESS TECHNOLOGY, INC.**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**

	<u>Years Ended December 31,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
	(In thousands, except per share data)		
Net revenues .....	\$256,496	\$194,815	\$272,039
Net revenues from related party — Vialta .....	<u>782</u>	<u>458</u>	<u>1,403</u>
Total net revenues .....	257,278	195,273	273,442
Cost of revenues .....	<u>219,397</u>	<u>132,690</u>	<u>176,454</u>
Gross profit .....	37,881	62,583	96,988
Operating expenses:			
Research and development .....	37,467	33,184	26,964
In-process research and development .....	—	2,690	—
Selling, general and administrative .....	<u>41,056</u>	<u>31,761</u>	<u>34,170</u>
Operating income (loss) .....	(40,642)	(5,052)	35,854
Non-operating income, net .....	<u>3,360</u>	<u>45,946</u>	<u>2,407</u>
Income (loss) before income taxes .....	(37,282)	40,894	38,261
Provision for (benefit from) income taxes .....	(1,732)	15,603	984
Net income (loss) .....	<u><u>\$ (35,550)</u></u>	<u><u>\$ 25,291</u></u>	<u><u>\$ 37,277</u></u>
Net income (loss) per share:			
Basic .....	<u><u>\$ (0.90)</u></u>	<u><u>\$ 0.64</u></u>	<u><u>\$ 0.85</u></u>
Diluted .....	<u><u>\$ (0.90)</u></u>	<u><u>\$ 0.61</u></u>	<u><u>\$ 0.80</u></u>
Shares used in calculating net income (loss) per share:			
Basic .....	<u><u>39,476</u></u>	<u><u>39,517</u></u>	<u><u>44,044</u></u>
Diluted .....	<u><u>39,476</u></u>	<u><u>41,238</u></u>	<u><u>46,731</u></u>

The accompanying notes are an integral part of these consolidated financial statements.

ESS TECHNOLOGY, INC.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

	Common Stock		Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Shareholders' Equity	Comprehensive Income (Loss)
	Shares	Amount				
	(In thousands)					
Balance at December 31, 2001	42,334	153,678	\$(1,374)	\$ 24,674	\$176,978	
Issuance of common stock upon exercise of options	1,203	7,935	—	—	7,935	
Issuance of common stock for employee stock purchase plan	216	1,452	—	—	1,452	
Issuance of common stock from secondary public offering	2,500	45,181	—	—	45,181	
Income tax benefit on disqualifying disposition of common stock options	—	1,025	—	—	1,025	
Repurchase of common stock	(2,948)	(13,228)	—	(29,431)	(42,659)	
Stock-related compensation charge	—	301	—	—	301	
Unrealized gain on marketable securities	—	—	260	—	260	\$ 260
Net income	—	—	—	37,277	37,277	37,277
Write-down of Cisco shares	—	—	1,573	—	1,573	1,573
Loss on sale of marketable security	—	—	45	—	45	45
Total comprehensive income	—	—	—	—	—	<u>\$ 39,155</u>
Balance at December 31, 2002	43,305	196,344	504	32,520	229,368	
Issuance of common stock upon exercise of options	642	3,872	—	—	3,872	
Issuance of common stock for employee stock purchase plan	159	750	—	—	750	
Income tax reversal on disqualifying disposition of common stock options	—	(3,324)	—	—	(3,324)	
Repurchase of common stock	(4,860)	(22,096)	—	(7,205)	(29,301)	
Unrealized gain on marketable Securities	—	—	425	—	425	\$ 425
Net income	—	—	—	25,291	25,291	25,291
Total comprehensive income	—	—	—	—	—	<u>\$ 25,716</u>
Balance at December 31, 2003	39,246	175,546	929	50,606	227,081	
Issuance of common stock upon exercise of options	275	1,582	—	—	1,582	
Issuance of common stock for employee stock purchase plan	160	880	—	—	880	
Income tax reversal on disqualifying disposition of common stock options	—	(117)	—	—	(117)	
Stock-related compensation charge	—	139	—	—	139	
Unrealized loss on marketable securities	—	—	(1,103)	—	(1,103)	\$ (1,103)
Net loss	—	—	—	(35,550)	(35,550)	(35,550)
Total comprehensive loss	—	—	—	—	—	<u>\$(36,653)</u>
Balance at December 31, 2004	<u>39,681</u>	<u>\$178,030</u>	<u>\$ (174)</u>	<u>\$ 15,056</u>	<u>\$192,912</u>	

The accompanying notes are an integral part of these consolidated financial statements.

**ESS TECHNOLOGY, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

	Years Ended December 31,		
	2004	2003	2002
	(In thousands)		
<b>Cash flows from operating activities:</b>			
Net income (loss) .....	\$ (35,550)	\$ 25,291	\$ 37,277
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation .....	5,489	3,948	5,685
Amortization .....	4,796	2,899	395
Write-down of intangible asset — Pictos .....	300	—	—
Write-off of NetRidium goodwill .....	398	—	—
(Gain) loss on sale of property, plant and equipment .....	12	54	(85)
Charges for purchased in-process research and development ..	—	2,690	—
(Gain) loss from sale of investments .....	(231)	(185)	189
Write-down of investments .....	—	1,986	3,612
Stock-based compensation .....	139	—	301
Income tax benefit (reversal) on disqualifying disposition of common stock options .....	(117)	331	1,025
Changes in assets and liabilities, net of effect of business combinations:			
Accounts receivable, net .....	36,065	(27,421)	14,160
Related party receivable — Vialta .....	153	(248)	14
Inventories .....	(12,123)	(6,381)	13,297
Prepaid expenses and other assets .....	3,435	(1,786)	(1,208)
Accounts payable and accrued expenses .....	(33,768)	40,958	(13,978)
Related party payable — Vialta .....	—	—	(111)
Income tax payable and deferred income taxes .....	(236)	14,071	4,179
Net cash provided by (used in) operating activities .....	(31,238)	56,207	64,752
<b>Cash flows from investing activities:</b>			
Purchase of property, plant and equipment .....	(3,914)	(7,962)	(2,147)
Sales of property, plant and equipment .....	34	—	—
Purchase of short-term investments .....	(129,527)	(161,188)	(295,349)
Sale of short-term investments .....	152,369	236,989	143,112
Purchase of long-term investments .....	(5,176)	(5,298)	(5,212)
Sale of long-term investments .....	—	—	440
Cash paid for acquisitions, net of cash acquired .....	—	(52,052)	—
Net cash provided by (used in) investing activities .....	13,786	10,489	(159,156)
<b>Cash flows from financing activities:</b>			
Repurchase of common stock .....	—	(29,301)	(42,659)
Issuance of common stock from secondary public offering .....	—	—	45,181
Issuance of common stock under employee stock purchase plan and stock option plans .....	2,462	4,622	9,387
Net cash provided by (used in) financing activities .....	2,462	(24,679)	11,909
Net increase (decrease) in cash and cash equivalents .....	(14,990)	42,017	(82,495)
Cash and cash equivalents at beginning of year .....	56,517	14,500	96,995
Cash and cash equivalents at end of year .....	\$ 41,527	\$ 56,517	\$ 14,500
<b>Supplemental disclosure of cash flow information</b>			
Cash paid for income taxes .....	\$ (460)	\$ (2,926)	\$ (237)
Cash refund for income taxes .....	\$ 1,872	\$ 1,566	\$ 4,520

The accompanying notes are an integral part of these consolidated financial statements.

## ESS TECHNOLOGY, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### Note 1. The Company

We design, develop and market highly integrated analog and digital processor chips, imaging sensor chips, digital amplifiers, and camera lens modules. Our digital processor chips are the primary processors driving digital video and audio devices, including DVD, Video CD ("VCD"), consumer digital audio players, and digital media players. Our imaging sensor chips utilize advanced Complimentary Metal Oxide Semiconductor ("CMOS") sensor technology to capture an image for cellular camera phone applications. Our digital amplifiers boost the digital sound to a level required to drive loudspeakers, in such applications as DVD and CD players, home theater systems, audio receivers, boom boxes and television sets. Our camera lens modules provide camera capabilities to electronic devices such as cellular phones and Personal Digital Assistants ("PDAs"). We have also developed and marketed encoding processors to address the growing demand for digital video recorders ("DVRs") and recordable DVD players. We believe that multi-featured DVD, DVR and recordable DVD players will serve as a platform for the digital home system ("DHS"), integrating various digital home entertainment and information delivery products into a single box. We are also a supplier of chips for use in modems, other communication devices, and PC audio products. Our chips use multiple processors and a programmable architecture that enable us to offer a broad array of features and functionality. We focus on our design and development strengths and outsource all of our chip fabrication and assembly as well as the majority of our test operations.

We market our products worldwide through our direct sales force, distributors and sales representatives. Substantially all of our sales are to customers in China, Hong Kong, Taiwan, Japan, Korea, Turkey and Singapore. We employ sales and support personnel located outside of the United States in China, Taiwan, Hong Kong, Korea and Japan to support these international sales efforts. We expect that international sales will continue to represent a significant portion of our net revenues. In addition, substantially all of our products are manufactured, assembled and tested by independent third parties in Asia. We also have a number of employees engaged in research and development efforts outside of the United States. There are special risks associated with conducting business outside of the United States.

We were incorporated in California in 1984 and became a public company in 1995. On June 9, 2003, we acquired 100% of the outstanding shares of Pictos Technologies, Inc., a Delaware corporation ("Pictos"). On August 15, 2003, we acquired 100% of the outstanding shares of Divio, Inc., a California corporation ("Divio"). See Note 3, "Significant Business Combinations", to the consolidated financial statements.

#### Note 2. Summary of Significant Accounting Policies

##### *Use of Estimates*

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

##### *Basis of Presentation*

The accompanying consolidated financial statements have been prepared in accordance with accounting principals generally accepted in the United States of America.

The consolidated financial statements include the accounts of ESS and all of its subsidiaries. The financial condition and results of operations as of and for the years ended December 31, 2004, 2003 and 2002 include the results of acquired subsidiaries from their effective dates of acquisition. All significant inter-company accounts and transactions have been eliminated.

## ESS TECHNOLOGY, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

#### *Foreign Currency Translation*

Our subsidiaries primarily use the U.S. dollar as their functional currency. Accordingly, assets and liabilities of these subsidiaries are translated using exchange rates in effect at the end of the period, except for non-monetary assets that are translated using historical exchange rates. Revenues and costs are translated using average exchange rates for the period, except for costs related to those balance sheet items that are translated using historical exchange rates. The resulting transaction gains and losses are recorded as non-operating income (loss) in the Consolidated Statement of Operations as incurred and were not material for all periods presented.

#### *Cash, Cash Equivalents, and Short-Term Investments*

We consider all highly liquid investments with an initial maturity of 90 days or less to be cash equivalents and investments with original maturity dates of greater than 90 days to be short-term investments.

Short-term investments are primarily comprised of debt instruments and marketable securities. Short-term investments are accounted for as available-for-sale and are reported at fair value with unrealized gains and losses, net of related tax, recorded as accumulated other comprehensive income in shareholders' equity until realized in accordance with Statement of Financial Accounting Standards ("SFAS") No. 115, "Accounting for Certain Investments in Debt and Equity Securities." Gains and losses on securities sold are based on the specific identification method and are included in our Consolidated Statement of Operations as non-operating income (loss).

The Company accounts for its investments in auction rate securities in accordance with FASB Statement 115 and its policy regarding cash equivalents. Specifically, when the underlying security of an auction rate security has a stated or contractual maturity date in excess of 90 days, regardless of the frequency of the interest rate reset date, which results in a highly liquid market similar to cash equivalents, the security is classified as an available-for-sale marketable debt security.

#### *Fair Value of Financial Instruments*

The reported amounts of certain of our financial instruments, including cash and cash equivalents, short-term investments, accounts receivable, accounts payable, accrued expenses and other current liabilities approximate fair value due to their short maturities.

#### *Inventories*

Our inventory is comprised of raw materials, work-in-process and finished goods, all of which are manufactured by third-party contractors. Inventory is valued at the lower of standard cost (which approximates actual cost on a first-in, first-out basis) or market. We reduce the carrying value of inventory for estimated slow-moving, excess, obsolete, damaged or otherwise unmarketable products by an amount that is the difference between cost and estimated market value based on forecasts of future demand and market conditions.

#### *Property and Equipment*

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation is generally computed using the straight-line method over the estimated useful lives of the assets.

Building and building improvements .....	7-30 years
Machinery and equipment .....	3-5 years
Furniture and fixtures .....	3-5 years

## ESS TECHNOLOGY, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Repairs and maintenance costs are expensed as incurred.

#### *Equity Investments*

Equity investments, representing ownership of less than 20% of the investee in which we do not have the ability to exert significant influence, are accounted for using the cost method. The Company reviews its investments on a regular basis and considers factors including the operating results, available evidence of the market value and economic outlook of the relevant industry sector. When the Company concludes that an other-than-temporary impairment has resulted, the difference between the fair value and the carrying value is written off and recorded as an impairment charge in the statement of operations.

#### *Goodwill*

We test goodwill for impairment annually, or more frequently if events or changes in circumstances indicate that the asset might be impaired, applying a fair-value based test. Examples of such events or circumstances include:

- a significant adverse change in legal factors or in the business climate;
- an adverse action or assessment by a regulator;
- unanticipated competition;
- a loss of key personnel;
- a more-likely-than-not expectation that a reporting unit or a significant portion of a reporting unit will be sold or otherwise disposed of;
- the testing for recoverability of a significant asset group within a reporting unit; and
- recognition of goodwill impairment loss in the financial statements of a subsidiary that is a component of a reporting unit.

The impairment test consists of a comparison of the fair value of the goodwill with its carrying value. If the carrying value of the goodwill exceeds its fair value, an impairment loss shall be recognized in an amount equal to that excess.

#### *Acquisition-Related Intangible Assets*

Intangible assets result from business acquisitions accounted for under the purchase method, and consist of existing technology, patents and core technology, customer contacts and relationships, partner agreements and relationships, order backlog, distributor relationships, foundry agreements and in-process research and development. Intangible assets are reported at cost, net of accumulated amortization. Identifiable intangible assets other than in-process research and development are amortized on a straight-line basis over their estimated useful lives ranging from three months to three years. In-process research and development is charged to operating expense in the period the acquisition is consummated.

#### *Impairment of Long-Lived Assets*

We review long-lived assets and certain identifiable intangibles assets to be held and used for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. We evaluate any possible impairment of long-lived assets and certain intangible assets using estimates of undiscounted future cash flows. If an impairment loss is to be recognized, it is measured as the amount by which the carrying amount of the asset exceeds the fair value of the asset. Management evaluates the fair value of its long-lived assets and certain intangibles assets using primarily the estimated discounted

## ESS TECHNOLOGY, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

future cash flows method. Management uses other alternative valuation techniques whenever the estimated discounted future cash flows method is not appropriate.

#### *Revenue Recognition*

Revenue is primarily generated by product sales and is generally recognized at the time of shipment when persuasive evidence of an arrangement exists, the price is fixed or determinable and collection of the resulting receivable is reasonably assured, except for products sold to certain distributors with certain rights of return and allowance, in which case, revenue is deferred until such a distributor resells the products to a third party. Such deferred revenue related to distributor sales, net of deferred cost of goods sold are recorded as deferred margin included in accrued expenses on our balance sheets.

We provide for rebates based on current contractual terms and future returns based on historical experiences at the time revenue is recognized as reductions to product revenue. Actual amounts may be different from management's estimates. Such differences, if any, are recorded in the period they become known.

Income from MediaTek royalties for the sale of products utilizing licensed technology is reported as revenue based on the number of units as reported to us by MediaTek.

#### *Research and Development Costs*

We expense research and development costs as incurred.

#### *In-Process Research and Development*

Purchased in-process research and development consists primarily of acquired technology that has not reached technological feasibility.

#### *Income Taxes*

We account for income taxes under an asset and liability approach that requires the recognition of deferred tax liabilities and assets for the expected future tax consequences of timing differences between the carrying amounts and the tax bases of assets and liabilities. U.S. deferred income taxes are not provided on un-remitted earnings of our foreign subsidiaries as such earnings are considered permanently invested. Assumptions underlying recognition of deferred tax assets and non-recognition of U.S. income tax on un-remitted earnings can change if our business plan is not achieved or if Congress adopts changes in the Internal Revenue Code of 1986, as amended.

#### *Net Income (Loss) Per Share*

Basic net income (loss) per share is computed by dividing net loss by the weighted average number of common shares outstanding during the period. Diluted net income (loss) per share is calculated using the weighted average number of outstanding shares of common stock plus potential dilutive shares. Potential dilutive shares consist of stock options using the treasury stock method based on the average stock price for the period. The calculation of diluted net loss per share excludes potential dilutive shares if the effect is antidilutive.

#### *Stock Based Compensation*

We account for stock-based compensation, including stock options granted under our various stock option plans and shares issued under the 1995 Employee Stock Purchase Plan ("Purchase Plan"), using the intrinsic value method prescribed in APB No. 25, "Accounting for Stock Issued to Employees," and related

ESS TECHNOLOGY, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

interpretations. Compensation cost for stock options, if any, is recognized ratably over the vesting periods. Our policy is to grant options under our stock option plans with an exercise price equal to the fair market value of our common stock based on the closing price on the grant date, except as otherwise provided by law. Our policy is to grant purchase options under the Purchase Plan with a purchase price equal to 85% of the lesser of the fair market value of the common stock on the enrollment date or on the purchase date. The enrollment date is on the first business day of May and November of each year. Unless otherwise specified, the purchase dates under the Purchase Plan are on the last business date of April or October. We provide additional pro forma disclosures as required under SFAS No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123") and SFAS No. 148, "Accounting for Stock-Based Compensation — Transition and Disclosure — an Amendment of SFAS No. 123."

The Purchase Plan, as amended, permits eligible employees to acquire shares of our common stock through payroll deductions at a price equal to the lower of 85% of the fair market value of our common stock at the beginning of the offering period or on the purchase date. The Purchase Plan, as amended, provides a 24-month rolling period beginning on each enrollment date and the purchase price is automatically adjusted to reflect the lower enrollment price. As of December 31, 2004, 973,097 shares have been issued under the Purchase Plan, as amended.

Our pro forma net income (loss) and net income (loss) per share would have been as follows had compensation costs for options granted under our stock option plans and shares purchased under our Purchase Plan been determined based on the fair value at the grant dates, as prescribed by SFAS No. 123:

	<u>Years Ended December 31,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
	(In thousands, except per share data)		
Net income (loss):			
As reported .....	\$(35,550)	\$ 25,291	\$ 37,277
Stock-based employee compensation expense included in reported net income (loss) .....	39	—	—
Amortization of stock compensation expense .....	<u>(3,787)</u>	<u>(10,142)</u>	<u>(10,827)</u>
Pro forma net income (loss) .....	<u>\$(39,298)</u>	<u>\$ 15,149</u>	<u>\$ 26,450</u>
Net income (loss) per share — basic:			
As reported .....	\$ (0.90)	\$ 0.64	\$ 0.85
Pro forma .....	\$ (1.00)	\$ 0.38	\$ 0.60
Net income (loss) per share — diluted:			
As reported .....	\$ (0.90)	\$ 0.61	\$ 0.80
Pro forma .....	\$ (1.00)	\$ 0.37	\$ 0.57

The fair value of each option granted under our stock option plans is estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions for the years ended December 31, 2004, 2003 and 2002:

	<u>Employee Stock Options</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
Expected dividend yield .....	0.0%	0.0%	0.0%
Weighted average risk-free interest rate .....	3.43%	2.13%	3.69%
Expected volatility .....	82%	94%	102%
Weighted average expected life (in years) .....	4	4	4
Weighted average grant date fair value .....	\$7.58	\$5.79	\$9.70

ESS TECHNOLOGY, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Shares purchased under the Purchase Plan in 2004, 2003 and 2002 were approximately 160,000, 159,000 and 216,000 shares, respectively, at an average price per share of \$5.50, \$4.69 and \$6.74, respectively. Pro forma compensation expense for the grant date fair value, as defined by SFAS No. 123, of the purchase rights granted under the Purchase Plan was calculated using the Black-Scholes model with the following assumptions for 2004, 2003 and 2002:

	1995 Employee Stock Purchase Plan		
	2004	2003	2002
Expected dividend yield .....	0.0%	0.0%	0.0%
Risk-free interest rate .....	1.61%	0.97%	3.69%
Expected volatility .....	82%	60%	102%
Expected life (in months) .....	6	6	6
Weighted average grant date fair value .....	\$3.32	\$2.01	\$3.45

Because additional option grants are expected to be made from our stock option plans and additional shares are expected to be purchased under the Purchase Plan each year, the above pro forma disclosures are not representative of pro forma effects on reported net income (loss) for future years.

*Warranty*

We provide standard warranty coverage for twelve months. We account for the general warranty cost as a charge to cost of goods sold when revenue is recognized. The estimated warranty cost is based on historical product performance and field expenses. In addition to the general warranty reserves, we also provide specific warranty reserves for certain parts if there are potential warranty issues. The following table shows the details of the product warranty accrual, as required by Financial Accounting Standards Board ("FASB") Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others," for the years ended December 31, 2004, 2003 and 2002, respectively.

	Year Ended December 31, 2004	Year Ended December 31, 2003	Year Ended December 31, 2002
	(In thousands)		
Beginning balance .....	\$ 800	\$ 550	\$ 544
Accruals for warranties issued during the year .....	152	628	1,067
Settlements made during the year .....	(416)	(378)	(1,061)
Adjustments .....	<u>(212)</u>	<u>—</u>	<u>—</u>
Ending balance .....	<u>\$ 324</u>	<u>\$ 800</u>	<u>\$ 550</u>

*Comprehensive Income (Loss)*

SFAS No. 130, "Reporting Comprehensive Income" ("SFAS 130"), establishes a standard for the reporting and display of comprehensive income and its components within the financial statements. Comprehensive income, as defined, includes all changes in equity during a period from non-owner sources.

*Risks and Uncertainties*

We operate in one business segment that is characterized by rapid technological advances, changes in customer requirements and evolving industry standards. Our failure to anticipate or respond to such advances and changes could have a material adverse effect on our business and operating results.

## ESS TECHNOLOGY, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

#### *Concentration of Credit Risk*

Financial instruments, which potentially subject us to concentrations of credit risk, consist primarily of cash equivalents, short-term investments, and accounts receivable. By policy, we place our investments, other than U.S. Government Treasury instruments, only with financial institutions meeting our investment guidelines. The composition and maturities of our cash equivalents and investments are regularly monitored by management.

Almost all of our accounts receivable are derived from sales to customers and distributors, in the consumer electronics, computer and communications markets. See Note 13, "Business Segment Information and Concentration of Certain Risks." Substantially all of our sales are to customers in Hong Kong, Taiwan, Japan, China, Korea, Turkey, and Singapore. Dynax Electronics is our largest distributor. Sales through Dynax Electronics (HK) LTD ("Dynax Electronics") accounted for approximately 51%, 63% and 57% of our net revenues in 2004, 2003 and 2002, respectively. Dynax Electronics' percentage of trade accounts receivable was 72% and 73% as of December 31, 2004 and December 31, 2003.

A substantial portion of our net revenues have been derived from sales to a small number of customers. Sales to our top five end-customers accounted for approximately 42% of our net revenues in 2004 compared to 34% of our net revenues in 2003. ATLM, one of our top end-customers, accounted for approximately 15% and 12% of our net revenues for 2004 and 2003, respectively. Rikai, another one of our top end-customers, accounted for approximately 7% and 11% of our net revenues for 2004 and 2003, respectively. No other end-customers accounted for more than 10% of our net revenues during 2004 and 2003.

We believe that the concentration of credit risk on accounts receivable is substantially mitigated by our evaluation process and relatively short collection terms. We perform ongoing credit evaluations of our customers' financial condition and limit the amount of credit extended when deemed necessary, but generally require no collateral. We maintain an allowance for potential credit losses. In estimating the allowance, we take into consideration the overall quality and aging of the receivable portfolio and specifically identified customer risks. Through December 31, 2004, such losses have been within our expectations.

#### *Reclassification*

Certain reclassifications have been made to prior period reported amounts to conform with current year presentation, including reclassification of auction rate securities from cash and cash equivalents to short-term investments. Accordingly, we have revised the classification to exclude \$33.7 million and \$42.4 million from cash and cash equivalents at December 31, 2004 and 2003, respectively, and to include such amounts as short-term investments. In addition, we have made corresponding reclassifications to the accompanying statements of cash flows to reflect the purchases and proceeds from sale of the auction rate securities as investing activities. These reclassifications resulted in a net increase in cash provided by investing activities of \$8.7 million in 2004, net decrease in cash used in investing activities of \$81.2 million in 2003 and net increase in cash used in investing activities of \$123.6 million in 2002. These reclassifications had no impact on previously reported results of our operations, operating cash flows or working capital.

#### *Recent Accounting Pronouncements*

On December 16, 2004, the FASB issued Statement of SFAS No. 123R (revised 2004), "Share-Based Payment", which is a revision of SFAS No. 123, "Accounting for Stock-Based Compensation". SFAS No. 123R supersedes APB Opinion No. 25, "Accounting for Stock Issued to Employees", and amends SFAS No. 95, "Statement of Cash Flows". Generally, the approach in SFAS No. 123R is similar to the approach described in SFAS No. 123. However, SFAS No. 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro forma disclosure is no longer an alternative. The new standard will be effective for our

## ESS TECHNOLOGY, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

quarter ending September 30, 2005. We are in the process of assessing the impact of adopting this new standard, including the transition method and option pricing model to select.

In December 2004, the FASB issued SFAS No. 151, "Inventory Costs", which adopts wording from the International Accounting Standards Board's IAS 2 "Inventories" in an effort to improve the comparability of international financial reporting. The new standard indicates that abnormal freight, handling costs, and wasted materials (spoilage) are required to be treated as current period charges rather than as a portion of inventory cost. Additionally, the standard clarifies that fixed production overhead should be allocated based on the normal capacity of a production facility. The provisions of SFAS No. 151 are effective for fiscal years beginning after June 15, 2005. Adoption of SFAS No. 151 is not expected to have a material impact on our financial position or results of operations.

On October 22, 2004, the President signed the American Jobs Creation Act of 2004 (the "Act"). The Act creates a temporary incentive for U.S. corporations to repatriate accumulated income earned abroad by providing an 85 percent dividends received deduction for certain dividends from controlled foreign corporations. The deduction is subject to a number of limitations and, as of today, uncertainty remains as to how to interpret numerous provisions in the Act. As such, we are not yet in a position to decide on whether, and to what extent, we might repatriate foreign earnings that have not yet been remitted to the U.S.

In June 2004, the FASB ratified Emerging Issues Task Force Issue No. 03-1 (EITF 03-1), "The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments." EITF 03-1 includes new guidance for evaluating and recording impairment losses on debt and equity investments, as well as new disclosure requirements for investments that are deemed to be temporarily impaired. Adoption of the recognition and measurement guidance of EITF 03-1 has been temporarily deferred by the FASB, but the disclosure requirements of EITF 03-1 are effective for our 2004 annual consolidated financial statements. Accordingly, additional disclosures as required by EITF 03-1 are included in Note 6 of the Notes to Consolidated Financial Statements.

#### **Note 3. Significant Business Combinations**

##### *Divio*

On August 15, 2003, we acquired 100% of the outstanding shares of Divio for \$27.1 million in cash plus transaction costs. Divio, formerly a privately-held company based in Sunnyvale, California, designs, manufactures and markets digital encoding semiconductor products. The acquisition expands our product lines in the digital consumer electronics market with advanced MPEG 1, 2 and 4 encoders and DV codecs for digital video recorders, digital still cameras and solid-state digital camcorders. The acquisition was accounted for as a purchase combination under SFAS No. 141, "Business Combination," ("SFAS 141"). Accordingly, the estimated fair value of assets acquired and liabilities assumed were included in our consolidated balance sheet as of August 15, 2003, the effective date of the purchase. The results of operations of Divio have been included in our consolidated results of operations since the effective date of the purchase. There were no significant differences between our accounting policies and those of Divio.

**ESS TECHNOLOGY, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

We allocated the purchase price of \$27.1 million and \$3.1 million of legal, other professional expenses and other costs directly associated with the acquisition as follows, based on management's estimates and appraisal:

<u>Purchase Price Allocation</u>	<u>Amounts</u> <u>(In thousands)</u>
Tangible assets .....	\$ 1,661
Identifiable intangible assets .....	6,310
Goodwill .....	<u>23,535</u>
Total assets acquired .....	31,506
Deferred tax liabilities .....	<u>(2,587)</u>
Net assets acquired .....	28,919
In-process research and development .....	<u>1,270</u>
Total consideration .....	<u><u>\$30,189</u></u>

The following table lists the components of \$6.3 million identifiable intangible assets and their respective useful lives.

<u>Identifiable Intangible Assets</u>	<u>Estimated Fair Value</u>	<u>Estimated Life</u>
	<u>(In thousands)</u>	
Existing technology .....	\$4,790	3 years
Patents and core technology .....	820	3 years
Customer contacts and related relationships .....	510	3 years
Partner agreements and related relationships .....	110	3 years
Order backlog .....	<u>80</u>	3 months
Total identifiable intangible assets .....	<u><u>\$6,310</u></u>	

***Pictos***

On June 9, 2003, we acquired 100% of the outstanding shares of Pictos for \$27.0 million in cash plus transaction costs. Pictos, formerly a privately-held company based in Newport Beach, California, designs, manufactures and markets digital imaging semiconductor products. The acquisition expands our business into the digital imaging consumer electronics market with advanced CMOS sensor and image processor solutions for digital still cameras and cellular camera phones. The acquisition was accounted for as a purchase combination under SFAS 141. Accordingly, the estimated fair value of assets acquired and liabilities assumed were included in our consolidated balance sheet as of June 9, 2003, the effective date of the purchase. The results of operations have been included in our consolidated results of operations since the effective date of the purchase. There were no significant differences between our accounting policies and those of Pictos.

**ESS TECHNOLOGY, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

We allocated the purchase price of \$27.0 million and \$453,000 of legal and other professional expenses directly associated with the acquisition as follows, based on management's estimates and appraisal.

<u>Purchase Price Allocation</u>	<u>Amounts</u> (In thousands)
Tangible assets .....	\$ 8,160
Identifiable intangible assets .....	7,850
Goodwill .....	<u>18,180</u>
Total assets acquired .....	34,190
Liabilities assumed .....	(4,938)
Deferred tax liabilities .....	<u>(3,219)</u>
Net assets acquired .....	26,033
In-process research and development .....	<u>1,420</u>
Total consideration .....	<u>\$27,453</u>

The following table lists the components of \$7.9 million identifiable intangible assets and their respective useful lives.

<u>Identifiable Intangible Assets</u>	<u>Estimated Fair Value</u> (In thousands)	<u>Estimated Life</u>
Existing technology .....	\$3,600	3 years
Patents and core technology .....	1,800	3 years
Customer relationships .....	1,080	3 years
Distributor relationships .....	90	2 years
Foundry agreement .....	930	2 years
Order backlog .....	<u>350</u>	6 months
Total identifiable intangible assets .....	<u>\$7,850</u>	

***Pro forma Financial Information***

Summarized below are our unaudited pro forma results, reflecting the results of the Pictos and Divio acquisitions had they been consolidated from the beginning of all periods indicated. Adjustments have been made for the estimated increases in amortization of intangibles, amortization of stock-based compensation and other appropriate pro forma adjustments. The charges for purchased in-process research and development of \$2.7 million are not included in the pro forma results, because they are non-recurring.

	<u>Twelve Months Ended</u> <u>December 31,</u>	
	<u>2003</u>	<u>2002</u>
	(In thousand, except per share data)	
Total revenues .....	\$198,997	\$282,819
Operating income (loss) .....	\$(20,844)	\$ 11,790
Net income .....	\$ 8,610	\$ 10,646
Net income per share:		
Basic .....	\$ 0.22	\$ 0.24
Diluted .....	\$ 0.21	\$ 0.23

The above amounts are based upon certain assumptions and estimates, which we believe are reasonable, and they do not reflect any potential benefit from the economy of size, which may result from our combined

ESS TECHNOLOGY, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

operations. The pro forma financial information presented above is not necessarily indicative of either the results of operations that would have occurred had the acquisitions taken place at the beginning of the periods indicated or of future results of operations of the combined companies.

**Note 4. Goodwill and Other Intangible Assets**

The following table summarizes the activities in goodwill and other intangible assets during the year ended December 31, 2004:

	<u>December 31,</u> 2003	<u>Additions</u>	<u>Amortization</u> (In thousands)	<u>Write- Off</u>	<u>December 31,</u> 2004
Goodwill . . . . .	\$43,789	—	—	(398)	\$43,391
Other intangible assets . . . . .	\$11,510	—	(4,796)	(300)	\$ 6,414

An annual goodwill impairment test was performed in the fourth quarter of 2004 and the result of the test indicated that goodwill was not impaired. However, as we expect the technology of NetRidium will no longer be utilized in our business, we specifically wrote off \$398,000 of related goodwill.

We have goodwill and other intangible assets related to our acquisitions of Silicon Analog Systems ("SAS") in 2001, and Pictos and Divio in 2003. In accordance with SFAS 142, we reclassified acquired workforce intangible assets, which were previously recognized apart from goodwill, as goodwill and ceased amortization of goodwill as of January 1, 2002.

	<u>December 31,</u>	
	<u>2004</u>	<u>2003</u>
	(In thousands)	
Acquired other intangible assets, net:		
Pictos . . . . .	\$3,039	\$ 6,009
Divio . . . . .	3,375	5,451
NetRidium . . . . .	—	50
Total intangible assets, net . . . . .	<u>\$6,414</u>	<u>\$11,510</u>

Acquired other intangible assets by categories as of December 31, 2004 and 2003 consist of the following (in thousands):

	<u>Gross Carrying Amounts</u>	<u>Accumulated Amortization</u>	
		<u>December 31,</u> 2004	<u>December 31,</u> 2003
Amortized other intangible assets:			
Existing technology . . . . .	\$ 8,390	\$4,065	\$1,269
Patents and core technology . . . . .	2,620	1,311	437
Customer relationships . . . . .	1,590	1,095	265
Distributor relationships . . . . .	90	70	25
Partner agreement and related relationships . . . . .	110	50	14
Foundry agreement . . . . .	930	725	260
Order backlog . . . . .	430	430	430
Technical infrastructure . . . . .	797	797	747
Total identifiable intangible assets . . . . .	<u>\$14,957</u>	<u>\$8,543</u>	<u>\$3,447</u>

ESS TECHNOLOGY, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Existing technology, patents and core technology, customer relationships, distributor relationships, partner agreement and related relationships, foundry agreement, order backlog and technical infrastructure are being amortized on a straight-line basis over the following estimated periods of benefit:

Existing technology .....	3 years
Patents and core technology .....	3 years
Customer relationships .....	3 years
Distributor relationships .....	2 years
Partner agreement and related relationships .....	3 years
Foundry agreement .....	2 years
Order backlog .....	3 – 6 months
Technical infrastructure .....	4 years

The Company expects amortization expense of existing intangible assets to be \$4.3 million in fiscal 2005 and \$2.1 million in fiscal 2006, at which time existing intangible assets will be fully amortized assuming no future impairments of those intangible assets or additions as a result of business combinations.

**Note 5. Balance Sheet Components**

	December 31,	
	2004	2003
	(In thousands)	
Cash and cash equivalents:		
Cash and money market accounts .....	\$ 40,140	\$ 27,318
U.S. government and corporate debt securities .....	1,387	29,199
	<u>\$ 41,527</u>	<u>\$ 56,517</u>
Short-term investments:		
U.S. government and corporate debt securities .....	\$ 85,668	\$108,280
Unrealized gain (loss) on marketable securities, net .....	(507)	49
	<u>\$ 85,161</u>	<u>\$108,329</u>
Accounts receivable, net:		
Accounts receivable .....	\$ 21,881	\$ 50,316
Less: Allowance for doubtful accounts .....	(787)	(990)
	<u>\$ 21,094</u>	<u>\$ 49,326</u>
Other receivables:		
Receivable from vendor .....	\$ —	\$ 7,787
Other .....	234	280
	<u>\$ 234</u>	<u>\$ 8,067</u>
Inventories:		
Raw materials .....	\$ 15,857	\$ 1,735
Work-in-process .....	7,286	9,516
Finished goods .....	22,526	22,295
	<u>\$ 45,669</u>	<u>\$ 33,546</u>

ESS TECHNOLOGY, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	December 31,	
	<u>2004</u>	<u>2003</u>
	(In thousands)	
Prepaid expenses and other assets:		
Insurance .....	\$ 961	\$ 1,016
Maintenance .....	759	1,084
Advanced payments .....	1,200	—
Other .....	<u>956</u>	<u>859</u>
	<u>\$ 3,876</u>	<u>\$ 2,959</u>
Property, plant and equipment:		
Land .....	\$ 2,860	\$ 2,860
Building and building improvements .....	24,734	24,139
Machinery and equipment .....	36,189	34,406
Furniture and fixtures .....	<u>20,233</u>	<u>18,754</u>
	84,016	80,159
Less: Accumulated depreciation and amortization .....	<u>(61,007)</u>	<u>(55,530)</u>
	<u>\$ 23,009</u>	<u>\$ 24,629</u>
Other assets:		
Investments — Best Elite (Note 7) .....	\$ 10,000	\$ 5,000
Investments — other .....	3,029	4,076
Other .....	<u>212</u>	<u>4,564</u>
	<u>\$ 13,241</u>	<u>\$ 13,640</u>
Accounts payable and accrued expenses:		
Accounts payable .....	\$ 18,124	\$ 47,672
Accrued compensation costs .....	6,323	6,887
Accrued commission and royalties .....	9,212	12,290
Deferred revenue related to distributor sales, net of deferred cost of goods sold .....	8,041	8,229
Adverse purchase order commitments .....	4,960	368
Other accrued liabilities .....	<u>3,986</u>	<u>8,968</u>
	<u>\$ 50,646</u>	<u>\$ 84,414</u>

ESS TECHNOLOGY, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**Note 6. Marketable Securities**

The amortized costs and estimated fair value of securities available-for-sale as of December 31, 2004 and December 31, 2003 are as follows:

<u>December 31, 2004</u>	<u>Amortized Cost</u>	<u>Gross Unrealized Gains</u>	<u>Gross Unrealized (Loss)</u>	<u>Fair Value</u>
	(In thousands)			
Money market accounts .....	\$ 2,780	\$ —	\$ —	\$ 2,780
Municipal bonds .....	47,560	—	(31)	47,529
Corporate debt securities .....	14,876	—	(298)	14,578
Corporate equity securities .....	2,802	814	(587)	3,029
Government agency bonds .....	<u>24,619</u>	<u>—</u>	<u>(178)</u>	<u>24,441</u>
Total available-for-sale .....	<u>\$92,637</u>	<u>\$814</u>	<u>\$(1,094)</u>	<u>\$92,357</u>
Classified as:				
Cash equivalents .....				\$ 4,167
Short-term marketable securities .....				85,161
Long-term marketable securities .....				<u>3,029</u>
				<u>\$92,357</u>

<u>December 31, 2003</u>	<u>Amortized Cost</u>	<u>Gross Unrealized Gains</u>	<u>Gross Unrealized (Loss)</u>	<u>Fair Value</u>
	(In thousands)			
Money market accounts .....	\$ 10,486	\$ —	\$ —	\$ 10,486
Municipal bonds .....	64,120	26	—	64,146
Corporate debt securities .....	62,575	24	(21)	62,578
Corporate equity securities .....	2,626	1,618	(168)	4,076
Government agency bonds .....	<u>10,784</u>	<u>20</u>	<u>—</u>	<u>10,804</u>
Total available-for-sale .....	<u>\$150,591</u>	<u>\$1,688</u>	<u>\$(189)</u>	<u>\$152,090</u>
Classified as:				
Cash equivalents .....				\$ 39,685
Short-term marketable securities .....				108,329
Long-term marketable securities .....				<u>4,076</u>
				<u>\$152,090</u>

The contractual maturities of debt securities classified as available-for-sale as of December 31, 2004, are as follows:

<u>December 31, 2004</u>	<u>Estimated Fair Value</u>
	(In thousands)
Maturing 90 days or less from purchase .....	\$35,090
Maturing between 90 days and one year from purchase .....	22,372
Maturing more than one year from purchase .....	<u>29,086</u>
Total available-for-sale debt securities .....	<u>\$86,548</u>

Actual maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties, and we may need to sell the investment to

**ESS TECHNOLOGY, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

meet our cash needs. Net realized gains and losses for the twelve months ended December 31, 2004, 2003 and 2002 were not material to our financial position or results of operations.

The following table provides the breakdown of available-for-sale investments with unrealized losses at December 31, 2004:

	In Loss Position for Less than 12 Months		In Loss Position for More Than 12 Months		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
	(In thousands)					
Municipal bonds . . . . .	\$ 4,815	\$ 28	\$2,063	\$ 4	\$ 6,878	\$ 32
Corporate debt securities . . . . .	7,075	204	4,113	93	11,188	297
Corporate equity securities . . . . .	729	587	—	—	729	587
Government agency bonds . . . . .	<u>20,439</u>	<u>178</u>	<u>—</u>	<u>—</u>	<u>20,439</u>	<u>178</u>
	<u>\$33,058</u>	<u>\$997</u>	<u>\$6,176</u>	<u>\$97</u>	<u>\$39,234</u>	<u>\$1,094</u>

Other than for corporate equity securities, the gross unrealized losses are primarily due to a decrease in the fair value of debt securities resulting from an increase in interest rates during 2004. The corporate equity securities are traded in a non-U.S. market and have over the past several years experienced significant fluctuations not closely related to the company's financial condition or prospects. We have determined that the gross unrealized losses on investments at December 31, 2004 are temporary in nature. We review our investment portfolio to identify and evaluate investments that have indications of possible impairment. Factors considered in determining whether a loss is temporary include the length of time and extent to which fair value has been less than the cost basis, the financial condition and near-term prospects of the investee, credit quality and our ability to hold the investment for a period of time sufficient to allow for any anticipated recovery in market value.

**Note 7. Investments**

***Best Elite International Limited***

In January 2003, we acquired 4,545,400 shares of Convertible Non-Cumulative Preference Series B shares of Best Elite International Limited ("Best Elite") for approximately \$5,000,000 in cash. In January 2004, we acquired an additional 4,545,455 shares for approximately \$5,000,000 in cash, on the same terms and price as the initial investment. Our investments represent less than a 1.3% equity interest in Best Elite on a fully diluted basis. The investments are recorded using the cost method of accounting. Best Elite was organized under the laws of the British Virgin Islands as an investment vehicle for the purpose of establishing a foundry in Mainland China. During the year ended December 31, 2004, no impairment was noted.

***C-Com Corporation***

In March 2002, we acquired 2,750,000 shares of Broadmedia, Inc. ("Broadmedia") common stock for approximately \$4,200,000 in cash, representing an 8% equity interest in Broadmedia. Broadmedia was a design and manufacturing house for OEMs with expertise in broadband network access equipment technologies. In December 2002, our Broadmedia common stock was exchanged for stock of Archtek Corporation ("Archtek") as a result of corporate restructuring by Broadmedia and Archtek.

## ESS TECHNOLOGY, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

In May 2003, the merger between Broadmedia/Archtek and C-Com Corporation (“C-Com”), a publicly traded company in Taiwan, was approved by the shareholders of both companies. In connection with the merger between these two companies, we were given a right to receive 5,578,571 shares of C-Com common stock in exchange for our investment in Broadmedia. As of December 31, 2003, we received 3,905,000 shares of C-Com common stock. The remaining 1,673,571 shares will be received over the next four years. During the year ended December 31, 2003, we recorded a pre-tax non-operating loss of \$2.0 million as a result of receiving the C-Com common stock in exchange for stock of Archtek based on the fair market value of the C-Com common stock. During the year ended December 31, 2004, no other than temporary impairment was noted.

#### *MosChip Semiconductor Technology Limited*

In April 2002, we acquired 1,600,000 shares of MosChip Semiconductor Technology Limited (“MosChip”) common stock for approximately \$988,000 in cash. In December 2003, we acquired an additional 500,000 shares for approximately \$298,000. In July 2004, we acquired an additional 229,092 shares for approximately \$180,000. Our total investments represent approximately a 7% equity interest in MosChip on a fully diluted basis. The investment in MosChip is accounted for in accordance with SFAS No. 115. MosChip is a publicly traded company in India. MosChip based in Hyderabad, India, specializes in designing, manufacturing and marketing very large integrated circuits (“ICs”), with particular focus on consumer and data communication ICs. During the year ended December 31, 2004, no impairment was noted.

#### **Note 8. Inventory Provision**

During the year ended December 31, 2004, we recorded a \$33.1 million charge to cost of revenues, which included approximately \$4.6 million representing accrued purchase order commitments recorded as other accrued liabilities. The charges were due to certain excess or obsolete video recording, DVD and digital imaging products.

During the year ended December 31, 2004, we experienced a lower than expected demand for our video recording products. Consequently, inventories built earlier in the year in anticipation of the fast growth of this new market exceeded requirements for the period. In accordance with our inventory reserve policy, we recorded a \$9.8 million excess inventory reserve for these products. As a result of declining average selling prices, we also recorded a \$4.4 million lower of cost or market reserve for these products.

In the year ended December 31, 2004, we experienced reduced market demand for DVD products. To maintain our market position and in anticipation of our lower-cost 2005 DVD products, we significantly reduced our prices to be more competitive. Accordingly, we recorded a \$3.6 million excess inventory reserve and a \$9.2 million lower of cost or market reserve for certain of our DVD product inventories.

Lastly, we have written off an additional \$6.1 million for certain custom and obsolete digital imaging products for which we anticipate no future demand.

**ESS TECHNOLOGY, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

**Note 9. Non-Operating Income, Net**

The following table lists the major components of Non-Operating Income for the years ended December 31, 2004, 2003 and 2002, respectively:

	<u>Years Ended December 31,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
	(In thousands)		
Licensing fee from MediaTek settlement .....	\$ —	\$45,000	\$ —
Legal fee related to MediaTek settlement .....	—	(515)	—
Consulting fees — Taiwanese tax exemption .....	—	(1,500)	—
Interest income .....	1,971	2,486	3,586
Income (loss) on other investments .....	—	774	(189)
Write-down on investments .....	—	(1,986)	(3,612)
Vialta rental income .....	503	1,182	1,852
Other .....	886	505	770
Total non-operating income .....	<u>\$3,360</u>	<u>\$45,946</u>	<u>\$ 2,407</u>

**MediaTek Settlement**

On June 11, 2003, we entered into a License Agreement and Mutual Release (the “Settlement Agreement”) with MediaTek Incorporation (“MediaTek”) relating to a copyright infringement lawsuit. Under the terms of the Settlement Agreement, both parties terminated all claims against each other and MediaTek received a non-exclusive worldwide license of our proprietary DVD user interface and other key DVD software. Under the Settlement Agreement, MediaTek paid us a one-time license fee of \$45.0 million related to sales of certain DVD products and is required to pay ongoing royalties with a quarterly cap of \$5.0 million and lifetime cap of \$45.0 million. The maximum total payments under the Settlement Agreement are \$90.0 million. Income from MediaTek royalty payments resulting from future sales of products utilizing the licensed technology is reported as revenues based on the number of units sold. During the year ended December 31, 2004 and 2003, \$20 million and \$5 million in revenues were recognized from MediaTek royalty payments, respectively.

**Note 10. Income Taxes**

Income (loss) before provision for (benefit from) income taxes consisted of the following:

	<u>Years Ended December 31,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
	(In thousands)		
Domestic .....	\$(12,561)	\$(5,211)	\$(2,248)
Foreign .....	(24,721)	46,105	40,509
	<u>\$(37,282)</u>	<u>\$40,894</u>	<u>\$38,261</u>

ESS TECHNOLOGY, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Provision for (benefit from) income taxes consisted of the following:

	Years Ended December 31,		
	2004	2003	2002
	(In thousands)		
Current:			
Federal .....	\$ (1,349)	\$ 13,815	\$ 1,086
State .....	—	2,749	11
Foreign .....	551	140	141
	(798)	16,704	1,238
Deferred			
Federal .....	(923)	(980)	(224)
State .....	(11)	(121)	(30)
	(934)	(1,101)	(254)
Total .....	<u>\$ (1,732)</u>	<u>\$ 15,603</u>	<u>\$ 984</u>

Reconciliation between the provisions for (benefit from) income taxes computed at the federal statutory rate of 35% for the years ended December 31, 2004, 2003 and 2002 and the provision for (benefit from) income taxes is as follows:

	Years Ended December 31,		
	2004	2003	2002
	(In thousands)		
Provision (benefit) at statutory rate .....	\$ (13,049)	\$ 14,313	\$ 13,047
Foreign income taxed at different rates .....	14,976	581	(15,007)
State income taxes, net of federal tax benefit .....	(2,089)	2,351	1,745
General business credit .....	(1,670)	(423)	(1,111)
Nondeductible research and development costs .....	—	1,096	99
Other .....	100	(2,315)	2,211
Provision for (benefit from) income taxes .....	<u>\$ (1,732)</u>	<u>\$ 15,603</u>	<u>\$ 984</u>

ESS TECHNOLOGY, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Deferred tax assets (liabilities) are comprised of the following:

	<u>December 31,</u>	
	<u>2004</u>	<u>2003</u>
	(In thousands)	
<b>Current:</b>		
Accrued liabilities and reserves .....	\$ 1,483	\$ 1,055
Deferred tax asset (liability) arising from unrealized loss on investments	107	(713)
Other .....	<u>1</u>	<u>90</u>
Current deferred tax assets .....	<u>\$ 1,591</u>	<u>\$ 432</u>
<b>Non-current:</b>		
Depreciation and amortization .....	\$ 4,054	\$ 3,625
Acquired intangible assets .....	(2,604)	(4,657)
Net operating loss carryforwards .....	24,304	23,907
Credit carryforwards .....	6,293	5,695
Deferred foreign income .....	<u>—</u>	<u>(9,139)</u>
Non-current deferred tax assets .....	<u>32,047</u>	<u>19,431</u>
Total deferred tax assets .....	33,638	19,863
Valuation allowance .....	<u>(32,495)</u>	<u>(31,139)</u>
Net deferred tax assets (liabilities) .....	<u>\$ 1,143</u>	<u>\$ (11,276)</u>

As of December 31, 2004, our federal and state net operating loss carryforwards for income tax purposes were approximately \$66.5 million and \$18.1 million, respectively. If not utilized, both the federal and state net operating loss carryforwards will begin to expire in 2010. Our federal and state research tax credit carryforwards for income tax purposes are approximately \$0.6 million and \$8.1 million, respectively. If not utilized, the federal tax credit carryforwards will begin to expire in 2016.

Deferred tax assets related to net operating loss and credit carryforwards pertain primarily to the carryovers of certain acquired companies as well as certain state carryovers. Utilization of these federal and state net operating loss and tax credit carryforwards may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended, and similar state provisions.

Additionally, we received tax deductions from the gains realized by employees on the exercise of certain non-qualified stock options for which the benefit is recognized as a component of shareholders' equity. We have evaluated the deferred tax assets relating to these stock option deductions along with our other deferred tax assets and concluded that a valuation allowance is required for that portion of the total deferred tax assets that are not considered more likely than not to be realized in future periods. To the extent that the deferred tax assets with a valuation allowance become realizable in future periods, we will have the ability, subject to carryforward limitations, to benefit from these amounts. Approximately \$0.3 million of these deferred tax assets pertain to certain net operating loss carryforwards resulting from the exercise of employee stock options. When recognized, the tax benefit of tax deductions related to stock options are accounted for as a credit to additional paid-in capital rather than a reduction of the income tax provision. Also included are approximately \$27.3 million of acquired entity deferred tax assets that will adjust goodwill rather than income tax provision when recognized.

We have not provided for U.S. federal income and state income taxes on all of the non-U.S. subsidiaries' undistributed earnings as of December 31, 2004, because such earnings are intended to be indefinitely

**ESS TECHNOLOGY, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

reinvested. Upon distribution of those earnings in the form of dividends or otherwise, we would be subject to applicable U.S. federal and state income taxes. On October 22, 2004, the President signed the American Jobs Creation Act of 2004. The Act creates a temporary incentive for U.S. corporations to repatriate accumulated income earned abroad by providing an 85 percent dividends received deduction for certain dividends from controlled foreign corporations. The deduction is subject to a number of limitations and, as of today, uncertainty remains as to how to interpret numerous provisions in the Act. As such, we are not yet in a position to decide on whether, and to what extent, we might repatriate foreign earnings that have not yet been remitted to the U.S.

**Note 11. Net Income (Loss) Per Share**

Net income (loss) per share is calculated in accordance with the provisions of SFAS No. 128, "Earnings Per Share" ("SFAS 128"). SFAS 128 requires us to report both basic net income (loss) per share, which is based on the weighted average number of common shares outstanding, and diluted net income (loss) per share, which is based on the weighted average number of common shares outstanding and all dilutive potential common shares outstanding. A reconciliation of basic and diluted income per shares is presented below.

	<u>Net Income (Loss)</u>	<u>Shares</u>	<u>Per Share Amount</u>
	<small>(In thousands, except per share data)</small>		
<b>Year Ended December 31, 2004</b>			
Basic net loss per share .....	\$(35,550)	39,476	\$(0.90)
Effects of dilutive securities: Stock options .....	<u>—</u>	<u>—</u>	<u>—</u>
Diluted net loss per share .....	<u>\$(35,550)</u>	<u>39,476</u>	<u>\$(0.90)</u>
<b>Year Ended December 31, 2003</b>			
Basic net income per share .....	\$ 25,291	39,517	\$ 0.64
Effects of dilutive securities: Stock options .....	<u>—</u>	<u>1,721</u>	<u>(0.03)</u>
Diluted net income per share .....	<u>\$ 25,291</u>	<u>41,238</u>	<u>\$ 0.61</u>
<b>Year Ended December 31, 2002</b>			
Basic net income per share .....	\$ 37,277	44,044	\$ 0.85
Effects of dilutive securities: Stock options .....	<u>—</u>	<u>2,687</u>	<u>(0.05)</u>
Diluted net income per share .....	<u>\$ 37,277</u>	<u>46,731</u>	<u>\$ 0.80</u>

For the years ended December 31, 2004, 2003 and 2002, there were options to purchase approximately 3,962,451, 3,751,683 and 1,089,000 shares of our common stock, respectively, with exercise prices greater than the average market value of such common stock. These options were excluded from the calculation of diluted net income (loss) per share as they are anti-dilutive. Because we had a net loss of \$35.6 million during the year ended December 31, 2004, approximately 1,889,062 equivalent shares were excluded from the calculation of effects of dilutive securities.

**Note 12. Shareholders' Equity**

*Common Stock*

*Public Offering*

In February 2002, we completed a public offering of 5,520,000 shares of our common stock at a price of \$19.38 per share. We sold 2,500,000 shares, and 3,020,000 shares were sold by the selling shareholders. Net of

## ESS TECHNOLOGY, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

the underwriting discount, we received proceeds from the sales of approximately \$45.6 million before expenses.

#### *Stock Repurchase*

We announced on April 16, 2003 that our Board of Directors authorized us to repurchase up to 5.0 million shares of our common stock, in addition to all shares that remained available for repurchase under previously announced programs, on the same terms and conditions as those of prior repurchase programs. No purchases were made in 2003 and 2004 under this program. As of December 31, 2004, we have an aggregate of 5,000,000 shares remain available for repurchase under this stock repurchase program.

We announced on August 8, 2002, that our Board of Directors authorized us to repurchase up to 5.0 million shares of our common stock, in addition to all shares that remain available for repurchase under previously announced programs, on the same terms and conditions as these prior repurchase programs. We purchase shares of our common stock under the repurchase program from time to time, depending on market conditions and other factors, through open market purchases. In the period from January 1, 2003 through December 31, 2003, we repurchased 4,797,764 shares of our common stock for an aggregate price of \$29.0 million at market prices ranging from \$5.43 to \$6.70 per share under this program. Upon repurchase, these shares were retired and no longer deemed outstanding. No purchase was made under this program from January 1, 2003 through December 31, 2004. As of December 31, 2004, we had approximately 202,000 shares remain available for repurchase under this program.

We announced on May 7, 2002 that our Board of Directors authorized us to repurchase up to 3.0 million shares of our common stock, inclusive of all shares that then remained available for repurchase under previously announced programs, on the same terms and conditions as our prior repurchase programs. During 2002, we repurchased 2,937,828 shares for an aggregated price of \$42.5 million at market prices ranging from \$5.27 to \$18.20 per share. In the period from January 1, 2003 through December 31, 2003, we repurchased 62,172 shares of our common stock at an average market price of \$5.43 per share to complete the program. Upon repurchase, these shares were retired and no longer deemed outstanding. As of December 31, 2004, no shares remain available for repurchase under this program.

#### *1992 Stock Option Plan*

In January 1992, we adopted the 1992 Stock Option Plan (the "1992 Plan"). We authorized 6,966,000 shares to be reserved for issuance under the 1992 Plan. Under the 1992 Plan, options granted generally vest 25% at the end of the first year, after the anniversary date of the date of grant, and ratably thereafter over the remaining vesting period.

This plan is no longer active and we will no longer issue options under this plan. The 1992 Plan terminated in January 2002; however, outstanding options issued under this plan will remain exercisable until they expire.

#### *1995 Equity Incentive Plan*

In August 1995, we adopted the 1995 Equity Incentive Plan (the "1995 Incentive Plan"), which provides for the grant of stock options and stock bonuses and the issuance of restricted stock to our employees, directors and others. We have reserved 3,000,000 shares of our common stock for issuance under the 1995 Incentive Plan. The terms of the 1995 Incentive Plan are generally similar to those of the 1992 Plan outlined above.

#### *1995 Employee Stock Purchase Plan*

In August 1995, we adopted the 1995 Employee Stock Purchase Plan (the "Purchase Plan") and reserved a total of 225,000 shares of our common stock for issuance thereunder. The Purchase Plan, as most

## ESS TECHNOLOGY, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

recently amended on May 29, 2003, authorizes the aggregate issuance of 1,425,000 shares under the Purchase Plan. The Purchase Plan, as amended, permits eligible employees to acquire shares of our common stock through payroll deductions at a price equal to the lower of 85% of the fair market value of our common stock at the beginning of the offering period or on the purchase date. The Purchase Plan, as amended, provides a 24-month rolling period beginning on each enrollment date and the purchase price is automatically adjusted to reflect the lower enrollment price. As of December 31, 2004, 973,097 shares have been issued under the Purchase Plan, as amended.

#### *1995 Directors Stock Option Plan*

In August 1995, we adopted the 1995 Directors Stock Option Plan (the "Directors Plan") and reserved a total of 300,000 shares of our common stock for issuance thereunder. The Directors Plan, as amended in April 2001, authorizes the issuance of 600,000 shares under the Directors Plan. The Directors Plan, as amended allows for granting of stock options to non-employee members of the Board of Directors of the Company. The plan was amended as of July 24, 2004 to extend the termination date from 2005 to 2015 and increase the number of authorized share by 400,000. The plan was recently amended as of November 23, 2004 to provide a 3-year post-termination exercise period for termination of service for any reason by a non-employee director.

#### *1997 Equity Incentive Plan*

In May 1997, we adopted the 1997 Equity Incentive Plan (the "1997 Incentive Plan") and reserved a total of 3,000,000 shares of our common stock for issuance thereunder. The 1997 Incentive Plan, as most recently amended in May 2003, authorizes the issuance of 13,000,000 shares under the 1997 Incentive Plan. The vesting schedule of the 1997 Incentive Plan is generally similar to those of the 1992 Plan outlined above.

#### *2002 Non-executive Stock Option Plan*

In May 2002, we adopted the 2002 Non-Executive Stock Option Plan (the "2002 Plan") and reserved a total of 2,000,000 shares of our common stock for issuance thereunder. The 2002 Plan allows for granting of stock options to our non-executive employees and consultants, and options granted under the 2002 Plan are Non-statutory Stock Options. The vesting schedule of the 2002 Plan is generally similar to those of the 1992 Plan outlined above.

#### *Platform Stock Option Plan*

In June 1997, in connection with the acquisition of Platform Technologies, Inc. ("Platform"), we assumed the Platform Stock Option Plan (the "Platform Plan"). We reserved and granted approximately 954,000 shares of ESS common stock under the Platform Plan pursuant to the outstanding options at the time of the Platform acquisition. The Platform options vest ratably over four years and we did not issue any additional options under the Platform Plan. The Platform plan is no longer active; however, 26,146 shares of outstanding options issued under this plan remain exercisable at December 31, 2004.

#### *Stock Option Exchange Offer*

On November 29, 2004 we commenced an offering to our employees and consultants to voluntarily exchange certain outstanding stock options to purchase shares of our common stock for replacement stock options that we will grant at least six months and one day after the date on which we cancelled the options we accepted for exchange. On December 27, 2004 the offer period ended and we accepted for cancellation stock options to purchase an aggregate of 3,705,449 shares of common stock, representing 42% of the shares subject to options that were eligible to be exchanged, with a weighted average exercise price of \$14.11 per share. Subject to the terms and conditions of the offer, we will grant replacement stock options to purchase approximately 3,705,449 shares of common stock on or after June 29, 2005. The exercise price of the

ESS TECHNOLOGY, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

replacement options will be the fair market value of our common stock on the date they are granted, which could be higher or lower than the exercise price of the options for which they were exchanged. Otherwise, the replacement options will cover the same number of shares and will be vested and exercisable to the same degree as the original options would have been had they not been cancelled. All employees and consultants were eligible to participate in the option exchange. However, participants must be employees or consultants on the replacement grant date to be granted replacement stock options. If replacement stock options are granted on June 29, 2005 in exchange for all of the cancelled stock options, 2,148,327 shares will be exercisable. The offer applies to stock options that were granted under our 2002 Non-executive Stock Option Plan, 1997 Equity Incentive Plan and 1995 Equity Incentive Plan.

*Summary of Stock Option Activity*

Transactions under our various stock option plans are summarized as follows:

	<u>Available for Grant</u>	<u>Options Outstanding</u> (In thousands)	<u>Weighted Average Exercise Price</u>
Balance at December 31, 2001 .....	2,333	7,519	\$ 8.34
Authorized .....	4,000	—	\$ —
Granted .....	(1,643)	1,643	\$13.39
Exercised .....	—	(1,203)	\$ 6.46
Canceled .....	<u>596</u>	<u>(596)</u>	\$ 9.50
Balance at December 31, 2002 .....	5,286	7,363	\$ 9.64
Authorized .....	1,000	—	\$ —
Granted .....	(2,602)	2,602	\$ 8.96
Exercised .....	—	(642)	\$ 6.04
Canceled .....	<u>757</u>	<u>(757)</u>	\$10.99
Balance at December 31, 2003 .....	4,441	8,566	\$ 9.58
Authorized .....	400	—	\$ —
Granted .....	(2,055)	2,055	\$12.03
Exercised .....	—	(275)	\$ 5.76
Canceled .....	<u>4,784</u>	<u>(4,784)</u>	\$13.53
Balance at December 31, 2004 .....	<u>7,570</u>	<u>5,562</u>	\$ 7.29

The weighted average fair value of options granted during the years ended December 31, 2004, 2003 and 2002 were \$7.58, \$5.79 and \$9.70, respectively.

ESS TECHNOLOGY, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table summarizes information about stock options outstanding at December 31, 2004:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number Outstanding at December 31, 2004 (In thousands)	Weighted Average Remaining Contractual Life (In years)	Weighted Average Exercise Price	Number Exercisable at December 31, 2004 (In thousands)	Weighted Average Exercise Price
\$ 0.03 - \$ 4.70 .....	243	2.92	\$ 3.10	221	\$ 2.95
\$ 4.71 - \$ 4.99 .....	1,904	3.75	\$ 4.88	1,749	\$ 4.88
\$ 5.00 - \$ 7.99 .....	1,559	8.04	\$ 6.98	585	\$ 6.52
\$ 8.00 - \$ 9.99 .....	1,106	8.49	\$ 9.10	442	\$ 9.02
\$10.00 - \$23.25 .....	750	6.84	\$12.80	511	\$12.60
Total .....	<u>5,562</u>	6.28	\$ 7.29	<u>3,508</u>	\$ 6.68

At December 31, 2003 and 2002, options to purchase approximately 3,852,000 and 2,952,000 shares, were exercisable at average exercise prices of \$9.15 and \$8.27, respectively.

**Note 13. Business Segment Information and Concentration of Certain Risks**

*Business Segment*

We operate in one reportable business segment: the semiconductor segment. We design, develop, support, manufacture and market highly integrated analog and digital processor chips, recordable chips, imaging sensor chips, digital amplifiers, and camera lens modules.

The following table summarizes revenues for the years ended December 31, 2004, 2003 and 2002 by major product category:

	Percentage of Net Revenues for Years Ended December 31,		
	2004	2003	2002
DVD .....	54%	40%	59%
VCD .....	27%	38%	31%
Digital imaging .....	6%	8%	—
Recordable .....	3%	6%	—
Royalty .....	8%	3%	—
Other .....	2%	5%	10%
Total .....	<u>100%</u>	<u>100%</u>	<u>100%</u>

DVD revenue includes revenue from sales of DVD decoder chips. VCD revenue includes revenue from sales of VCD and SVCD chips. Digital imaging revenue includes revenue from sales of image sensor chips and image processor chips. Recordable revenue includes revenue from sales of integrated encoder and decoder chips and non-integrated encoder and decoder chipsets. Consumer digital media revenue includes revenue from sales of consumer digital audio chips.

ESS TECHNOLOGY, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

*Geographic Segments*

We sell and market to leading consumer OEMs worldwide. International sales comprise a significant portion of our revenues. The following geographic location of our revenues for 2004, 2003 and 2002 were based upon destination of the shipment. Thus, our sales to Dynax Electronics were categorized as sales to Hong Kong, even though Dynax Electronics eventually sells through a lot of the products to other parts of China. Most of the long-lived assets located outside the United States are in the Asia Pacific region. The following table summarizes net sales and long-lived assets for the years ended December 31, 2004, 2003 and 2002:

	<u>Net Sales</u>	<u>Long-Lived Assets</u>
	(In thousands)	
<b>Year Ended December 31, 2004</b>		
United States .....	\$ 2,365	\$21,369
Hong Kong .....	135,954	630
Taiwan .....	38,683	413
Japan .....	22,489	—
China (excluding Hong Kong) .....	14,466	265
Korea .....	11,730	180
Turkey .....	10,398	—
Singapore .....	9,409	—
Rest of the world .....	11,784	152
Total foreign .....	<u>254,913</u>	<u>1,640</u>
Total .....	<u>\$257,278</u>	<u>\$23,009</u>
<b>Year Ended December 31, 2003</b>		
United States .....	\$ 1,111	\$23,585
Hong Kong .....	129,002	671
Taiwan .....	17,836	8
China (excluding Hong Kong) .....	10,936	131
Korea .....	8,787	69
Japan .....	8,432	3
Czech Republic .....	7,936	—
Singapore .....	4,156	—
Rest of the world .....	7,077	162
Total foreign .....	<u>194,162</u>	<u>1,044</u>
Total .....	<u>\$195,273</u>	<u>\$24,629</u>
<b>Year Ended December 31, 2002</b>		
United States .....	\$ 2,453	\$18,366
Hong Kong .....	191,510	619
Taiwan .....	19,346	—
Japan .....	11,973	—
Singapore .....	5,244	—
Rest of the world .....	42,916	—
Total foreign .....	<u>270,989</u>	<u>619</u>
Total .....	<u>\$273,442</u>	<u>\$18,985</u>

Long-lived assets are comprised of property, plant and equipment.

**ESS TECHNOLOGY, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

***Significant Customers and Distributors***

We sell to both direct customers and distributors. We use both a direct sales force as well as sales representatives to help us sell to our direct customers. During the year ended December 31, 2004, Dynax Electronics was the only customer or distributor that accounted for more than 10% of our net revenues.

***Transactions with Dynax Electronics***

We sell our products through distributors. Dynax Electronics is our largest distributor. We work directly with many of our customers in Hong Kong and China on product design and development. However, whenever one of these customers buys our products, the order is processed through Dynax Electronics, which functions much like a trading company. Dynax Electronics manages the order processing, arranges shipment into China and Hong Kong, manages the letters of credit, and provides credit and collection expertise and services. The title and risk of loss for the inventories are transferred to Dynax Electronics upon shipment of inventories to Dynax Electronics. Dynax Electronics is legally responsible to pay our invoices regardless of when the inventories are sold to end-customers. Revenues on sales to Dynax Electronics are deferred until Dynax Electronics sells the products to end-customers.

During the years ended December 31, 2004, 2003 and 2002, except for one distributor, Dynax Electronics, no single customer or other distributor accounted for more than 10% of our net revenues.

The following table summarizes the percentage of our net revenues for the year ended December 31, 2004, 2003 and 2002, respectively, which were attributable to sales made through Dynax Electronics:

	Years Ended December 31,		
	2004	2003	2002
	(In thousands, except percentage data)		
Net revenues .....	\$257,278	\$195,273	\$273,442
Net revenues from Dynax Electronics .....	\$131,684	\$122,701	\$156,963
Percentage of net revenues from Dynax Electronics .....	51%	63%	57%

As of December 31, 2004 and 2003, except for one distributor, Dynax Electronics, no single customer or other distributor accounted for more than 10% of our trade accounts receivable.

The following table summarizes Dynax Electronics' percentage of our trade accounts receivable as of December 31, 2004 and 2003:

	December 31,	
	2004	2003
	(In thousands, except percentage data)	
Trade accounts receivable .....	\$21,881	\$50,316
Trade accounts receivable from Dynax Electronics .....	\$15,827	\$36,605
Percentage of trade accounts receivable from Dynax Electronics .....	72%	73%

**Note 14. Related Party Transactions with Vialta, Inc.**

In April 2001, our Board of Directors decided to spin off Vialta, our majority-owned subsidiary. Accordingly, all of Vialta's assets and liabilities as of December 31, 2000 were reclassified in the balance sheet to net assets of discontinued operation, net of minority interest and its revenues and expenses for all periods presented were reclassified in the income statement to discontinued operation, net of minority interest. The spin-off transaction was completed in August 2001, and accordingly, we had no material assets, liabilities or commitments relating to Vialta as of December 31, 2003. Further, we do not have any contractual obligations that are expected to have a material impact upon our revenues, operating results or cash flows under any of the

**ESS TECHNOLOGY, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

spin-off agreements, which include the Master Distribution Agreement and its ancillary agreements, consisting of the Master Technology Ownership and License Agreement, the Employee Matters Agreement, the Tax Sharing and Indemnity Agreement, the Real Estate Matters Agreement, the Master Confidential Disclosure Agreement, and the Master Transitional Services Agreement. On July 1, 2003, we entered into the First Amendment to the Amended and Restated Commercial Lease Agreement with Vialta to reduce the space of the Fremont facility subject to the lease and adjust the rental amount. Effective July 1, 2003, Vialta pays us approximately \$312,000 per year, payable in monthly installments of approximately \$26,000 pursuant to the amendment. In addition, Vialta reimburses us for certain expenses related to the facility. The Master Transitional Services Agreement terminated on August 21, 2002.

The following is a summary of major transactions between Vialta and us for the periods presented:

	Transactions Between ESS and Vialta		
	Years Ended December 31,		
	2004	2003	2002
	(In thousands)		
Selling, general, administrative and other services provided to Vialta, net of charges from Vialta . . . . .	\$ 10	\$ 70	\$ (38)
Lease charges to Vialta under Real Estate Matters Agreement . . . . .	503	1,182	1,852
Chip purchases by Vialta . . . . .	782	458	1,403
Products purchased from Vialta . . . . .	<u>(22)</u>	<u>(2)</u>	<u>(61)</u>
Total charges to Vialta, net of charges from Vialta . . . . .	<u>\$1,273</u>	<u>\$1,708</u>	<u>\$3,156</u>

We record in our Statements of Operations as an offset to our applicable operating expenses the fees we charge Vialta for the selling, general and administrative services we provide Vialta pursuant to the Master Transitional Services Agreement. We record in our Statements of Operations as other income the rent we charge Vialta pursuant to the Real Estate Matters Agreement and related agreements. Charges from us to Vialta under the Real Estate Matters Agreement are recorded in our Statements of Operations as other income. Charges for product purchases by Vialta are recorded in our Statements of Operations under Net revenues from related party — Vialta.

**Note 15. Commitments and Contingencies**

As of December 31, 2004, our commitments to purchase inventory from the third-party contractors aggregated approximately \$25.5 million of which approximately \$5.0 million was adverse purchase order commitments that we have recorded as other accrued liabilities. Under these contractual agreements, we may order inventory from time to time, depending on our needs. There is no termination date to these agreements. Additionally, in the ordinary course of business, we enter into various arrangements with vendors and other business partners, principally for service, license and other operating supplies. As of December 31, 2004, commitments under these arrangements totaled \$6.2 million. There are no material commitments for these arrangements extending beyond 2007.

**ESS TECHNOLOGY, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

We lease certain property and equipment under various non-cancelable lease agreements expiring through 2007. Future minimum lease payment obligations under these leases are as follows (in thousands):

<u>Year Ending December 31,</u>	<u>Amount</u>
2005 .....	\$2,854
2006 .....	822
2007 .....	145
2008 .....	<u>16</u>
Total .....	<u>\$3,837</u>

The total rent expense under all operating leases was approximately \$6,303,000, \$4,045,000 and \$2,890,000 for fiscal years 2004, 2003 and 2002 respectively.

From time to time, we are subject to legal proceedings and claims, including claims of alleged infringement of trademarks, copyrights and other intellectual property rights and other claims arising out of the ordinary course of business. Further, we are currently engaged in certain shareholder class action and derivative lawsuits. We intend to defend these suits vigorously and we may incur substantial expenses in litigating claims against third parties and defending against existing and future third-party claims that may arise. In the event of a determination adverse to us, we may incur substantial monetary liability and be required to change our business practices. Either of these results could have a material adverse effect on our financial position, results of operations and cash flows. See Part I, Item 3, "Legal Proceedings."

We enter into various agreements in the ordinary course of business. Pursuant to these agreements, we may agree to indemnify its customers for losses suffered or incurred by them as a result of any patent, copyright, or other intellectual property infringement claims by any third party with respect to our products. These indemnification obligations may have perpetual terms. The Company's normal business practice is to limit the maximum amount of indemnification to the license fees received. On occasion, the maximum amount of indemnification we may be required to make may exceed its normal business practices. We estimate the fair value of its indemnification obligations as insignificant, based upon its history of litigation concerning product and patent infringement claims. Accordingly, we have no liabilities recorded for indemnification under these agreements as of December 31, 2004.

We have agreements whereby our officers and directors are indemnified for certain events or occurrences while the officer or director is, or was serving, at our request in such capacity. The maximum potential amount of future payments we could be required to make under these indemnification agreements is unlimited. However, we have a directors and officers' insurance policy that may reduce our exposure and enable us to recover a portion of any future amounts paid. As a result of our insurance policy coverage, we believe the estimated fair value of these indemnification agreements is minimal.

**Note 16. Employee Benefit Plan**

We have a 401(K) Plan (the "401(K) Plan"), which covers substantially all employees. Each eligible employee may elect to contribute to the 401(K) Plan, through payroll deductions, up to 25% of their compensation, subject to current statutory limitations. We made no contributions through December 31, 2004.

2. Financial Statement Schedule:

VALUATION AND QUALIFYING ACCOUNTS

	<u>Balance at Beginning of Period</u>	<u>Additions Charged to Costs and Expenses</u>	<u>Deductions</u>	<u>Balance at Ending of Period</u>
	(In thousands)			
Year Ended December 31, 2004				
Allowance for doubtful accounts .....	\$ 990	\$ 176	\$ 379	\$ 787
Allowance for sales returns .....	\$1,711	\$ 653	\$1,607	\$ 757
Year Ended December 31, 2003				
Allowance for doubtful accounts .....	\$ 949	\$ 369	\$ 328	\$ 990
Allowance for sales returns .....	\$1,048	\$1,324	\$ 661	\$1,711
Year Ended December 31, 2002				
Allowance for doubtful accounts .....	\$ 899	\$ 50	\$ —	\$ 949
Allowance for sales returns .....	\$1,430	\$1,008	\$1,390	\$1,048

All other schedules for which provision is made in applicable accounting regulations of the Securities and Exchange Commission are omitted because they are not required under the related instructions or are applicable.

### 3. Supplementary Data:

#### Selected Quarterly Financial Data (unaudited)

The following table presents unaudited quarterly financial information for each of our last eight quarters. This information has been derived from our unaudited financial statements and has been prepared on the same basis as the audited Consolidated Financial Statements appearing elsewhere in this Form 10-K. In the opinion of management, all necessary adjustments, consisting only of normal recurring adjustments, have been included to present fairly the quarterly results.

	2003				2004			
	Mar. 31	Jun. 30	Sept. 30	Dec. 31	Mar. 31	Jun. 30	Sept. 30	Dec. 31
	(In thousands, except per share data)							
<b>Statement of Operations Data:</b>								
Net revenues	\$33,151	\$31,011	\$48,243	\$82,868	\$76,745	\$76,813	\$ 60,611	\$ 43,109
Cost of revenues(1)	<u>23,376</u>	<u>20,982</u>	<u>33,281</u>	<u>55,051</u>	<u>53,332</u>	<u>53,921</u>	<u>64,504</u>	<u>47,640</u>
Gross profit (loss)	9,775	10,029	14,962	27,817	23,413	22,892	(3,893)	(4,531)
Operating expenses:								
Research and development	6,256	8,750	11,360	9,508	9,293	10,537	9,017	8,620
Selling, general and administrative	<u>6,674</u>	<u>6,660</u>	<u>8,874</u>	<u>9,553</u>	<u>11,742</u>	<u>9,766</u>	<u>10,179</u>	<u>9,369</u>
Operating income (loss)	(3,155)	(5,381)	(5,272)	8,756	2,378	2,589	(23,089)	(22,520)
Non-operating income, net	<u>944</u>	<u>44,187</u>	<u>(659)</u>	<u>1,474</u>	<u>1,162</u>	<u>812</u>	<u>724</u>	<u>662</u>
Income (loss) before income taxes	(2,211)	38,806	(5,931)	10,230	3,540	3,401	(22,365)	(21,858)
Provision for (benefit from) income taxes	<u>(98)</u>	<u>22,905</u>	<u>(8,680)</u>	<u>1,476</u>	<u>233</u>	<u>224</u>	<u>(1,189)</u>	<u>(1,000)</u>
Net income (loss) from continuing operations	<u>(2,113)</u>	<u>15,901</u>	<u>2,749</u>	<u>8,754</u>	<u>3,307</u>	<u>3,177</u>	<u>(21,176)</u>	<u>(20,858)</u>
Net income (loss)	<u><u>\$(2,113)</u></u>	<u><u>\$15,901</u></u>	<u><u>\$ 2,749</u></u>	<u><u>\$ 8,754</u></u>	<u><u>\$ 3,307</u></u>	<u><u>\$ 3,177</u></u>	<u><u>\$(21,176)</u></u>	<u><u>\$(20,858)</u></u>
Net income (loss) per share:								
Basic	<u><u>\$ (0.05)</u></u>	<u><u>\$ 0.41</u></u>	<u><u>\$ 0.07</u></u>	<u><u>\$ 0.22</u></u>	<u><u>\$ 0.08</u></u>	<u><u>\$ 0.08</u></u>	<u><u>\$ (0.54)</u></u>	<u><u>\$ (0.53)</u></u>
Diluted	<u><u>\$ (0.05)</u></u>	<u><u>\$ 0.40</u></u>	<u><u>\$ 0.07</u></u>	<u><u>\$ 0.21</u></u>	<u><u>\$ 0.08</u></u>	<u><u>\$ 0.08</u></u>	<u><u>\$ (0.54)</u></u>	<u><u>\$ (0.53)</u></u>
Shares used in calculating net income (loss) per share:								
Basic	<u><u>41,662</u></u>	<u><u>38,683</u></u>	<u><u>38,694</u></u>	<u><u>39,014</u></u>	<u><u>39,305</u></u>	<u><u>39,439</u></u>	<u><u>39,529</u></u>	<u><u>39,629</u></u>
Diluted	<u><u>41,662</u></u>	<u><u>39,842</u></u>	<u><u>40,579</u></u>	<u><u>42,169</u></u>	<u><u>42,657</u></u>	<u><u>41,732</u></u>	<u><u>39,529</u></u>	<u><u>39,629</u></u>

(1) Included net inventory provision of \$19.3 million and \$11.1 million in the quarter ended September 30, 2004 and December 31, 2004, respectively.

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

None

**Item 9A. *Controls and Procedures***

**Evaluation of Disclosure Controls and Procedures**

We maintain “disclosure controls and procedures” as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the “Exchange Act”), that are designed to ensure that the information required to be disclosed by us in reports filed or submitted under the Exchange Act are recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognized that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any disclosure controls and procedures also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Based on their evaluation as of December 31, 2004, our Chief Executive Officer and Chief Financial Officer have concluded that, subject to the limitations noted above, our disclosure controls and procedures were effective as of December 31, 2004.

**Management’s Report on Internal Control over Financial Reporting**

Management’s annual report on internal control over financial reporting and the report of independent registered public accounting firm are incorporated by reference to pages 41 and 42, respectively.

**Changes in Internal Control over Financial Reporting**

There was no change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) identified in connection with management’s evaluation during our last fiscal quarter that has materially effected, or is reasonably likely to materially effect, our internal control over financial reporting.

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

None

**PART III**

Certain information required by Part III is omitted from this Report since we plan to file with the Securities and Exchange Commission the definitive proxy statement for our 2005 Annual Meeting of Shareholders (the “Proxy Statement”) not later than 120 days after the end of the fiscal year covered by this Report, and certain information included therein is incorporated herein by reference.

**Item 10. *Directors and Executive Officers of the Registrant***

The information concerning our directors and certain information concerning our Executive Officers required by this Item are incorporated by reference from our Proxy Statement, which we will file with the Commission not later than 120 days after our fiscal year-end. The notes concerning our executive officers required by this Item is set forth at the end of Part I in a section captioned “Executive Officers of the Registrant” above.

The Company has adopted a Code of Ethics that applies to its principal executive officer, principal financial and accounting officer, controller and certain other senior financial management. The Code of Ethics is posted on the Company's website at <http://www.ESSTECH.com>. If any substantive amendments are made to the Code of Ethics or grant of any waiver, including any implicit waiver, from a provision of the Code of Ethics to the Company's Chief Executive Officer, Chief Financial Officer or Controller, the Company will disclose the nature of such amendment or waiver on its website or in a report on Form 8-K.

**Item 11. Executive Compensation**

The information required by this Item is incorporated by reference from the sections in our Proxy Statement entitled "Executive Compensation," which we will file with the Commission not later than 120 days after our fiscal year-end.

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

The security ownership information required by this Item is incorporated by reference from the Proxy Statement, which we will file with the Commission not later than 120 days after our fiscal year-end.

The following table summarizes information with respect to options under our equity compensation plans at December 31, 2004:

**Equity Compensation Plan Information(1)**

<u>Plan Category</u>	<u>Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights(a) (3)</u>	<u>Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights(b)</u>	<u>Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column(a)) (c)</u>
Equity compensation plans approved by security holders . . . .	5,164,023	\$7.20	6,389,726(2)
Equity compensation plans not approved by security holders . . . .	<u>398,098</u>	\$8.37	<u>1,588,072</u>
<b>Total</b> . . . . .	<u><u>5,562,121</u></u>	\$7.29	<u><u>7,977,798</u></u>

- (1) Includes only options outstanding under ESS' stock option plans, as no stock warrants or rights were outstanding as of December 31, 2004.
- (2) Includes 451,903 shares of common stock reserved for future issuance under the ESS Technology, Inc. 1995 Employee Stock Purchase Plan.
- (3) Includes outstanding options to purchase 26,146 shares of ESS common stock assumed through the acquisition of Platform Technologies, Inc.

The equity compensation plans not approved by security holders have generally the same features as those approved by security holders. For further details regarding ESS' equity compensation plans, see Note 12, "Shareholders' Equity," in the consolidated financial statements in Item 8 of this Report.

**Item 13. Certain Relationships and Related Transactions**

The information required by this Item is incorporated by reference from the Proxy Statement, which we will file with the Commission not later than 120 days after our fiscal year-end.

**Item 14. Principal Accountant Fees and Services**

The information required by this Item is incorporated by reference from the Proxy Statement, which we will file with the Commission not later than 120 days after our fiscal year-end.

## PART IV

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

#### (a)(1) *Financial Statements*

The consolidated financial statements of the registrant as set forth under Item 8 are filed as part of the Form 10-K.

#### (a)(2) *Financial Statement Schedule*

The independent registered public accounting firm's report with respect to the financial statement and financial statement schedule listed in Item 15(a)(1) and 15(a)(2) above is on page 42 of this Report.

#### (a)(3) *Exhibits*

The exhibits listed in the accompanying Index to Exhibits are filed or incorporated by reference as part of this Annual Report on Form 10-K.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

ESS TECHNOLOGY, INC.  
(Registrant)

By:           /s/ ROBERT L. BLAIR            
Robert L. Blair  
*President and Chief Executive Officer*

Date: March 16, 2005

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Robert L. Blair and James B. Boyd, and each of them severally, his or her true and lawful attorneys-in-fact, each with full power of substitution, for him or her in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all each of said attorneys-in-fact or any of them, or his or their substitute or substitutes, may lawfully do or cause to be done or by virtue hereof.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ ROBERT L. BLAIR Robert L. Blair	President and Chief Executive Officer (principal executive officer)	March 16, 2005
/s/ JAMES B. BOYD James B. Boyd	Chief Financial Officer, Senior Vice President and Assistant Secretary (principal financial officer and principal accounting officer)	March 16, 2005
/s/ FRED S.L. CHAN Fred S.L. Chan	Chairman of the Board of Directors	March 16, 2005
/s/ GARY L. FISCHER Gary L. Fischer	Director	March 16, 2005
/s/ DAVID S. LEE David S. Lee	Director	March 16, 2005
/s/ PETER T. MOK Peter T. Mok	Director	March 16, 2005
/s/ ALFRED J. STEIN Alfred J. Stein	Director	March 16, 2005

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

**Form 10-K/A**  
**Amendment No. 1**

(Mark One)

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

For the fiscal year ended December 31, 2004

or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 0-26660

**ESS Technology, Inc.**

*(Exact name of Registrant as specified in its charter)*

**California**

*(State or other jurisdiction of  
incorporation or organization)*

**48401 Fremont Blvd.,  
Fremont, California**

*(Address of principal executive offices)*

**94-2928582**

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

**94538**

*(Zip Code)*

**Registrant's telephone number, including area code:**

**(510) 492-1088**

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

**None**

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

**Common Stock, no par value**

*(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  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 the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes  No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant, computed by reference to \$10.71, the closing price of the registrant's common stock as reported on the NASDAQ National Market on June 30, 2004, the last business day of the registrant's most recently completed second fiscal quarter, was approximately \$347,397,250. Shares of common stock held by each officer and director and by each person who owned 5% or more of the registrant's outstanding common stock on that date have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of April 14, 2005, registrant had outstanding 39,718,248 shares of common stock.

## EXPLANATORY NOTE

ESS Technology, Inc. (the "Company" or "we") is filing this Amendment No. 1 to the Annual Report on Form 10-K for the fiscal year ended December 31, 2004 to amend Item 9B (Other Information) and Item 15 (Exhibits and Financial Statement Schedules). Unaffected items have not been repeated in this Amendment No. 1. In addition, in connection with the filing of this Amendment and pursuant to Rules 12b-15 and 13a-14 under the Securities Exchange Act of 1934, as amended, we are including with this Amendment certain currently dated certifications.

Please note that the information contained in this Amendment No. 1 does not reflect events occurring after the original filing date.

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

On December 7, 2005, the Company entered into a retention and incentive agreement ("Agreement") with James Boyd, its Chief Financial Officer and Senior Vice President, pursuant to which, for his commitment to remain continuously employed by the Company through at least March 1, 2006, the Company has paid Mr. Boyd a retention and incentive bonus, subject to payback in the event of an earlier voluntary termination or a failure to comply with the notice provision set forth in the Agreement.

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

#### **(a)(3) Exhibits**

The exhibit index below lists the exhibits that are filed as part of this Amendment.

<u>Exhibit Number</u>	<u>Exhibit Title</u>
10.32	Retention and Incentive Agreement by and between ESS Technology, Inc. and James Boyd.
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

**SIGNATURE**

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.

ESS TECHNOLOGY, INC.  
(Registrant)

By: /s/ ROBERT L. BLAIR

Robert L. Blair  
President and Chief Executive Officer

Date: April 18, 2005

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## Corporate Information

### Directors

**Fred S. L. Chan**  
*Chairman*

**Robert L. Blair**  
*Director, President and  
Chief Executive Officer*

**Gary L. Fischer**  
*Director*

**David Lee**  
*Director*

**Peter T. Mok**  
*Director*

**Alfred J. Stein**  
*Director*

### Executive Officers

**Fred S. L. Chan**  
*Chairman*

**Robert L. Blair**  
*Director, President, Chief Executive Officer*

**James B. Boyd**  
*Chief Financial Officer,  
Chief Accounting Officer,  
Senior Vice President and  
Assistant Secretary*

### Corporate Headquarters

48401 Fremont Boulevard  
Fremont, CA 94538  
Telephone: 510/492-1088  
Facsimile: 510/492-1098

### Offices Worldwide

*Domestic Offices*  
48401 Fremont Boulevard  
Fremont, California 94538  
510/492-1088

Four Technology Drive  
Suite No. 100  
Irvine, California 92618  
949/453-6800

### Overseas Offices

1708 Dolphin Avenue, Unit 1106,  
Kelowna, BC, Canada, V1Y 9S4  
250/869-8251

Rm B1001, 10th Floor Beijing Shi Ji Yu  
Hui Da Sha, No. 73, Fu Cheng Lu,  
Hai Dian Dist., Beijing 100036,  
Beijing, China  
86/10-6842-2898

15/F, Shenzhen Commercial Bank  
Mansion, No. 1099 Shen Nan Zhong  
Road, Fu Tian District, Shenzhen,  
PRC 518031 86/755-2587-8318

Rm D4, 6/F, Jia Cheng Building  
No.128 Jin Ji Hu Lu, Suzhou Industrial  
Park, Suzhou, Jiangsu, PRC 215021  
86/512-6761-9838

Unit 1, 18th Floor, Westley Square,  
48 Hoi Yuen Road, Kwun Tong  
Kowloon, Hong Kong  
852/2418-0860

7F, No. 550, Ruei Guang Rd.  
Nei-Hu District  
Taipei 114, Taiwan

9F, Samsung Life Insurance Building,  
Garak-Dong #8-2, Songpa-Ku,  
Seoul 138-160, Korea  
82/2-448-6900

### Form 10-K

The Company's Form 10-K as filed  
with the Securities and Exchange  
Commission, is available without  
charge upon written request to:

Investor Relations  
48401 Fremont Boulevard  
Fremont, CA 94538  
Telephone: 510/492-1161 or

Email: [ir@esstech.com](mailto:ir@esstech.com)

On-line:

<http://www.esstech.com/IR/sec.shtm>

### Transfer Agent and Registrar

Chase Mellon  
Shareholder Services, LLC  
235 Montgomery Street, 23rd Floor  
San Francisco, CA 94104  
Website: [www.chasemellon.com](http://www.chasemellon.com)

### Independent Accountants

PriceWaterhouseCoopers LLP  
Ten Almaden Boulevard, Suite 1600  
San Jose, California 95113

### Legal Counsel

Orrick, Herrington & Sutcliffe LLP  
1020 Marsh Road  
Menlo Park, California 94025

### Common Stock Data

As of February 22, 2005, there were  
approximately 199 record holders of  
the Company's Common Stock. The  
last reported sale price on that date  
was \$5.65.

### Stock Price History

The Company's Common Stock has been  
trading on the Nasdaq National Market  
under the symbol "ESST" since  
October 6, 1995. The following table  
sets forth the high and low last reported  
sales prices for the Common Stock as  
reported by the Nasdaq National  
Market during the period indicated.

	High	Low
<b>Fiscal 2004</b>		
First Quarter	19.23	12.40
Second Quarter	15.90	10.28
Third Quarter	9.88	6.35
Fourth Quarter	7.75	6.54
<b>Fiscal 2003</b>		
First Quarter	7.09	5.40
Second Quarter	9.75	6.04
Third Quarter	11.22	8.54
Fourth Quarter	17.40	11.11

The Company has never declared or paid  
any cash dividends on its Common Stock.  
The Company currently anticipates that  
it will retain all future earnings for use  
in its business and does not anticipate  
paying any cash dividends in the foresee-  
able future.

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ColdThunder, HyperStream, Vantage, Vibratto, and Visba are trademarks of ESS Technology, Inc.

DivX is a registered trademark of DivXNetworks, Inc.

Dolby is a trademark of Dolby Laboratories.

MPEG is the Moving Picture Experts Group of the ISO/IEC.

All other trademarks referred to in this annual report are the property of their respective owners.



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ESS Technology, Inc.

48401 Fremont Boulevard, Fremont, CA 94538 / Telephone: 510/492-1033 / Facsimile: 510/492-1098 / [www.esstech.com](http://www.esstech.com)

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