

# RESULTS

## To Our Shareholders:

Varian Semiconductor, like other semiconductor capital equipment suppliers, is experiencing the most difficult period in our industry's history. The demand for semiconductor capital equipment weakened sharply and suddenly at the end of fiscal 2000. During fiscal 2001, economic and political forces combined to further weaken demand and reverse the momentum that had been driving our business.

Fundamentally, however, our business has not changed. Cyclical peaks and troughs are normal in our industry, and we have successfully dealt with both extremes in the past – emerging from each down cycle stronger on the upside. Although the current downturn is particularly difficult, we are employing aggressive tactics to manage successfully through it with strong traction for the anticipated upturn.

One of the keys to our success is that we develop and sell technology that enables our customers to produce their next generation products and also improve the cost and performance of their existing products. Our new 300mm VIISa platform of single wafer tools will help lead Varian Semiconductor and our customers into the next upturn.

Among our important accomplishments in the past year were:

- We successfully introduced the VIISa 3000 high energy ion implanter, completing the industry-leading VIISa single wafer platform for 300mm and 200mm applications.
- We achieved 42 percent overall market share on a unit basis in ion implant, as reported by Dataquest.
- We received a patent for an advanced ion implant architecture that enables the VIISa 810



medium current implanter to improve the yield of semiconductor devices by delivering an ion beam of exceptional species and beam purity.

- We introduced our patented Post-Gate Ion Implantation (PoGI) process which has the potential of significantly reducing chip-manufacturing costs by eliminating up to four of the mask levels required during device production.
- We won first place for the fifth consecutive year as the best semiconductor capital equipment supplier, as determined by VLSI Research. VLSI Research's survey led them to designate VSEA as a "technology and customer satisfaction powerhouse."

## A Differentiated Strategy

We continue to invest substantially in R&D, developing advanced technologies to manufacture next generation devices. The VIISta single wafer common platform is clearly differentiated from competitive products. VIISta leads an industrywide transition to single wafer processing in ion implantation.

At industry meetings, we have seen a growing awareness of our platform's advantages. Recent orders for our 300mm tools with high-tilt capabilities, the PoGI application and other features are leading indicators of our opportunity for market share gains in the next upturn.

The VIISta platform provides considerable customer advantages derived from our unique architectural approach. In short:

- Single wafer processing for all ion implant energies and doses allows customers superior processing and implant precision.
- VIISta single wafer implanters have the highest throughputs in the industry.

The common control system and wafer handling capabilities of the VIISta platform enable fab scheduling flexibility, thus effectively reducing capital and operating costs. The VIISta 10 P<sup>2</sup>LAD, the result of over a decade of research and development, is an ultra-low energy ion implanter that uses pulsed-plasma doping in place of a traditional ion beam. The system's proprietary approach to plasma doping overcomes the technical challenges posed by the requirements of low energy doping for ultra-shallow junctions.

## Managing the Industry Cycle

During this downturn, we have refined our business model to deal with the cycle's effects. Our aim is to ensure business growth and more profitable operations when markets improve.

We are focused on two areas that will improve our operating leverage:

- Reducing our costs. We have cut ongoing operating costs in the design, production and servicing of our tools. These efforts are expected to benefit future earnings performance.

- Shortening cycle times. We have reduced procurement, assembly and test times, and accelerated the introduction of engineering improvements by leveraging the benefits of the VIISta common platform.

## The Management Team

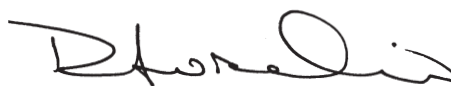
Dick Aurelio, chief executive officer, assumed the additional post of chairman on the retirement of Tracy O'Rourke, and Ernie Godshalk was promoted to the new position of president and chief operating officer and elected to the Board of Directors. We added Bob Halliday to our team as vice president and chief financial officer and Ai Sheng as vice president of engineering.

We are pleased to welcome Liz Tallett to our Board of Directors. Liz is the president and chief executive officer of Dioscor, Inc. We are benefiting from her considerable experience in technology and new business development.

## Outlook

As we look forward to the year ahead, we are in a strong position to take full advantage of the demand for new technologies. We expect to come out of this downturn with financial strength, operating leverage and leading market share.

We want to close with our sincere thanks to our shareholders, employees, customers and suppliers. We value your continuing support.



Richard A. Aurelio  
Chairman and Chief Executive Officer



Ernest L. Godshalk, III  
President and Chief Operating Officer

December 17, 2001

# FINANCIAL HIGHLIGHTS

(dollars in millions)	Fiscal Year 2001 <sup>(1)</sup> (with SAB 101)	Fiscal Year 2001 <sup>(1)</sup> (pre-SAB 101)	Fiscal Year 2000 <sup>(2),(4)</sup>	Fiscal Year 1999 <sup>(3),(4)</sup>
Revenue	\$ 632.0	\$ 599.5	\$ 687.7	\$ 271.9
Gross Profit	233.2	217.2	270.7	92.2
Percent of Revenue	36.9%	36.2%	39.4%	33.9%
Research and Development	49.8	49.8	47.0	37.6
Percent of Revenue	7.9%	8.3%	6.8%	13.8%
Marketing, Selling and Administrative	93.2	93.2	98.1	70.3
Percent of Revenue	14.7%	15.5%	14.3%	25.9%
Restructuring Costs	1.9	1.9	-	2.7
Operating Income (Loss)	\$ 88.3	\$ 72.3	\$ 125.6	\$ (18.4)
Other Income	-	-	18.7	2.0
Interest Income, Net	8.2	8.2	4.6	1.8
Income (Loss) before Taxes	\$ 96.5	\$ 80.5	\$ 148.9	\$ (14.6)
Tax Provision (Benefit)	31.9	26.6	49.1	(3.2)
Income (Loss) before Cumulative Effect of SAB 101	\$ 64.6	\$ 53.9	\$ 99.8	\$ (11.4)
Cumulative Effect of SAB 101	(27.0)	-	-	-
Net Income (Loss)	37.6	53.9	99.8	(11.4)
Net Income (Loss) Per Share - Basic	\$ 1.16	\$ 1.67	\$ 3.18	\$ (0.37)
Net Income (Loss) Per Share - Diluted	1.10	1.59	2.97	(0.37)
Backlog	\$ 160.0	\$ 109.0	\$ 360.0	\$ 181.0
Working Capital	344.8	361.1	294.1	153.7
Current Ratio	2.9	3.7	2.7	2.2
Long Term Debt	-	-	-	-
Stockholders' Equity	399.4	415.8	349.4	206.4
Total Assets	588.1	557.2	533.7	347.3

(1) The Company adopted SAB 101 during the fourth quarter of fiscal year 2001, effective at the start of fiscal year 2001.

(2) In fiscal year 2000, the Company recorded in Other Income a pre-tax gain of \$18.7 million (\$12.6 million after tax or \$0.37 per share) related to litigation settlements.

(3) Prior to April 2, 1999 Varian Semiconductor Equipment Associates, Inc. was operated as the semiconductor equipment business of Varian Associates, Inc.

(4) During the first quarter of fiscal year 2001, Varian Semiconductor changed its method of valuing domestic inventories from the last-in, first-out ("LIFO") method to the first-in, first-out ("FIFO") method. Varian Semiconductor has restated its financial statements to reflect the change to FIFO.

## Safe Harbor Statement

This Annual Letter to Stockholders contains forward-looking statements for purposes of the safe harbor provisions of The Private Securities Litigation Reform Act of 1995. For this purpose, the statements concerning the Company's operating outlook, sales growth, market share, capacity utilization, technology leadership, and technological capabilities and benefits are forward-looking statements and any statements using the terms "believes," "anticipates," "expects," "plans,"

or similar expressions are forward-looking statements. The forward-looking statements involve a number of risks and uncertainties. Among the important factors that could cause actual events to differ materially from those suggested or indicated by such forward-looking statements are volatility in the semiconductor equipment industry; economic conditions in general and as they affect the Company's customers; significant fluctuations in the Company's quarterly operating results; the impact of rapid technological change; the Company's dependence on the

development and introduction of new products; the Company's concentration on ion implantation systems and related products; concentration in the Company's customer base and lengthy sales cycles; the highly competitive market in which the Company competes; risks of international sales; foreign currency risks; and general economic conditions; and other factors identified in the Company's Annual Report on Form 10-K, and the most recent Quarterly Reports on Form 10-Q filed with the Securities and Exchange Commission.

# CORPORATE INFORMATION

## Offices

### Headquarters

35 Dory Road  
Gloucester, MA 01930  
Phone: 978-282-2000  
Fax: 978-283-5816  
Web: [www.vsea.com](http://www.vsea.com)

### North America

Austin, Texas  
Gloucester, Massachusetts  
Mesa, Arizona  
Newark, California  
Newburyport, Massachusetts  
Palo Alto, California  
Plano, Texas  
Portland, Oregon

### Europe

East Kilbride, Scotland  
Houten, The Netherlands  
Munich, Germany  
Paris, France  
Stuttgart, Germany

### Asia

Hsinchu, Taiwan  
Shanghai, China  
Singapore  
Songtan, Korea  
Yokohama, Japan

For a complete office listing,  
please visit our website at:  
[www.vsea.com/company/locations](http://www.vsea.com/company/locations)

## Management

**Richard A. Aurelio**  
Chairman & Chief Executive Officer

**Ernest L. Godshalk, III**  
President & Chief Operating Officer

**Robert J. Halliday**  
Vice President & Chief Financial Officer

**Seth H. Bagshaw**  
Vice President & Corporate Controller

**Yong-Kil Kim, Ph.D.**  
Vice President & General Manager  
Asia Operations

**Ralph E. Knupp, Ph.D.**  
Vice President, Human Resources  
& Communications

**Gary L. Loser**  
Vice President, General Counsel  
& Secretary

**Alan L. McKinnon, Jr.**  
Corporate Treasurer

**Brian T. Robertson**  
Vice President, Supply Chain

**Alan P. Sheng, Ph.D.**  
Vice President, Engineering

**Walter F. Sullivan**  
Vice President, Customer Operations  
& Chief Information Officer

**Seiji Yoshii, Ph.D.**  
President, Varian Semiconductor  
Equipment K.K., Japan

## Directors

**Richard A. Aurelio**  
Chairman of the Board  
& Chief Executive Officer

**Ernest L. Godshalk, III**  
President & Chief  
Operating Officer

**George W. Chamillard**  
Chairman, President &  
Chief Executive Officer,  
Teradyne, Inc.

**Robert W. Dutton, Ph.D.**  
Director of Research,  
Center for Integrated Systems &  
Professor of Electrical Engineering,  
Stanford University

**Angus A. MacNaughton**  
President, Genstar Investment  
Corporation

**Elizabeth E. Tallett**  
President & Chief Executive Officer,  
Dioscor, Inc.

## STOCKHOLDER INFORMATION

### Legal Counsel

Hale and Dorr LLP  
60 State Street  
Boston, MA 02109-1800  
Phone: (617) 526-6000

### Independent Accountants

PricewaterhouseCoopers LLP  
One Post Office Square  
Boston, MA 02109-2106  
Phone: (617) 478-5000

### Number of Registered Stockholders

3,738 registered holders as of  
September 28, 2001

### Stock Listing

Varian Semiconductor Equipment  
Associates, Inc. is traded on  
The Nasdaq National Market,  
Nasdaq Symbol: VSEA

### Transfer Agent

EquiServe Trust Company, N.A.  
PO Box 2500  
Jersey City, NJ 07303  
Phone: (800) 756-8200

### Form 10-K

A copy of Varian Semiconductor  
Equipment Associates, Inc. Annual  
Report on Form 10-K, filed with the  
Securities and Exchange Commission,  
contains additional information relating

to the Company and is available  
without charge at the contact below  
or at [www.vsea.com](http://www.vsea.com). We welcome  
questions from potential and existing  
stockholders.

### Please Contact:

Investor Relations  
Varian Semiconductor Equipment  
Associates, Inc.  
35 Dory Road  
Gloucester, MA 01930-2297  
Phone: (978) 282-2303  
[www.vsea.com](http://www.vsea.com)