

P.E. 10/31/01
AA/S

RECEIVED
FEB 15 2002



TECHNOLOGY

FOR THE

NEXT BILLION PEOPLE

PROCESSED
T FEB 20 2002
THOMSON
FINANCIAL

WLAN

A BILLION PEOPLE WORLDWIDE ARE NOW CONNECTED
BY NETWORKED COMMUNICATIONS DEVICES. ADVANCES IN SEMICONDUCTOR
TECHNOLOGY WILL SOON ENABLE
THE NEXT BILLION PEOPLE TO JOIN THE GLOBAL COMMUNITY.

We are joined by a web of wiring linking our homes and offices, running through neighborhoods and across continents, by fiber optic cables laid under our seas, by invisible waves moving through the air, and by a constellation of satellites circling high above. Through the extraordinary momentum of the Information Age, a billion people throughout the world are now connected and participate in a widening networked economy. With one button, one touch, one click—we connect—sharing our thoughts, our cultures and our experiences via microchip-powered cell phones, personal computers and new Internet devices.

As the largest semiconductor equipment solutions provider, Applied Materials makes the systems that are used to produce virtually every new microchip in the world. And within the next five years, through our advances in chipmaking technology, we will help welcome the next billion people into the global conversation.

Applied Materials is a leader of the Information Age and the world's largest provider of products and services to the global semiconductor industry. The Company supplies wafer fabrication systems that perform chemical vapor deposition (CVD), physical vapor deposition (PVD), epitaxial and polysilicon deposition, rapid thermal processing (RTP), plasma etching, electrochemical plating (ECP), ion implantation, metrology, inspection, chemical mechanical polishing (CMP); maskmaking equipment; CVD systems used to produce flat panel displays (FPDs); and manufacturing execution system (MES) software for semiconductor factory automation.

TABLE OF CONTENTS

FINANCIAL HIGHLIGHTS

PAGE 3

LETTER TO OUR STOCKHOLDERS

PAGE 4

EDITORIAL SECTION

PAGE 10

PRODUCT SECTION

PAGE 30

SELECTED CONSOLIDATED FINANCIAL DATA

PAGE 31

STOCKHOLDERS' INFORMATION

PAGE 32

BOARD OF DIRECTORS AND CORPORATE MANAGEMENT

PAGE 33

WORLDWIDE LOCATIONS

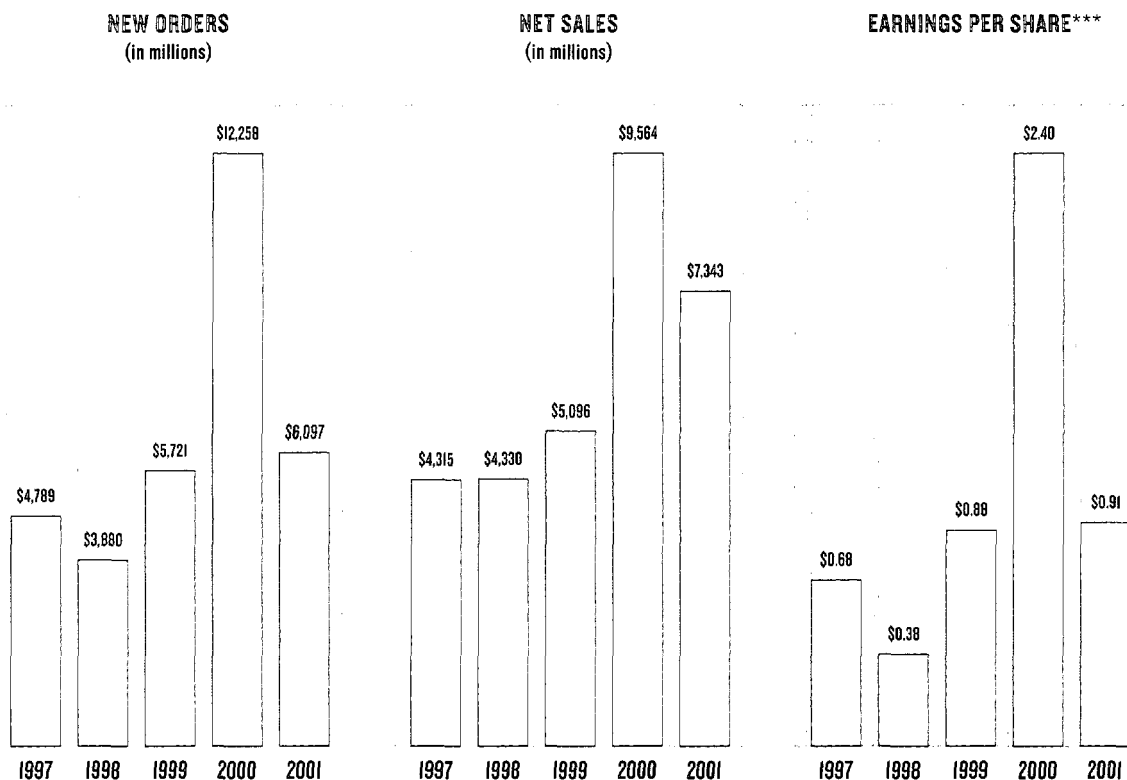
PAGE 34

Fiscal year ended	1999	2000	2001
(Dollars in thousands, except per share amounts)			
Net sales	\$5,096,302	\$9,564,412	\$7,343,248
Income from continuing operations before cumulative effect of change in accounting principle*	\$ 726,679	\$2,063,552	\$ 775,228
Income from continuing operations before cumulative effect of change in accounting principle per diluted share	\$ 0.88	\$ 2.40	\$ 0.91
Net income**	\$ 747,675	\$2,063,552	\$ 507,829
Net income per diluted share	\$ 0.91	\$ 2.40	\$ 0.60
Weighted average common shares and equivalents	820,580	859,169	847,329
Stockholders' equity	\$4,575,258	\$7,104,348	\$7,606,737
Return on equity***	18.3%	35.3%	10.5%
Order backlog	\$1,739,270	\$4,381,768	\$2,725,406

*Income from continuing operations before cumulative effect of change in accounting principle included net one-time items, on an after-tax basis, of \$30,248 expense for fiscal 1999, \$9,911 income for fiscal 2000 and \$158,871 expense for fiscal 2001.

**In addition to the net one-time items included in income from continuing operations before cumulative effect of change in accounting principle, net income also included after-tax income of \$20,996 from the reversal of provision for discontinuance of joint venture subsequently retained for fiscal 1999 and after-tax expense of \$267,399 from a cumulative effect of change in accounting principle for fiscal 2001.

***Based on income from continuing operations before cumulative effect of change in accounting principle.



To Our Stockholders,

Fiscal year 2001 was the toughest Applied Materials has faced in recent years. Following record growth, we began to prepare for a downturn but economic conditions worsened rapidly and spread globally, resulting in a very difficult environment for the semiconductor industry and our customers.

Our financial results in fiscal 2001 reflect these challenging conditions. Net sales of \$7.34 billion were down 23 percent from record net sales in fiscal 2000 of \$9.56 billion. Ongoing net income in fiscal 2001 was \$934 million, or \$1.10 per diluted share, down from \$2.05 billion, or \$2.39 per diluted share in fiscal 2000.

At Applied Materials, we refocused the entire Company around a few key priorities to get closer to our customers, strengthen our product performance and manage the rapid financial changes. Our overall objective was to maintain our long-term initiatives and position us for what we believe are enormous opportunities ahead.

INVESTING NOW FOR STRONG FUTURE GROWTH

As the economy recovers, we believe that the semiconductor industry will resume strong growth led by several major trends that will result in more semiconductor chips, doing more things, for more people around the world:

- **The proliferation of silicon:** The increasing silicon content of consumer and business elec-

tronic devices and the continuing expansion of chip-powered applications results in a growing opportunity for the semiconductor industry and for Applied Materials.

- **The expansion of e-business in companies of all sizes:** In every industry, companies are racing to implement online technology to gain global reach and greater efficiency by compressing response times, eliminating waste from transaction cycles and improving inventory management.

- **The spread of semiconductor devices to new users around the world:** As the price point of access to the networked economy continues to drop with the introduction of more powerful, portable and affordable chips, a billion more people are expected to join the connected world within the next five years via cell phones, PCs or other devices.

These strong long-term trends present substantial reasons for optimism, but translating them into opportunity will require demonstrated leadership. Investing today is critical to achieving a strong competitive position. Recognizing the strength of these trends, despite the challenges of fiscal 2001, Applied Materials maintained leading investment in research and development for advanced technology. We believe that these investments will put us in a strong position to outpace growth in the overall semiconductor industry.



DAN MAYDAN
President

JAMES C. MORGAN
Chairman and Chief Executive Officer

NEW TECHNOLOGY FOR NEW CHALLENGES

The depth and breadth of Applied Materials' engineering and technology capability is highlighted in this year's annual report. Advancement in semiconductor manufacturing technology continues despite sways in the global economy or the amount of existing semiconductor production capacity. The need for this new technology is driving most capital equipment purchases today and will drive the next expansion of Applied Materials' business. Based on the strength of our investment in R&D and proven success in commercializing new production-worthy solutions, we used fiscal 2001 to position Applied Materials' new products into customer pilot and manufacturing lines. With new solutions and close relationships with customers around the world, we had important wins in virtually every advanced pilot line.

Semiconductor manufacturing faces constant change and advancement. Three major technology transitions under way—the moves to smaller device features, innovative new materials and larger 300mm wafers—will drive tremendous new investments in chipmaking equipment. Today, less than 5 percent of the total worldwide fab capacity is ready to manufacture chips with features at 0.13 micron and below. Technology that can deliver these generations of chips will be in great demand as our customers invest in these production capabilities.

To help our customers move to even smaller circuit sizes, we are developing a number of new process technologies and are especially encouraged with our progress in the process diagnostics and control area. Smaller devices require innovative materials like copper, low κ dielectrics and others, and Applied Materials has developed a broad family of new products to deliver these capabilities for our customers. In this past year, we introduced an advanced physical vapor deposition system for copper barrier and seed, which added to the strong momentum for our entire copper manufacturing product line. As demand for larger 300mm wafers continues to grow, we further extended our comprehensive 300mm product offerings and are pleased to report that our market share to date in this strategic new area is greater than the market share we achieved for 200mm equipment.

These technology transitions are also reflected in the growing trend of semiconductor manufacturing to move beyond stand-alone chipmaking systems toward Process Modules that combine a number of sequential steps into integrated, highly automated systems for faster fab start-up times, higher yields and increased efficiency. Applied Materials is the pioneer of the Process Module concept. This past year, we took steps to further accelerate our progress by focusing our Company-wide collaborative development efforts and building a new Process Module Technology Center that

represents the greatest concentration of process integration knowledge and investment in the industry. We expect to introduce a broad range of products in this area in the next few years.

With the highly competitive pressure of our customers' marketplace, helping them to better manage their operational costs and efficiencies is a major opportunity for Applied Materials. Last year, we made significant progress in our post-sales customer service solutions business with broad customer acceptance of our leading productivity support products—Total Parts Management and Total Support Package—with 19 of the world's top 20 semiconductor manufacturers implementing one or more of these programs. And, in 2001 we introduced a number of new service products designed to help our customers reduce their operating costs in other ways, as well as to improve the performance of Applied Materials equipment and extend its useful operating life. With these "win-win" outcomes, we believe that our service offering will continue to be a fast growing business and help fuel the Company's growth.

RAPIDLY RESPONDING TO A CHANGING WORLD

A by-product of an increasingly interconnected world economy is an increase in the rapidity and volatility of global economic cycles. Our response at Applied Materials is to focus our efforts on streamlining and enabling our business processes to allow us to be a better competitor

while helping our customers reach new levels of operational performance.

Extending and deepening our global reach is a priority we share with our customers. Through fiscal 2001, we continued to improve the capabilities of our global infrastructure to anticipate and quickly respond to customer requirements in all of our markets. The strength of Applied Materials' global infrastructure is the result of continuing investments in training, regional supply facilities and technology centers, e-business initiatives, and management development around the world. For example, this past year we booked large orders from new fabs and opened a technical training center in China where we have developed a strong presence and even stronger business relationships over the past decade. As a result of early long-term investment, Applied Materials is well positioned for a leadership role in what is expected to be one of the world's fastest growing semiconductor markets.

We also are working on increasing service levels to our customers, while lowering our own costs through the development of innovative e-business applications. The goal is to rethink our internal processes to produce faster, more effective transactions throughout our entire organization by leveraging our information infrastructure. One of the first applications to be deployed will optimize our spare parts inventory. Another key initiative under way is the re-engineering of our product

development methodology to shorten total cycle time and incorporate even more customer feedback earlier in the design process. Our objective is to expand our product and service offerings to help our customers meet the challenges they face while creating robust new growth opportunities for Applied Materials.

INFORMATION FOR EVERYONE

The events of 2001 had ripple effects that transcend business and economic activity. On September 11, Applied Materials lost an employee as well as family, friends and colleagues, and we know that many of our customers, stockholders and suppliers also were tragically affected. As events unfolded, information flowed around the world instantaneously. Millions of people watched in horror on the Internet, on TV and via satellites. And, they responded instantly to share messages, check on loved ones and colleagues, and exchange information. This technological sharing allowed America and the world to come together to express grief, consolation and purpose, and reveals an optimistic and hopeful glimpse of the connected world we are developing.

Through the fundamental forces of the Information Age we have learned to link our citizens, our cultures and our experiences to form a new worldwide connected community with a shared stake and common destiny. And, Applied Materials is proud to play a central role. The

heart of computing and connectivity is the semiconductor chip, and Applied Materials makes the systems used to produce virtually every new microchip in the world. We see our purpose as striving to provide Information for Everyone by enabling our customers to make the more powerful, portable and affordable chips that open the Information Age to all.

In these days when the future seems cloudy, steady progress toward connecting the next billion people offers reason for optimism. We would like to thank our employees, suppliers and partners around the world for their perseverance in an extremely challenging year. Their dedicated teamwork, together with the support of our customers and stockholders, enabled Applied Materials to once again demonstrate its leadership, maintain its profitability, improve its competitive position and reinforce its role as a core infrastructure company and investment holding of the Internet and Information Age.

Sincerely,



JAMES C. MORGAN
Chairman and Chief Executive Officer



DAN MAYDAN
President

Applied Materials' mission is to be the leading supplier of semiconductor fabrication solutions worldwide—through innovation and enhancement of customer productivity with systems, process modules and service solutions.

GLOBAL LEADERSHIP

VALUES

Build a culture of achievement based on a set of core values—Close to the Customer, Mutual Trust and Respect, World-Class Performance—shared by employees around the world.

WORLD CLASS WORKFORCE

Attract, retain and develop the best people in the world and provide a global knowledge base for collaboration and effective decision making.

VISION OF INNOVATION

Create a shared vision and commitment to innovation in all organizations and activities.

MARKET LEADERSHIP

Early leaders win. Focus on markets where it's possible to take the leadership share.

GLOBAL PRESENCE

Control our destiny in global markets with strong local management and capabilities.

MANAGEMENT EXCELLENCE

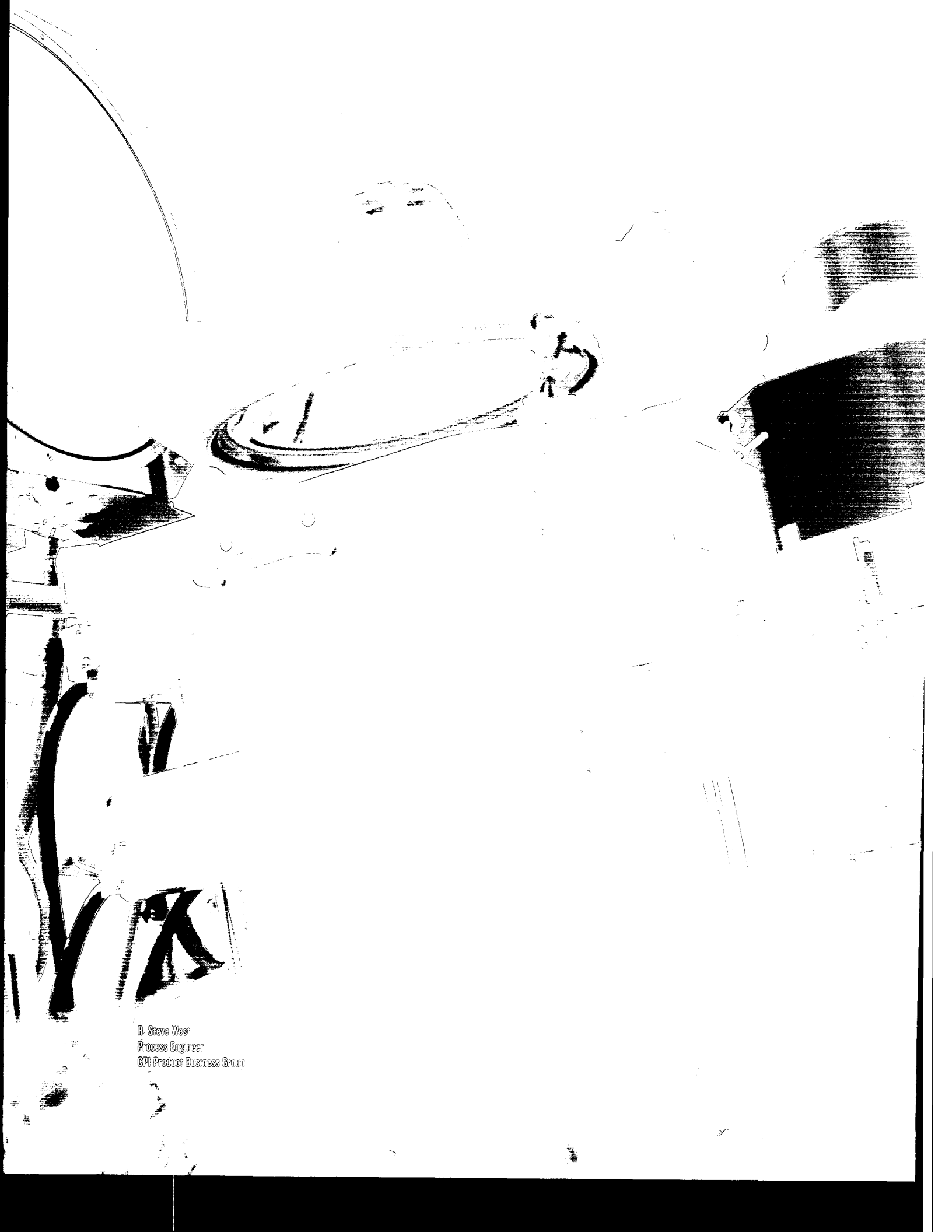
Develop a capable management team that can translate vision into performance. Leverage scale and profitability to invest strategically.





TECHNOLOGY FOR THE NEXT BILLION PEOPLE

The heart of computing, connectivity and communications is the semiconductor chip and Applied Materials systems are used to make nearly every new chip in the world. In 2001, we invested more than a billion dollars in research, development and engineering to commercialize leading-edge technology into new chipmaking products. We are enabling our customers to fabricate the next trillion chips more efficiently with breakthrough productivity solutions. Looking ahead, we are conceiving the ideas that will make it possible to manufacture the nanochips of the future. With every new technology innovation, Applied Materials is working to bring the benefits of a networked world to a billion more people.



R. Steve West
Process Engineer
CPI Product Business Group

INVESTING THE NEXT BILLION DOLLARS

We have accelerated our investments in product innovation and commercialization to help our customers transition to new chip manufacturing technologies that incorporate innovative materials, reduce feature sizes and utilize larger and more economical 300mm wafers.

The quest to create ever more powerful, portable and affordable semiconductor chips is never-ending. As our customers continue their drive to boost chip performance, they face three major technology transitions:

- Utilizing new materials to achieve faster processing speeds and more energy-efficient chips. Chipmakers are switching from aluminum to copper in order to fabricate the "interconnect" or wiring portion of the chip. The higher conductivity of copper, combined with more effective insulators (called low κ dielectrics), allows increased processing speeds while reducing power consumption.
- Shrinking the size of semiconductor circuits in order to pack more functionality onto chips and reduce their size. These smaller "geometries" (currently 0.13 micron—nearly one-thousandth the diameter of a human hair) allow chipmakers to squeeze more transistors onto each chip to perform a greater number of functions for an expanding array of portable applications.

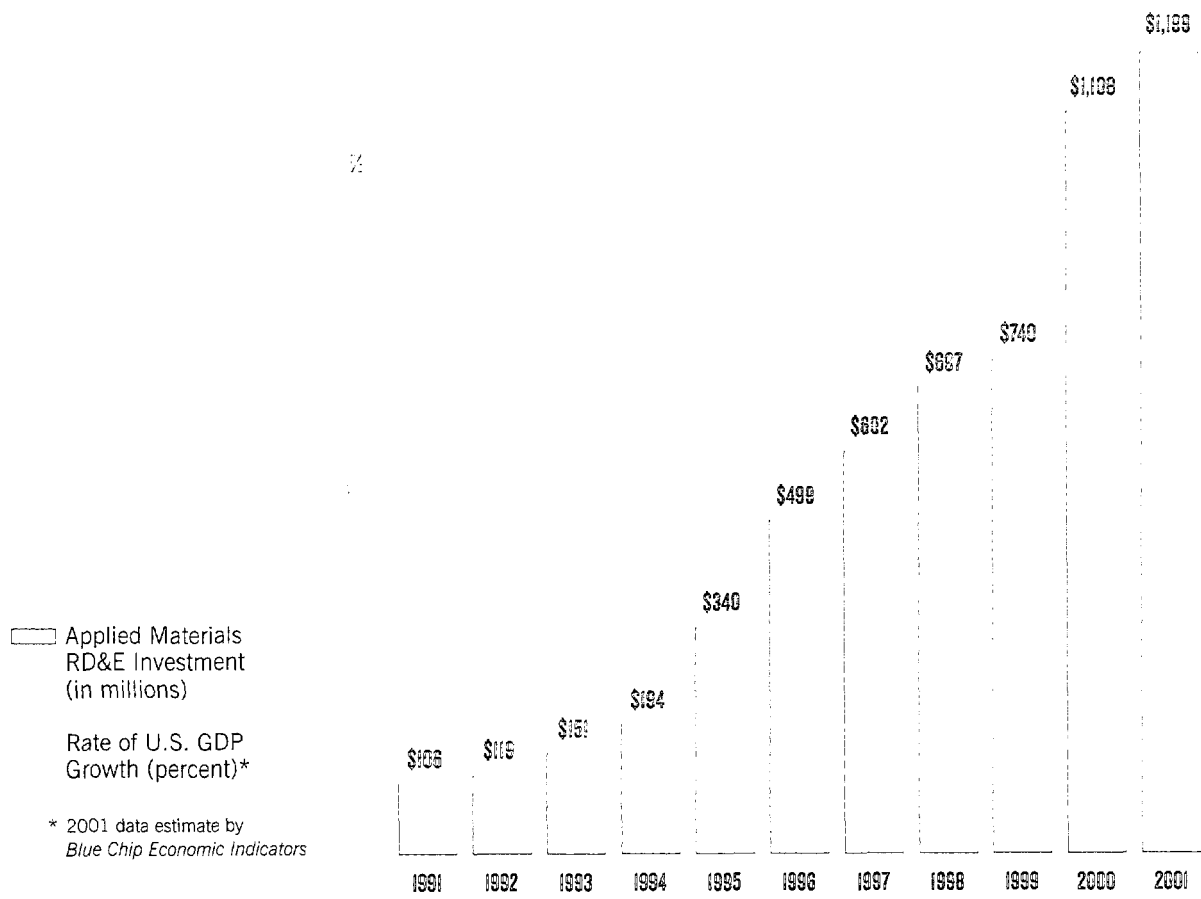
- Increasing the affordability of chips through the use of larger 300mm wafers, which provides chipmakers greater productivity and more economical manufacturing. Utilizing 300mm wafers in place of the previous generation of 200mm wafers, our customers will be able to produce up to 2.5x more chips per wafer, potentially reducing the costs of commercial production by 35 percent or more.

Never before have chipmakers faced three simultaneous technology transitions of this magnitude. Their combined complexity demands new production equipment to meet much more exacting manufacturing requirements.

At Applied Materials, we have responded with the largest investments in research, development and engineering (RD&E) in our history. Our RD&E efforts are focused on the rapid innovation and commercialization of new chip manufacturing technologies, as well as the continuous improvement of existing products. In the past

Applied Materials
 Applied Materials
 Applied Materials

Applied Materials has steadily increased its RD&E investments, even in the face of economic downturns (see GDP below), in order to provide advanced manufacturing systems for chipmakers and their fabs throughout the world.



year alone, we have been awarded more than 800 patents worldwide.

In the area of new materials, we've developed a full range of new manufacturing systems for copper-based chips. Our entire product line supports state-of-the-art 0.13 micron commercial chip production, with equipment for even smaller nanometer geometries now being tested and evaluated by our customers. And following the introduction of our first 300mm system in 1997, today we have the most comprehensive offering of 300mm systems in the industry. These are some of the tangible fruits of an RD&E investment that has steadily climbed over the past decade—enabling Applied Materials to stay at the forefront of semiconductor equipment technology and attain the largest market share of any company in the industry.

Our RD&E investments go well beyond solving today's current manufacturing challenges and improving specific process technologies. We maintain ongoing programs in software, automation control systems, materials research and environmental and safety solutions. On the horizon are

even more far-reaching changes. They include the development of advanced automation technologies and integrated Process Modules that have the potential to dramatically boost our customers' fab productivity.

We are also bringing the new technologies to market that will be needed to manufacture "nanochips"—with features of 100 nanometers (0.1 micron) and below—chips so tiny and powerful that they will undoubtedly help create new miracles in the 21st century in everything from education and medicine to business and communications.

To speed these innovations and support our customers as they transition to new technologies, we have made major investments in our Equipment and Process Integration Center and Process Module Technology Center (see story, pgs. 16–17). The first facilities of their kind, they are designed to further strengthen our product development capabilities and to help our customers test, customize and pre-integrate new manufacturing systems for their specific device requirements.

Michael Duane
Senior Member of Technical Staff
Technology Integration
EPIC

Wayne Chang, Ph.D.
Member of Technical Staff
Photolithography
EPIC



Inside Applied Materials:

A LONG-TERM INVESTMENT FOCUS REAPS RESULTS WITH THE EQUIPMENT PROCESS AND INTEGRATION CENTER

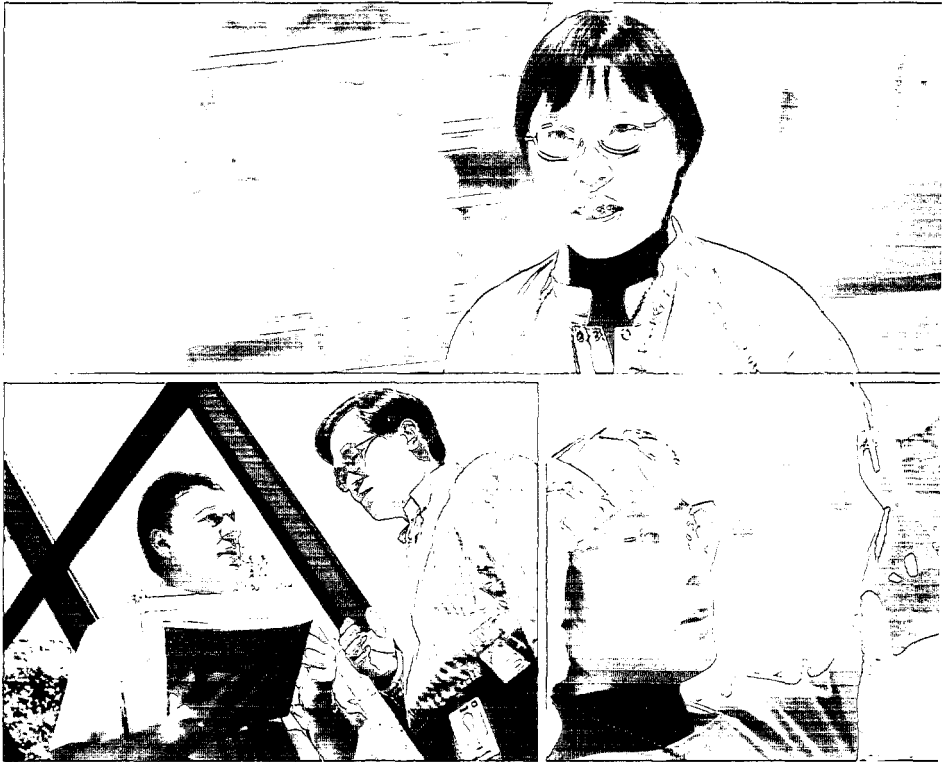
By the mid-1990s, Applied Materials reached a goal no other semiconductor equipment manufacturer had achieved—building a broad product line that encompassed nearly every step in the chip manufacturing process. With this depth of process knowledge and breadth of manufacturing systems, Applied Materials realized it could leverage these capabilities to create entirely new value-added services for its customers. The next logical step was to focus on the complex task of integrating a set of systems to perform a specific process sequence, giving chipmakers valuable time to market advantages. This move would require building a new facility, and in 1997 construction began on the Equipment and Process Integration Center (EPIC), the first dedicated 200mm pilot line integration facility in the semiconductor equipment industry. As a combination research lab, proving ground and test facility for process integration, EPIC enables Applied Materials' customers to speed their technology transitions by evaluating and integrating new manufacturing systems well in advance of installing such equipment in their production fabs.

Getting EPIC up and running was no small undertaking. Besides installing a wide range of Applied Materials manufacturing systems, additional new equipment and expertise, including in-house lithography and electrical test capabilities, were required to fully outfit the facility.

Hong Du, Ph.D.
Senior Manager
Photolithography
EPIC

Toshiyuki Nagata
Senior Manager
Characterization
EPIC

Yuan Tian, Ph.D.
Process Engineer
EPIC



Mehdi Moussavi
Director
Back End of Line Integration
EPIC

Tony Pan, Ph.D.
Senior Member of Technical Staff
Back End of Line Integration
EPIC

Once EPIC opened its doors in 1998, the learning curve quickly grew even steeper. Unlike production fabs, which set up a system once according to a standard process “recipe” and then focus on maximizing its running time, the challenge for EPIC engineers was to learn how to set up their systems as frequently as once a month and be able to quickly make modifications for differing customer recipes and requirements. Customers gained valuable new resources, while the reward for Applied Materials was in-depth integration experience unparalleled for a semiconductor equipment manufacturer—knowledge that would be invaluable in its future product development process.

Within the last two years, Applied Materials has faced still bigger challenges. Major industry transitions to larger 300mm wafers and new materials created a need for 300mm and advanced copper-based manufacturing integration facilities. In addition, EPIC’s integration expertise would give it a leading role in supporting the development of Applied Materials’ next major product development effort: Process Modules. To respond to these new challenges, Applied Materials began expanding its EPIC operations into a second, much larger facility in 2001. This facility, the Process Module Technology Center, houses a state-of-the-art 40,000 square foot Class 1 cleanroom that is home to the 300mm Module Development Line and Applications Laboratories. Together, these two multimillion dollar facilities give new depth to Applied Materials’ process integration capabilities and signify an ever expanding commitment to meet the technology needs of its customers.



Gigi Lai
Process Engineer
CPI Product Business Group

FABRICATING THE NEXT TRILLION CHIPS

At Applied Materials, we develop the systems chipmakers need to fabricate more powerful, portable and affordable chips. Today we're forging closer alliances with our customers to help them streamline their production processes and lower operating costs. To do that, we're developing innovative "smart" manufacturing technologies that will enable fabs to achieve much higher levels of efficiency.

In less than a decade, the number of semiconductor chips produced each year has more than doubled, growing from 176 billion in 1994 to over 373 billion in 2000. Even with the economic downturn that began in 2001, chips are still being manufactured at a rate of close to one billion per day. By 2010, the annual demand for chips is expected to triple to over one trillion in order to meet the exploding number of business, education, scientific, military, communications and consumer applications.

Given these skyrocketing numbers and the more than \$2 billion investment required to build a major new fab, chipmakers are looking to semiconductor equipment manufacturers for far more than manufacturing process improvements. They are seeking major advances in equipment productivity and in overall fab efficiency to continue to drive down the cost of chips and shorten time to high-volume production.

At Applied Materials, our 300mm wafer

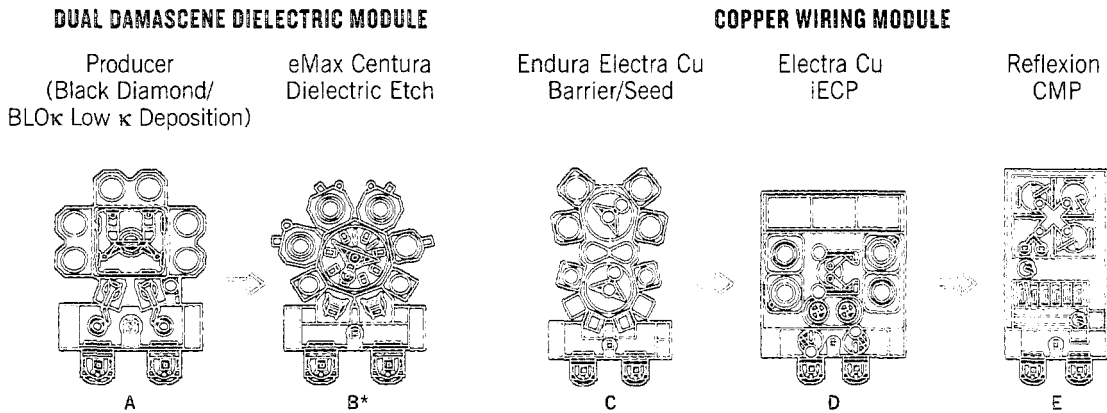
processing systems represent a significant advance in chip processing economics. Yet, the transition to 300mm systems, by itself, is not enough to continue the historical progress of Moore's Law—the trend for chips to double in power and halve in price every 18 months to two years. We have been hard at work developing new generations of equipment, as well as software technologies that can eliminate productivity bottlenecks, reduce chip variability, maximize yields, and streamline equipment set up and process integration schedules. A wide range of Applied Materials' factory efficiency advances offer chipmakers major economic returns while creating growth opportunities for our systems and services.

These efforts include:

- **Integrated Metrology and Inspection.** Using advances in measuring the extremely thin films that are deposited on chips during manufacturing, we are now designing products that integrate

Process Modules combine the production capabilities of multiple Applied Materials systems with advanced automatic process control and inter-system communications technologies. This advanced process control, based upon process algorithms, integrated metrology and software, offers the potential for chipmakers to fabricate their products with significantly greater repeatability and precision in day-to-day operation, and with higher yield of good chips.

INTERCONNECT MODULE: A TOTAL OF FIVE INTEGRATED SYSTEMS

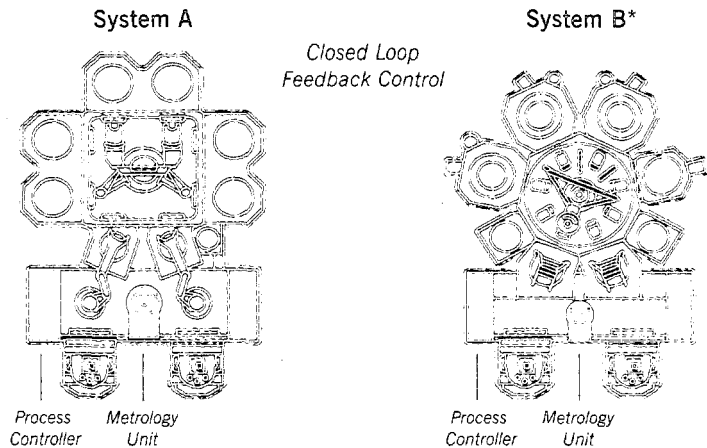


PROCESS INTEGRATION AND CONTROL

Closed Loop Feedback Control:
Each individual system has the capability to immediately measure the results of its process. The system then adjusts its process to achieve optimum results.

Feed-forward Process Control:
Process information from System A is sent ahead to System B, enabling it to adjust its process to achieve the desired results. Each system can forward process results to the next system in the module.

* A lithography step is inserted between the low κ dielectric deposition and dual damascene pattern etch steps.



Feed-forward Process Control

metrology (to measure the profile of fine patterns on a chip) and inspection (to find defects) on many of our systems.

Traditionally, these functions have been performed by stand-alone equipment that tests wafers only periodically—as often as 1 wafer in 25 or as seldom as 1 wafer every 24 hours. By integrating metrology and inspection functions, wafers can be inspected without slowing wafer cycle time and corrective action can be taken immediately after wafers are processed—maximizing the number of usable chips.

- **Process Control Software.** We are making great strides in data collection systems and software designed to improve equipment reliability, predictability and control. Our software can collect data from a system's inspection tools and sensors to continuously monitor the system's health and process, automatically schedule maintenance when needed, and provide detailed information about fault conditions. This enables chipmakers to improve equipment utilization by running equipment longer when process conditions remain within defined parameters.

- **Factory Control Software.** We are continuing to develop advanced software capabilities that enable our customers to control and optimize all their manufacturing operations. Ultimately, the goal is to provide fab-wide automated control systems that can precisely track the processing of individual wafers as they make their way through each system and process chamber—greatly increasing a chipmaker's ability to operate equipment at maximum efficiency and effectiveness.

Process Modules—A Major Advance in Semiconductor Manufacturing.

As the pace of semiconductor innovation continues to accelerate, chipmakers face unparalleled economic pressures to get their chips to market as quickly as possible. Previously, new generations of chips were introduced every three

to four years, but the product window has shrunk to as little as 18 months today. In this environment, even a few weeks of delay can result in many millions of dollars in lost revenue opportunities.

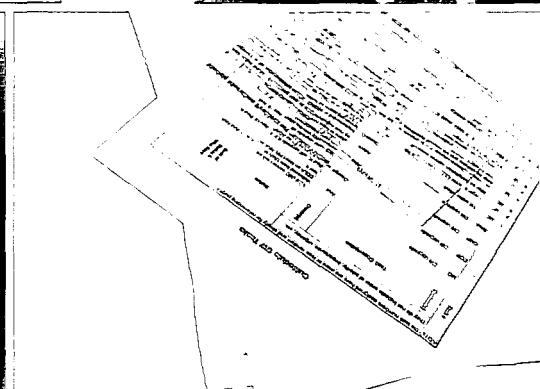
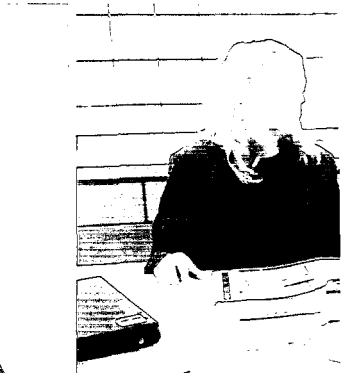
Helping our customers get their products to market faster has resulted in our pioneering a revolutionary new product offering called Process Modules (see story, pgs. 22–23). Moving beyond the traditional focus on discrete manufacturing processes, Process Modules integrate multiple individual systems to function like a single, highly automated unit. They are designed to perform a specified sequence of manufacturing steps to create a finished structure on the chip—such as parts of the transistor or the “interconnect” portion of a chip that contains its circuitry. Wafers fed through a module are automatically processed to a specified level of performance.

As a result, our customers will benefit from virtually a plug-and-play capability—eliminating the laborious process integration of individual systems they are now required to manage. The benefits of Process Modules are particularly compelling for chipmakers as they begin building new fabs for 300mm wafer processing. Process Modules will enable them to produce demonstrated results on 300mm wafers well before fab construction is completed or any equipment is installed, thereby cutting many weeks or months off fab start-up time.

Applied Materials is in a unique position to lead the way in the development of Process Modules, thanks to the breadth of our product line and the integration capabilities of our EPIC facility. By incorporating the latest advances in metrology and inspection techniques and process control software with Process Modules, we are enabling information to flow back and forth from system to system, thereby optimizing the fabrication process for quality while improving efficiency in terms of higher throughput and better yields.

Sanjiv Mittal, Ph.D.
Vice President, General Manager
Low κ /PECVD Systems & Modules
DSM Product Business Group

Russell C. Ellwanger
Vice President, Co-General Manager
FPS Product Business Group



Kathryn Ta, Ph.D.
Director
Module Systems Engineering

Farhad Haghdam, Ph.D.
Vice President, General Manager
DSM Product Business Group

Inside Applied Materials:

EXTRAORDINARY CUSTOMER FOCUS AND COLLABORATION DRIVE THE
DEVELOPMENT OF PROCESS MODULES

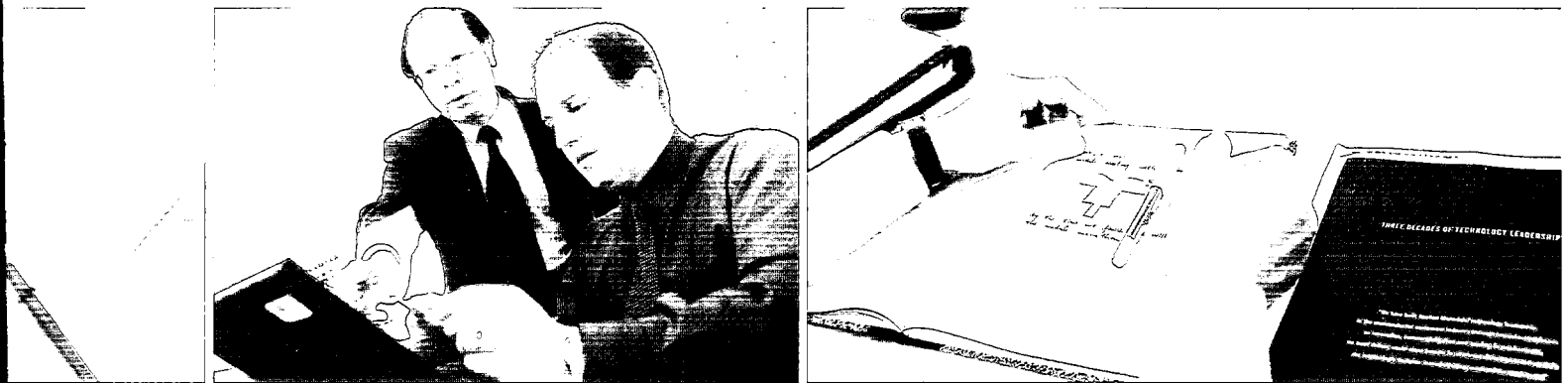
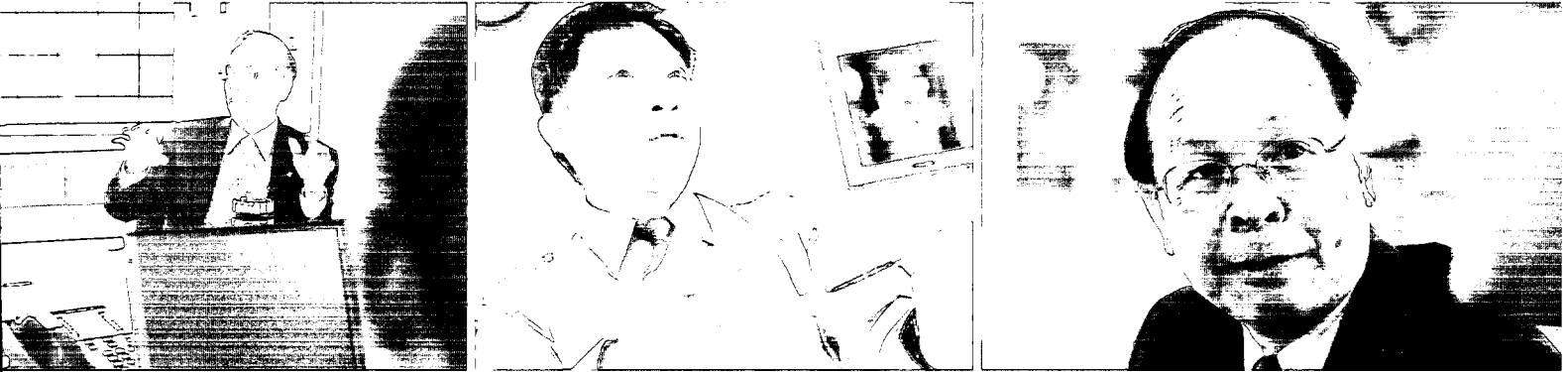
The successful development of Process Modules signals a new era for the semiconductor equipment industry. Like any technological breakthrough of this size and scope, the development of Process Modules didn't happen overnight. It took five years of intensive effort and represents one of the most comprehensive company-wide development projects in Applied Materials' history.

According to Ashok Sinha, senior vice president of Silicon Business Products, the challenge of creating Process Modules wasn't just technological, it was organizational. "The development of Applied Materials' systems in each process area has been chiefly the responsibility of individual product business groups," Sinha says. However, with Process Modules all that changed. Participants from seven different product business groups had to come together to work as one highly cohesive unit. "Each group had to be strongly committed in order to make Process Modules a success. It is a real tribute to the strong customer focus within Applied Materials that we were able to collaborate so successfully."

Ashok K. Sinha, Ph.D.
Senior Vice President
Silicon Business Products

Fusen Chen, Ph.D.
Vice President, General Manager
CPI Product Business Group

Robin Cheung
General Manager
ECP/Cu Wiring Division
CPI Product Business Group



Michael D. Armacost
Director, Low κ Dep Etch Module
DSM Product Business Group

From the start, it was also clear that Process Modules would require a sizeable expansion in key technical resources within Applied Materials—particularly in the area of software development. “We realized that in order to create a sophisticated module controller capable of monitoring each sequential process and feeding information forward and backward to adjust the manufacturing flow in real time, we needed broader programming expertise,” explains Russell Ellwanger, vice president and co-general manager of the Factory Productivity Solutions Product Business Group. These resources were added both through in-house hiring and as a result of an acquisition. “We are a much stronger company now,” states Ellwanger. “Our software capabilities give Applied Materials a competitive advantage in many product areas.”

The collaborative effort to develop Process Modules has had another equally important impact on the Company—greatly expanding the level of process integration knowledge within each of the product groups. While the ability to do advanced process integration was essential to creating successful module products, it is also changing the design of future stand-alone products. For the first time, Applied Materials’ design engineers can observe their systems running under extended production conditions that closely duplicate those in customer fabs. “This has led to a better understanding of the performance of individual products as well as the interactions between them,” says Farhad Moghadam, vice president and general manager, Dielectric Systems and Modules Product Business Group. “The result will be new design innovations and a higher level of production-worthiness across our entire product line.”



Ashok K. Sinha, Ph.D.
Senior Vice President
Silicon Business Products

CONCEIVING THE NEXT BILLION IDEAS

We are continually working on new ways to make future generations of chipmaking technology even more precise and productive. These innovative ideas will enable our customers to manufacture the world's first nanochips — driving Moore's Law into the next decade and bringing a billion more people into the connected world of the 21st century.

The semiconductor industry is racing toward a historic transition—the advent of nanometer-generation chips. While the circuits on today's chips are still measured in fractions of a micron, within two years, as they shrink to 0.1 micron and below, even that tiny measurement scale will be too large to be useful. At that point, the industry will move to measurements in nanometers—with one nanometer equal to one-thousandth of a micron. The microscopic circuits on “nanochips”—at 100 nanometers or smaller—will contain millions more transistors, run even faster than today's most powerful microprocessors and even put many functions of an entire electronic system on a chip. Thanks to chip design and manufacturing innovations currently under development, the first nanochips should reach production in 2003. Chips with features less than half that size are expected as early as 2007. With upwards of one billion transistors packed on a single chip, processor

speeds will soar—rising from 2 GHz in today's fastest microprocessors to 20 GHz and beyond by the end of this decade.

Nanochips will make possible remarkable new devices and applications that will change our lives.

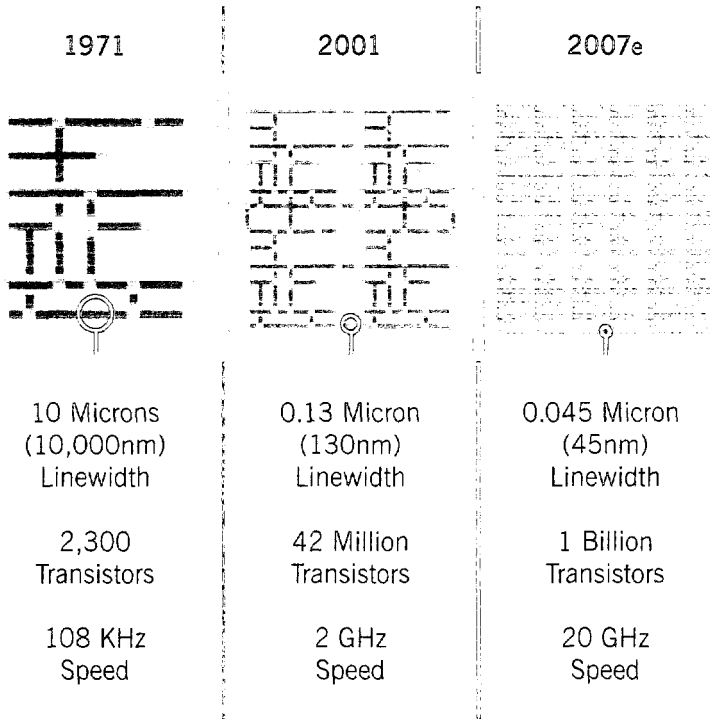
- As their processing power increases, applications like real-time voice translation will become practical. Imagine being able to talk on the phone in English with someone who speaks another language. One's words are instantly translated by a language processor and relayed to the other person. The response is heard in perfect English—all at normal conversational speeds.

- As the storage capacity of chips continues to grow, critical information will be more readily available when and where it's needed. Soon, medical cards could contain a person's complete health history on a memory chip—instantly available to doctors anywhere treatment is needed.

- As the price of chips continues to fall, the use of embedded sensors and processors will become

The past 30 years have seen the performance of chips increase exponentially thanks to the ability to squeeze millions more transistors onto each chip. The 10-micron circuits of the first commercial microprocessor are enormous in comparison to the latest generation of 0.13-micron chips. The number of transistors has grown from less than 3,000 to more than 42 million on today's most advanced microprocessors. By 2007 that number is estimated to climb to more than one billion—all on a tiny piece of silicon about the size of a fingernail.

**A TYPICAL
MICROPROCESSOR**
actual size



NANOCHIP ERA BEGINS

2003e

0.10 Micron
(100nm)
Linewidth

much more commonplace. Already such devices switch lights on and off as we enter or leave a room and run everything from coffee makers to garden sprinklers. But they will become increasingly ubiquitous with new functions that could include everything from testing the purity of our tap water to sensing when the milk in our refrigerator needs to be replaced.

- As the size and power requirements of chips decrease even further, they will make new medical devices possible. In the not too distant future, diabetes and heart patients may have inexpensive biosensors implanted to measure their vital signs and track blood sugar and cholesterol. Such chips could signal the need for dietary changes or alert patients if medications are required.

Beyond such futuristic advances, nanochips will lead to even broader benefits. Thanks to the rapid spread of inexpensive and energy-efficient chips in cell phones, personal computers and wireless Internet devices, a billion new users from around the world are likely to join today's digital communication networks and share the benefits of the rapid flow of information by 2007. Nearly three-quarters of these new users are expected to connect from countries outside of the United States and Europe.

While nanochips have the potential to change our lives in countless positive ways, the technical challenges of manufacturing them are exceedingly complex. More precise manufacturing methods and innovative materials must be developed. At Applied Materials, we are conceiving these new technological ideas and solutions. Our development of proprietary "low- κ " insulation materials represents a promising new way to overcome chip speed and power limitations. Currently, several leading chipmakers are working with our low κ films to create chips that in combination with advanced copper circuitry are expected to boost speeds up to 50 percent faster than those in production today.

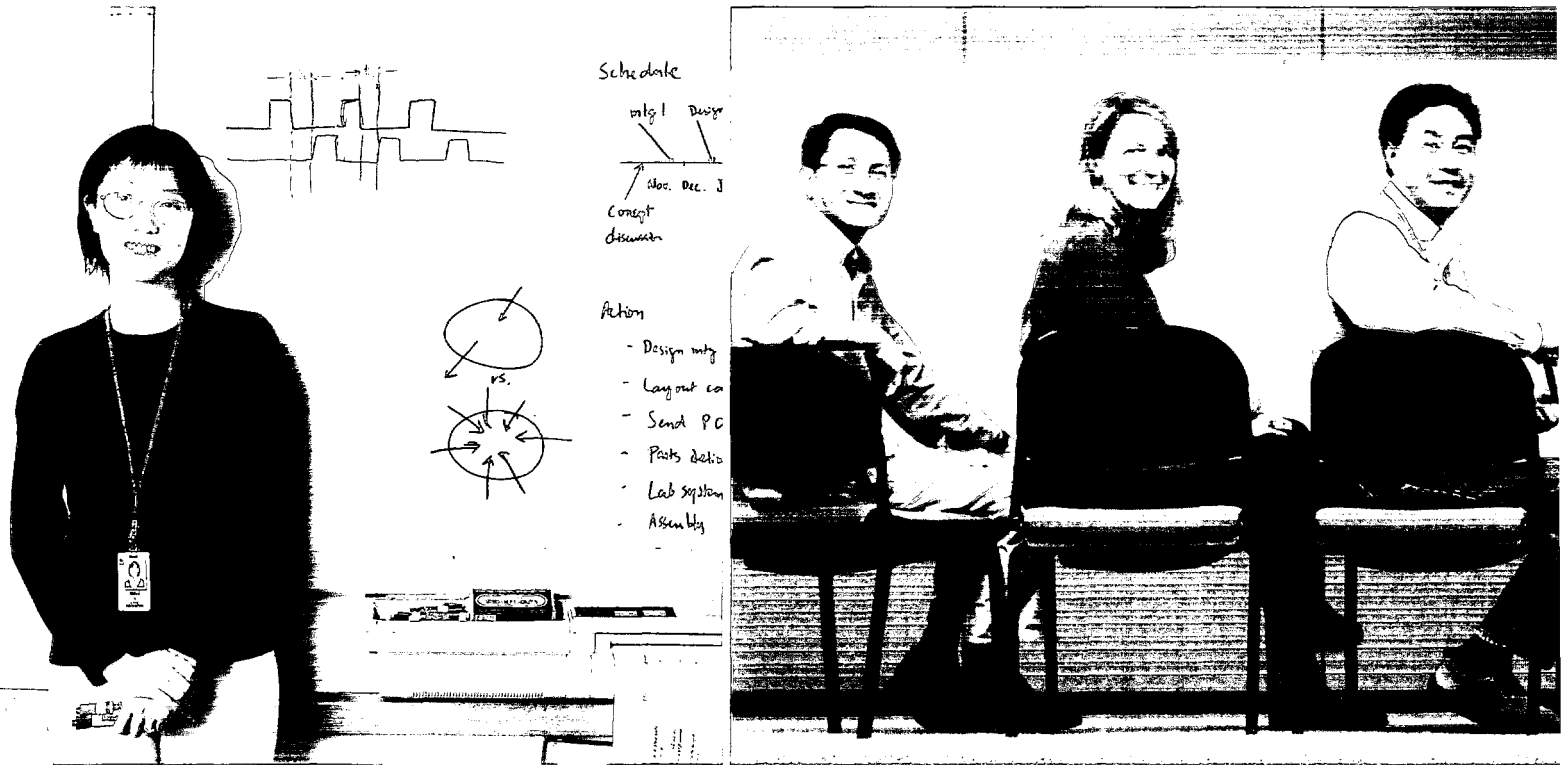
In 2001, we introduced a system for another key enabling technology, Atomic Layer Deposition (ALD), that will be essential for manufacturing nanochips. Traditional deposition processes are limited in their capability to evenly coat the increasingly narrow and deep features on nanochips with the ultra-thin, conformal and high purity films required. Applied Materials' ALD technology incorporates a number of design breakthroughs that give chipmakers an extremely precise way to deposit atoms or molecules a single layer at a time (see story, pgs. 28–29).

Successfully commercializing these new technologies requires a substantial depth and breadth of technical expertise. Our scientific and engineering team includes nearly 2,000 professionals with Ph.D.s and other advanced degrees. These professionals span the fields of physics, materials science, mechanical, chemical, electrical and systems engineering as well as a wide range of other disciplines. We have organized this enormous talent pool in a way that has optimized our ability to innovate rapidly with the creation of small, highly focused business units. Each unit is comprised of a multi-disciplinary team which has the autonomy and resources to commercialize new technologies as well as accountability for achieving results at our global customer base. In order to reduce product development cycle times and improve reliability, we provide these business units with proven common platforms, control software and automation engineering support through a shared systems engineering organization.

While nanochips are moving the semiconductor equipment industry to a new threshold of technical complexity, our three decades of experience translating innovative ideas into practical chip-making solutions will result in many more new products and technologies in the coming years. Together with our customers, we are committed to helping bring the extraordinary benefits of a connected global world to the next billion people.

Anh N. Nguyen
Member of Technical Staff
CMD Division

Cheryl Knepfier, Ph.D.
Product Manager
CMD Division



Ming Xi, Ph.D.
General Manager
CMD Division

Alfred Mak
Director
CMD Division

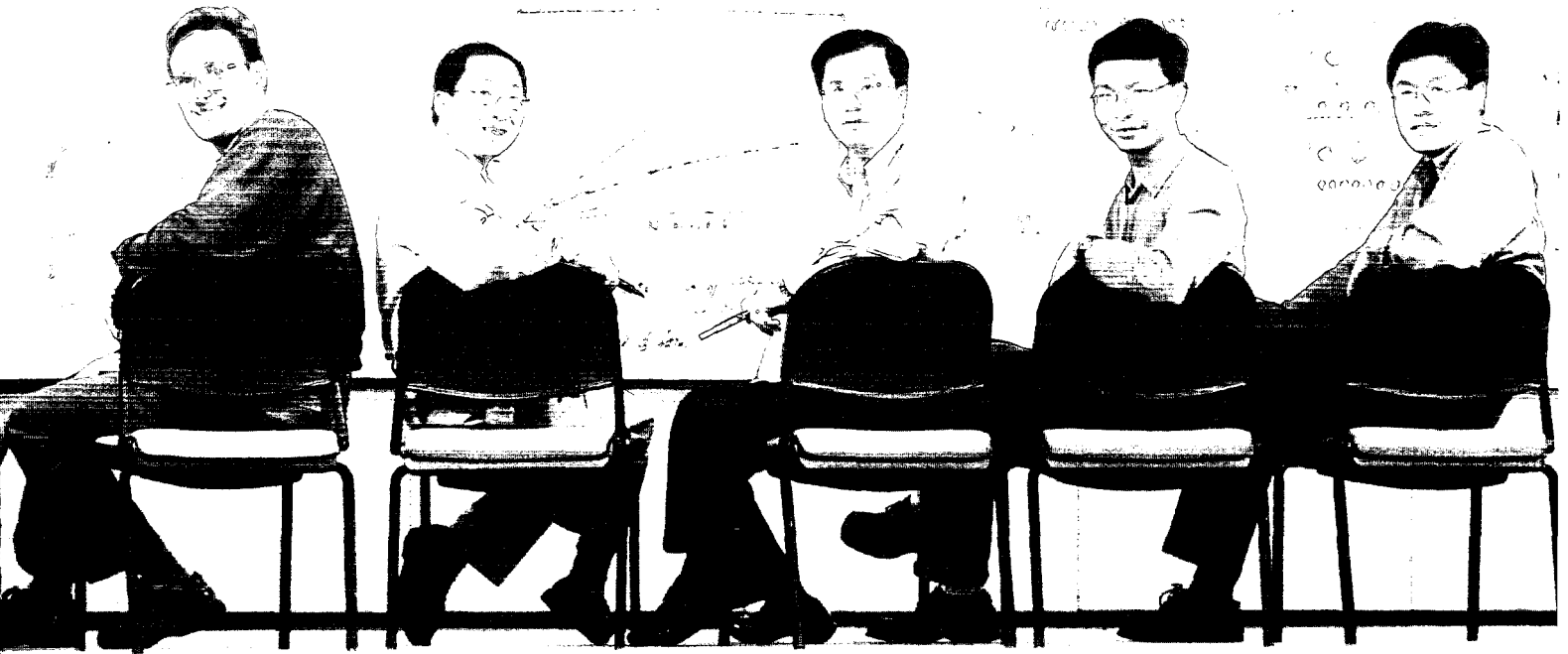
Inside Applied Materials:

IT TAKES A WORLD-CLASS TECHNOLOGY TEAM TO ACHIEVE
NANOCHIP BREAKTHROUGHS LIKE ATOMIC LAYER DEPOSITION

The technical challenge facing Ming Xi, leader of the Atomic Layer Deposition product development group at Applied Materials, was clear—once chip circuits reach 100 nanometers and below, a number of current manufacturing processes would no longer be practical. The team of nearly 40 people—including chemists, engineers, physicists, materials scientists, quality and manufacturing experts—has spent the past year and a half developing the technology to deposit an ultra-thin layer of material evenly on chip structures that are very deep and narrow. “Imagine trying to coat the sides and bottom of a tiny crack in the sidewalk evenly with a very thin layer of spray paint,” Xi explains, “when you can only spray it in from above. The paint would naturally tend to build up near the top edges while not completely coating the walls or the bottom.” The ALD process solves a similar problem in chipmaking by creating a layering process that can be deposited an atom or a molecule at a time—evenly coating all surfaces with a low defect density.

Sean M. Seutter, Ph.D.
Senior Process Engineer
CMD Division

Siqing Lu, Ph.D.
Member of Technical Staff
CMD Division



Lee Luo, Ph.D.
Director of Technology
TSM Division

Michael X. Yang, Ph.D.
Senior Technology Manager
CMD Division

Ling Chen, Ph.D.
Director
CPI Product Business Group

The resulting Applied Materials ALD systems have already led to innovative ALD processing solutions that enable ultra-thin layers of tungsten and titanium to be used for various applications in nanochips. Xi and her team are currently extending this core technology to create many other ALD-based processes and systems that will enable Applied Materials production-proven products to further advance nanochip fabrication.

"It takes enormous skill and dedication as well as many years of experience with semiconductor technology to be a successful member of an Applied Materials' product development team," Xi says. "It is a great privilege to be able to draw on the expertise of such a large number of leading scientists and engineers. They enable Applied Materials to stay on the cutting edge and develop products, like ALD, that are revolutionizing the chipmaking process."

TECHNOLOGY FOR THE NEXT BILLION PEOPLE BEGINS WITH APPLIED MATERIALS PRODUCTS

Creating the chips to connect the next billion people starts with Applied Materials chipmaking products. Today over 16,000 of our semiconductor manufacturing systems, encompassing nearly every step in the chipmaking process, are installed in fabs around the world. These products are the result of over three decades of technology innovation and commercialization by the talented and experienced technical team at Applied Materials.





"We have built Applied Materials' technology leadership in the semiconductor equipment industry through an unrelenting focus on innovation, commercialization and quality. We must deliver world-class results in all three of these areas to satisfy the increasingly complex manufacturing requirements of our customers."

If I were to single out the one factor most responsible for Applied Materials' long-term leadership in semiconductor equipment technology and products, it would be our shared passion throughout the Company for innovation, commercialization and quality.

Innovation and commercialization are measured by our ability to develop the right ideas for the right products and successfully design and manufacture them. We must have the creative instincts and market insights to select the correct development path and the vision to boldly implement it. In all cases, we must tightly focus our innovation around the specific needs of our customers and deliver products to market with complete customer satisfaction.

Equally important, we must design and engineer exceptional quality into every Applied Materials product in order to maintain and extend our competitive edge.

We have sustained our technology leadership with a world-class team of employees who are supported and encouraged to create innovative solutions. This philosophy has successfully guided Applied Materials for over three decades and will continue to guide us as we develop the market-leading products and technologies of the future.

Dan Maydan, President

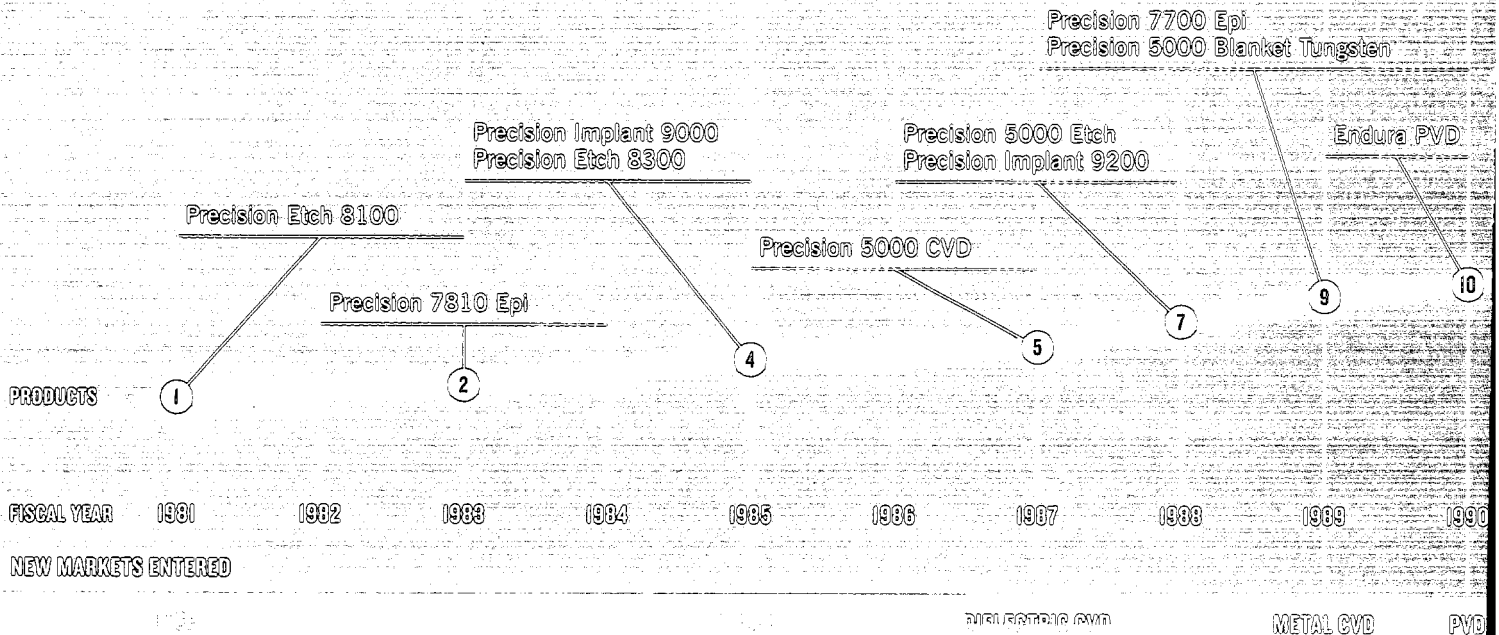
FOCUS ON INNOVATION AND COMMERCIALIZATION

Applied Materials has delivered 91 major products in 21 years

Rapid innovation and commercialization have fueled Applied Materials' growth and resulted in the introduction of 91 major products since 1981. We have expanded our product offerings by entering new markets with technologies that offer innovative chipmaking solutions to our customers.

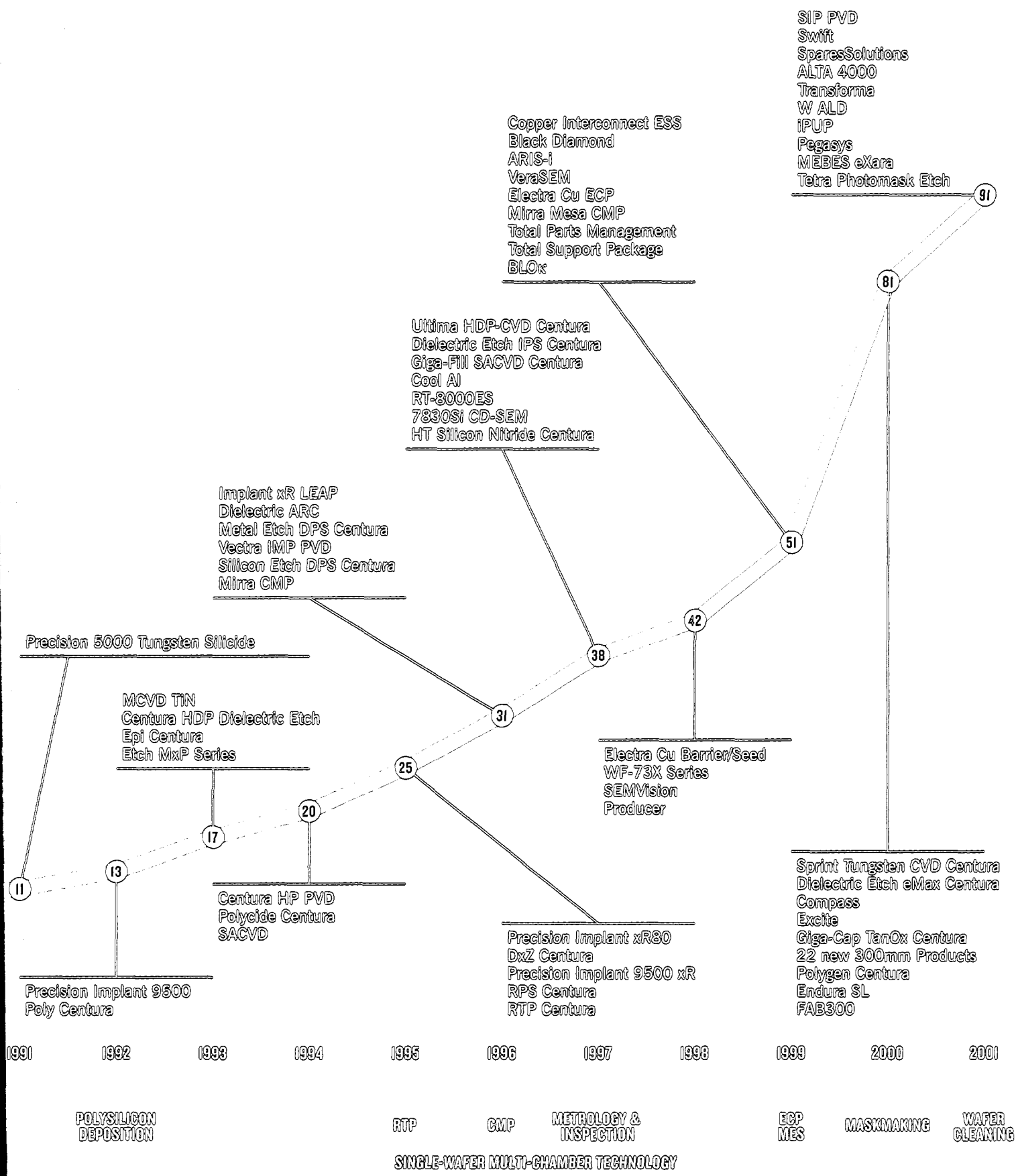
This expansion began with our first product for the etch market and continued throughout the 1980s with our entry into the ion implantation (implant) and chemical vapor deposition (CVD) markets. Applied Materials'

first single-wafer, multi-chamber CVD-product, the Precision 5000, so revolutionized semiconductor manufacturing that it was subsequently inducted into the Smithsonian Institution's permanent collection of Information Age technology. Our growth further accelerated in the 1990s and beyond with the development of products and technologies for the physical vapor deposition (PVD), polysilicon deposition, rapid thermal processing (RTP), chemical mechanical polishing (CMP) and numerous other markets.



SINGLE CHAMBER TECHNOLOGY

1 CUMULATIVE MAJOR PRODUCT ANNOUNCEMENTS

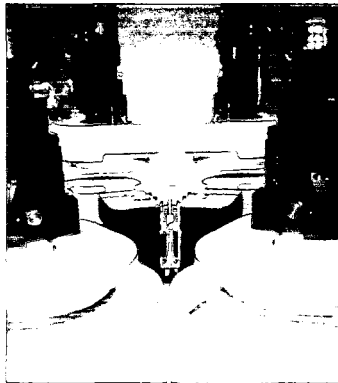
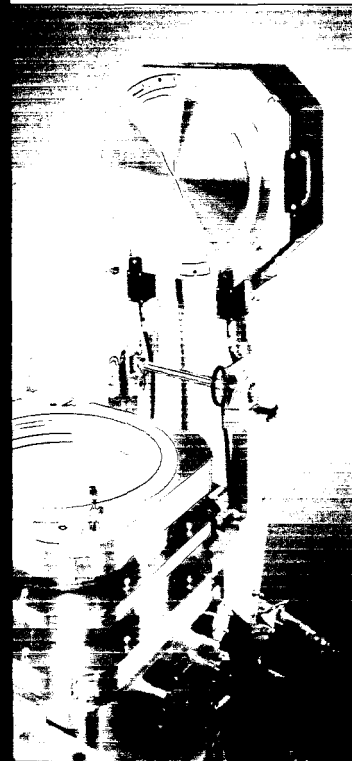


Physical Vapor
Deposition

Epitaxial
Deposition

Electrochemical
Plating

Etch



Chemical Vapor
Deposition

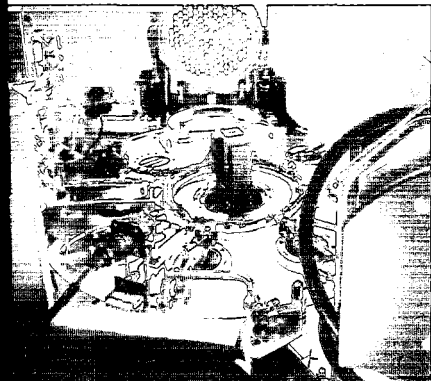
Chemical Mechanical
Polishing

A BROAD RANGE OF TECHNOLOGIES FOR TOTAL SOLUTIONS

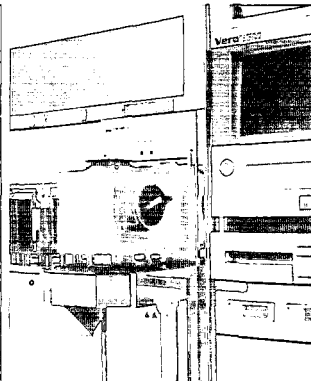
We're expanding customer productivity with a growing family of

Applied Materials product and service solutions

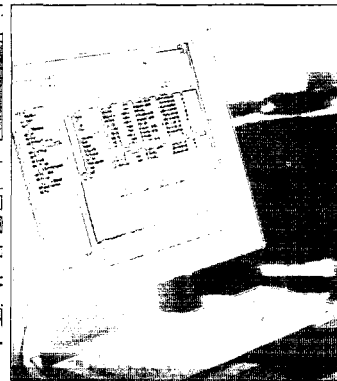
Thermal processing



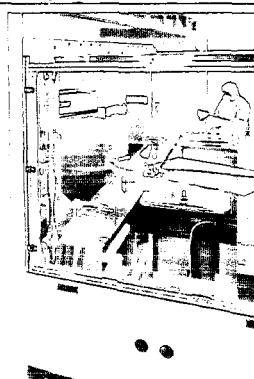
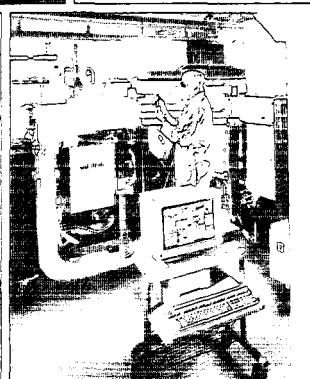
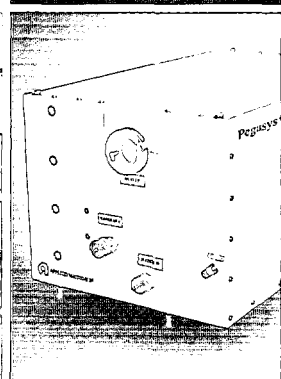
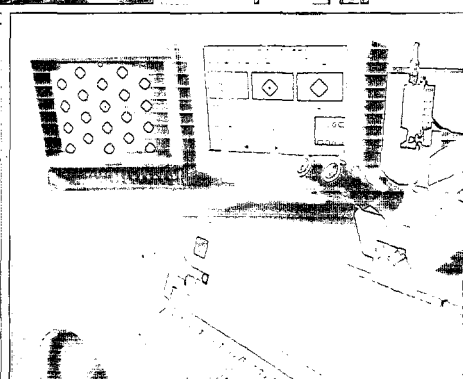
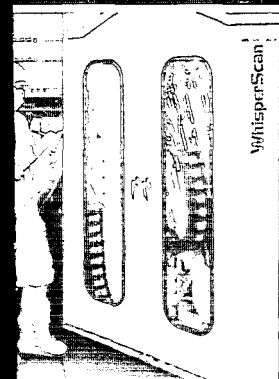
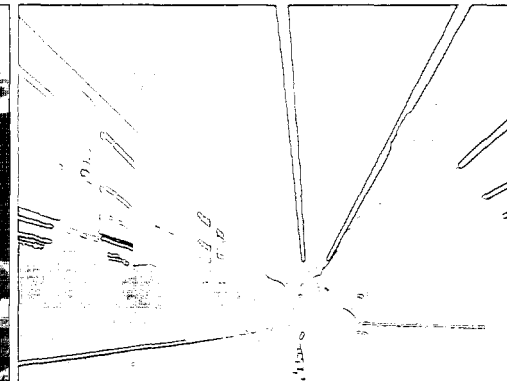
Metrology and Inspection



Manufacturing Execution System Software



Customer Productivity Support



Implantation

Mask Pattern Generation, Inspection and Etch

Environmental Solutions

Flat Panel Display

Applied Materials' comprehensive product portfolio includes systems that address nearly all of the process steps in chipmaking. We are the global market leader in a majority of these markets, with a strong presence in each of the others.

This large and technically diversified product line allows us to create new synergies and integration among multiple process technologies—particularly through the pioneering of Process Modules. This new approach combines several systems to function as one highly automated unit for manufacturing an entire structure on a chip.

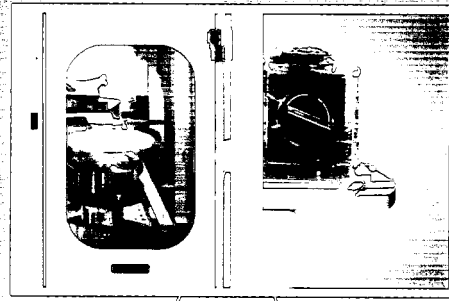
We have also leveraged our process expertise into enhancing our customers' fab operations with a suite of new products and services. These

include sophisticated factory control software and system automation technologies that can enhance communications between the factory floor and the fab management's decision-making process. In addition, we're leading the way with innovative environmental and inspection products.

Every Applied Materials product is supported at our customer fabs by a global service organization dedicated to providing the most responsive, productivity-enhancing programs in the industry. This complete portfolio of systems, Process Modules, fab process expertise, service and support provides our customers with the Total Solutions they need to meet all their manufacturing requirements.

SYSTEM DESIGN

Mechanical Engineering
Materials Science
Electrical Engineering
Automation
Software Controls

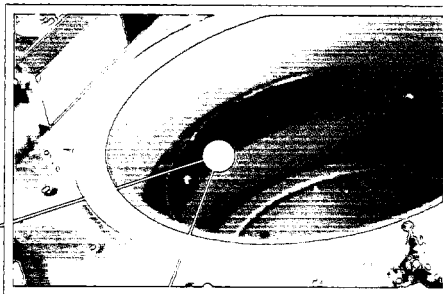
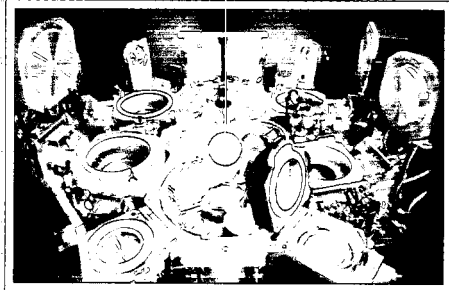


SYSTEM ELECTRONICS

Electrical Engineering
Circuit Design
Communications

CONTROL SYSTEMS

Electrical Engineering
Automation
Software
Networking
Computers
Robotics
Human Interfaces
Data Management
Control Engineering



CHAMBER DESIGN

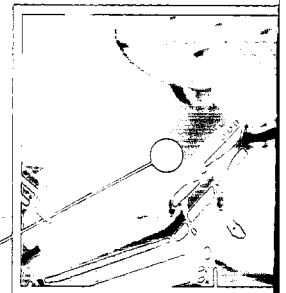
Mechanical Engineering
Chemical Engineering
Materials Science
Physics
Gas Dynamics
Thermodynamics
Fluid Mechanics

PROCESS

Physics
Materials Science
Chemical Engineering
Electrical Engineering

ROBOTICS

Mechanical Engineering
Materials Science
Electrical Engineering
Automation
Software Controls

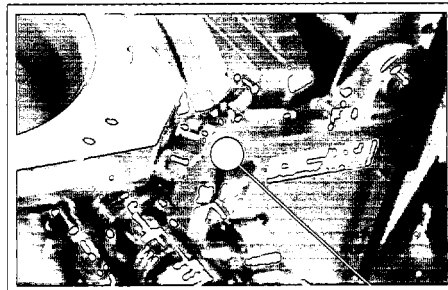
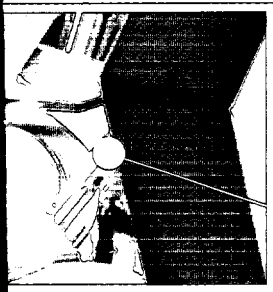


THE SCIENCE BEHIND SEMICONDUCTOR MANUFACTURING

Many specialized scientific disciplines are employed
in the design of Applied Materials equipment

Technology is the engine of Applied Materials' leadership in the semiconductor equipment industry. The diversity of science and engineering expertise required to develop today's state-of-the-art chipmaking technology is extraordinary, ranging from in-depth applications of physics, robotics and materials science to the latest advances in mechanical, chemical and electrical engineering, among many other disciplines. Currently, Applied Materials employs nearly 2,000 men and women with graduate degrees in these areas.

Attracting the world's top scientific and engineering talent is a never-ending challenge. Fortunately, Applied Materials' global leadership in chipmaking technology draws key scientists and technologists from the world's best universities and institutes to the excitement of working with one of the most dynamic technical teams ever assembled. Maintaining our technology position demands outstanding contributions from every individual. However, it ultimately rests on sustained, collaborative team efforts to achieve new breakthroughs in semiconductor equipment manufacturing.



VACUUM

Physics
Vacuum
Cryogenics
Gas Dynamics
Thermodynamics
Fluid Mechanics

SENSORS / INSPECTION

Electrical Engineering
Optics
Lasers
E-Beams
Instrumentation

FINANCIAL AND CORPORATE INFORMATION

Fiscal year ended ⁽¹⁾	1997 ⁽²⁾	1998 ⁽²⁾	1999 ⁽²⁾	2000 ⁽²⁾	2001
(Dollars in thousands, except per share amounts)					
Net sales	\$ 4,315,189	\$ 4,330,014	\$ 5,096,302	\$ 9,564,412	\$ 7,343,248
Gross margin	\$ 2,017,552	\$ 2,016,313	\$ 2,419,219	\$ 4,855,728	\$ 3,252,033
(% of net sales)	46.8	46.6	47.5	50.8	44.3
Research, development and engineering	\$ 601,985	\$ 697,291	\$ 740,114	\$ 1,107,922	\$ 1,198,799
(% of net sales)	14.0	16.1	14.5	11.6	16.3
Marketing, selling, general and administrative	\$ 594,534	\$ 626,311	\$ 695,296	\$ 960,753	\$ 901,924
(% of net sales)	13.8	14.5	13.6	10.0	12.3
Income from continuing operations before income taxes, equity in net income/(loss) of joint venture and cumulative effect of change in accounting principle	\$ 852,195	\$ 508,693	\$ 1,023,344	\$ 2,947,844	\$ 1,103,802
Effective tax rate (%)	37.5	34.0	32.3	30.0	29.8
Income from continuing operations before cumulative effect of change in accounting principle ⁽³⁾	\$ 532,913	\$ 298,665	\$ 726,679	\$ 2,063,552	\$ 775,228
(% of net sales)	12.3	6.9	14.3	21.6	10.6
Net income ⁽⁴⁾	\$ 532,913	\$ 277,669	\$ 747,675	\$ 2,063,552	\$ 507,829
Earnings per diluted share:					
Continuing operations	\$ 0.68	\$ 0.38	\$ 0.88	\$ 2.40	\$ 0.91
Discontinued operations	—	(0.03)	0.03	—	—
Cumulative effect of change in accounting principle	—	—	—	—	(0.31)
Total	\$ 0.68	\$ 0.35	\$ 0.91	\$ 2.40	\$ 0.60
Weighted average common shares and equivalents (in thousands)	784,236	786,596	820,580	859,169	847,329
Order backlog	\$ 1,880,311	\$ 1,045,567	\$ 1,739,270	\$ 4,381,768	\$ 2,725,406
Working capital	\$ 2,524,572	\$ 2,595,741	\$ 3,579,223	\$ 6,079,436	\$ 6,249,358
Current ratio	2.7	3.1	3.1	3.2	5.1
Long-term debt	\$ 623,090	\$ 616,572	\$ 584,357	\$ 573,126	\$ 564,805
Stockholders' equity	\$ 3,139,812	\$ 3,367,290	\$ 4,575,258	\$ 7,104,348	\$ 7,606,737
Book value per share	\$ 4.12	\$ 4.41	\$ 5.77	\$ 8.74	\$ 9.32
Total assets	\$ 5,355,309	\$ 5,288,206	\$ 7,014,510	\$ 10,545,730	\$ 9,828,510
Capital expenditures, net	\$ 364,994	\$ 464,372	\$ 219,657	\$ 383,255	\$ 710,620
Regular employees	14,826	13,179	13,831	19,220	17,365

⁽¹⁾ Each fiscal year ended on the last Sunday in October.

⁽²⁾ For periods prior to fiscal 2001, data was not available to provide pro forma information as if the change in accounting principle was applied retroactively.

⁽³⁾ Income from continuing operations before cumulative effect of change in accounting principle included net one-time items, on an after-tax basis, of: \$27,969 expense for fiscal 1997, \$165,093 expense for fiscal 1998, \$30,248 expense for fiscal 1999, \$9,911 income for fiscal 2000 and \$158,871 expense for fiscal 2001.

⁽⁴⁾ In addition to the net one-time items included in income from continuing operations before cumulative effect of change in accounting principle, net income also included after-tax expense of \$20,996 from discontinued operations for fiscal 1998, after-tax income of \$20,996 from the reversal of provision for discontinuance of joint venture subsequently retained for fiscal 1999 and after-tax expense of \$267,399 from a cumulative effect of change in accounting principle for fiscal 2001.

LEGAL COUNSEL

Orrick, Herrington & Sutcliffe LLP
San Francisco, California

INDEPENDENT ACCOUNTANTS

PricewaterhouseCoopers LLP
San Jose, California

NUMBER OF REGISTERED STOCKHOLDERS

6,584 (as of October 28, 2001)

STOCK LISTING

Applied Materials, Inc. is traded on
The Nasdaq National Market®,
Nasdaq Symbol: AMAT

TRANSFER AGENT

Stockholders should direct all inquiries to:
Computershare Investor Services, LLC.
Stockholder Services
P.O. Box A3504
Chicago, Illinois 60690
(312) 360-5186
web.queries@computershare.com

FORM 10-K

A copy of Applied Materials' Annual Report on Form 10-K, filed with the Securities and Exchange Commission, contains additional information relating to Applied Materials and is available without charge. We welcome questions from potential and existing stockholders.

PLEASE CONTACT:

Investor Relations
Applied Materials, Inc.
3050 Bowers Avenue, M/S 2038
Santa Clara, California 95054-3298
(800) 882-0373
investor_relations@amat.com
www.appliedmaterials.com

STOCK PRICE HISTORY

Fiscal year	2000		2001	
	High	Low	High	Low
First quarter	\$ 72.22	\$ 43.88	\$ 53.13	\$ 35.38
Second quarter	\$ 114.88	\$ 68.63	\$ 58.73	\$ 37.81
Third quarter	\$ 101.88	\$ 71.88	\$ 57.52	\$ 41.95
Fourth quarter	\$ 86.31	\$ 42.06	\$ 50.00	\$ 27.50

The preceding table sets forth the high and low closing sale prices as reported on The Nasdaq National Market.

BOARD OF DIRECTORS

JAMES C. MORGAN

Chairman and Chief Executive Officer
Applied Materials, Inc.

DAN MAYDAN

President
Applied Materials, Inc.

MICHAEL H. ARMACOST*

President
The Brookings Institution

DEBORAH A. COLEMAN*

General Partner
SmartForest Ventures LLC
Chairman of the Board
Teseda Corporation

HERBERT W. DWIGHT, JR.†

Chairman
Optical Coating Laboratory, Inc.
(retired)

PHILIP V. Gerdine*

Executive Director
Siemens AG (retired)

PAUL R. LOW†

Corporate Vice President, General
Manager, Technology Products
Division
IBM Corporation (retired)

STEVEN L. MILLER†

Chairman, President and
Chief Executive Officer
Shell Oil Company

MINORU MORIO†

Vice Chairman and Director
Sony Corporation

STAN SHIH*

Chairman and Chief Executive Officer
The Acer Group

*Audit Committee

†Human Resources and Compensation
Committee

CORPORATE MANAGEMENT

JAMES C. MORGAN

Chairman and Chief Executive Officer

DAN MAYDAN

President

JOSEPH R. BRONSON

Executive Vice President, Office of the
President and Chief Financial Officer

SASSON SOMEKH

Executive Vice President, Office of the
President; Chairman, Silicon Business
Executive Committee

DAVID N.K. WANG

Executive Vice President, Office of the
President

TETSUO IWASAKI**

Senior Vice President and Chairman,
Applied Materials Japan Subsidiaries

THOMAS M. ROHRS**

Senior Vice President, Global
Operations

ASHOK K. SINHA**

Senior Vice President, Silicon
Business Products

GINO ADDIEGO

Group Vice President, eBusiness
Solutions

JULIO A. ARANOVICH

Group Vice President, Global Human
Resources

FRANCOIS BERGER

Vice President and General Manager,
Applied Materials Europe

DAVID BERGERON

Vice President, Environmental Health,
Safety, Quality and EPIC Operations

RIVA BRANDMAN

Vice President, Executive Search and
Development

EDWARD J. BROWN, JR.

Group Vice President and General
Manager, Global Intel Business Unit

FUSEN CHEN

Vice President and General Manager,
Copper, PVD and Integrated Systems
and Modules Product Business Group

GEORGE DAVIS

Vice President and Treasurer

DAVID FRIED

Vice President and General Manager,
Customer Productivity Support

CHRIS GRONET

Vice President and General Manager,
Transistor and Capacitor Systems and
Modules Product Business Group

NANCY H. HANDEL

Group Vice President, Deputy Chief
Financial Officer and Corporate
Controller

JOHN HOFFMAN

Vice President and General Manager,
Etch Product Business Group

FRANZ JANKER

Group Vice President, Corporate
Marketing and Business Management

MANFRED KERSCHBAUM

Group Vice President and General
Manager, Applied Materials North
America

ZVI LAPIDOT

Vice President and Chairman,
Factory Productivity Solutions
Product Business Group

KAM LAW

Vice President and General Manager,
Display Business Products (AKT)

YOUNG I. LEE

Group Vice President and General
Manager, Applied Materials Korea

RAY LEUBNER

Vice President, Austin Volume
Manufacturing

FARHAD MOGHADAM

Vice President and General Manager,
Dielectric Systems and Modules
Product Business Group

MASAYUKI MORITA

Group Vice President and General
Manager, Applied Materials Japan

HOWARD NEFF

Group Vice President and General
Manager, Mask Business Products
(Etec Systems)

KHIM HAN NG

Vice President and General Manager,
Applied Materials South East Asia

MICHAEL K. O'FARRELL

Vice President, Community Relations

DARIUSH RAFINEJAD

Vice President and General Manager,
Chemical Mechanical Polishing
Product Business Group

SEIJI SATO

Vice President, Applied Materials
Japan

JOSEPH J. SWEENEY

Group Vice President, Legal Affairs
and Intellectual Property

AVI TEPMAN

Vice President, Silicon Business New
Disruptive Products

DAN VILENSKI

Chairman, Applied Materials Israel

CHIAM WU

Group Vice President and General
Manager, Applied Materials Taiwan

GERALD Z. YIN

Vice President, Low Cost Sourcing
Program

DONALD A. SLICHTER

Corporate Secretary and
Attorney at Law

**Member, Silicon Business Executive
Committee

Board of Directors and
Corporate Management,
as of fiscal year end 2001

CORPORATE HEADQUARTERS

Applied Materials, Inc.
3050 Bowers Avenue
Santa Clara, CA 95054-3298

ADDRESS

CORRESPONDENCE TO:

Applied Materials, Inc.
P.O. Box 58039
Santa Clara, CA 95052-8039
Tel: (408) 727-5555
Fax: (408) 748-9943

WEB SITE:

<http://www.appliedmaterials.com>

**RESEARCH, DEVELOPMENT AND
MANUFACTURING CENTERS**

Hayward, California, U.S.A.
Mountain View, California, U.S.A.
Santa Clara, California, U.S.A.
Portland, Maine, U.S.A.
Hillsboro, Oregon, U.S.A.
Austin, Texas, U.S.A.
Horsham, England
Rehovot, Israel
Narita, Chiba, Japan
Chunan, Korea
Hsinchu, Taiwan, R.O.C.

SALES AND SERVICE OFFICES

FRANCE

Le Coudray-Montceaux, Meylan,
Rousset, Rueil Malmaison

GERMANY

Boeblingen, Dresden, Feldkirchen,
Ismaning, Muenchen

ISRAEL

Kiryat Gat, Rehovot

ITALY

Agrate Brianza, Catania

JAPAN

Aizu, Fukuyama, Haneda, Hiroshima,
Joetsu, Kitakami, Kokubu, Kumamoto,
Kyoto, Nagaoka, Nagasaki, Naka,
Nishiwaki, Oita, Osaka, Saijo, Sendai,
Shonai, Takaoka, Tateyama, Tokyo,
West Tokyo, Yamaguchi, Yokkaichi,
Yokohama

KOREA

Bucheon, Cheongju, Chonan, Chunan,
Icheon, Kihueung, Kumi, Kyunggi-Do,
Seoul, Suwon

MALAYSIA

Kuching, Kulim

PEOPLE'S REPUBLIC OF CHINA

Beijing, Shanghai, Tianjin, Wuxi

REPUBLIC OF SINGAPORE

TAIWAN, REPUBLIC OF CHINA

Hsinchu, Linko, Tainan

THE NETHERLANDS

Badhoevedorp, Nijmegen

UNITED KINGDOM

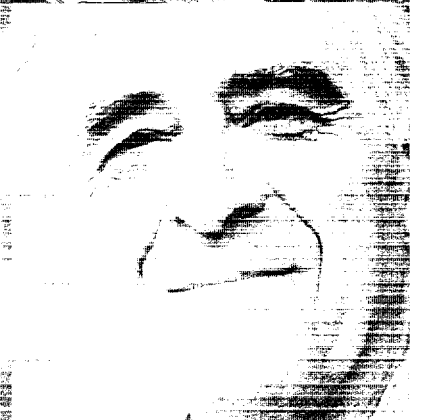
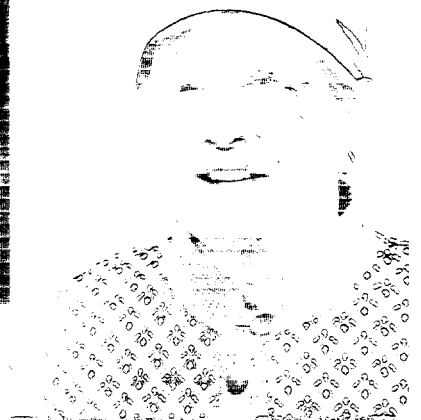
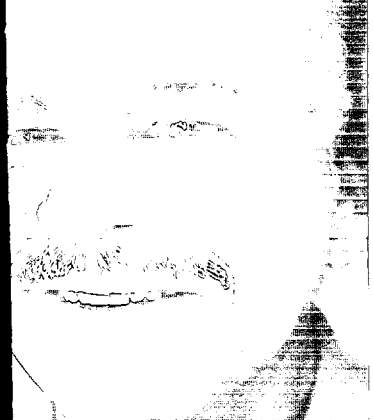
Newcastle, England; Thatcham,
England; Edinburgh, Scotland

UNITED STATES OF AMERICA

Phoenix, AZ; Tempe, AZ; Hayward, CA;
Irvine, CA; Mountain View, CA; Santa
Clara, CA; Colorado Springs, CO;
Orlando, FL; Boise, ID; Hudson, MA;
South Portland, ME; Bloomington, MN;
Rio Rancho, NM; Hopewell Junction,
NY; Eugene, OR; Hillsboro, OR; Lake
Oswego, OR; Allentown, PA; Austin, TX;
Dallas, TX; Irving, TX; Richardson, TX;
San Antonio, TX; Manassas, VA;
Richmond, VA; South Burlington, VT;
Vancouver, WA

Except for historical information, matters discussed in this Annual Report are forward-looking statements based on management's estimates, projections and assumptions as of the date hereof. Applied Materials assumes no obligation to update this information. Forward-looking statements may contain words such as "expects," "anticipates," "believes," "may," "should," "will," "estimates," "forecasts" or similar expressions. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those stated or implied. Risks and uncertainties include, but are not limited to, Applied Materials' ability to quickly and effectively align its cost structure with prevailing market conditions; the length and severity of the current industry downturn; changes in customer capacity requirements and demand for semiconductors, including capacity utilizing the latest technology; global uncertainties; Applied Materials' ability to develop new markets and products in a highly competitive industry characterized by increasingly rapid technological changes; and other risks described in Applied Materials' filings with the Securities and Exchange Commission.

Applied Materials, the Applied Materials Logo, Centura, Endura, Information For Everyone, Mirra, Precision 5000, Producer, Total Solutions and other trademarks so designated or otherwise indicated as product names or services, are trademarks of Applied Materials, Inc. in the U.S. and other countries. All other product and service marks contained herein are the trademarks of their respective owners.





APPLIED MATERIALS®

WWW.APPLIEDMATERIALS.COM

3050 BOWERS AVENUE, SANTA CLARA, CALIFORNIA 95054-3298 (408) 727-5555

PRINTED IN THE U.S.A. © APPLIED MATERIALS, INC. ALL RIGHTS RESERVED 2703001-1/02-700K

PRINTED ON RECYCLED PAPER 