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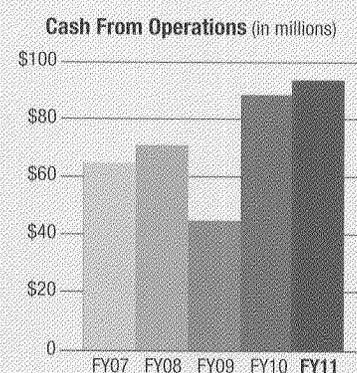
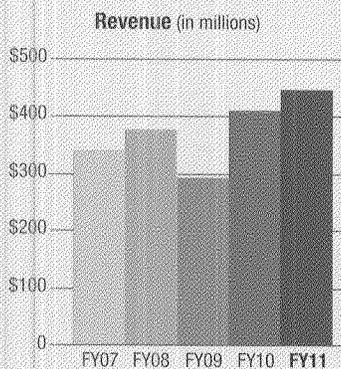
Received at
JAN 25 2012
Washington, DC 20540



OUR COMPANY

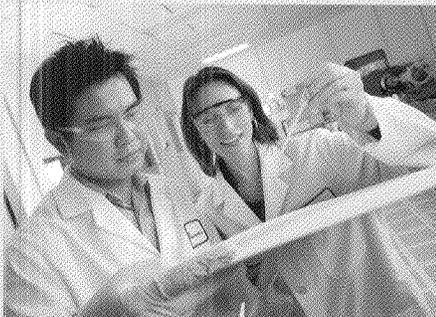
Cabot Microelectronics is the world's leading supplier of chemical mechanical planarization (CMP) slurries and a growing CMP pad supplier to the semiconductor industry. Our CMP consumables products are used to level, smooth and remove excess material from the multiple layers of material that are deposited upon silicon wafers in the production of most semiconductor devices. This enables our customers to manufacture smaller, faster and more complex devices. We also produce slurries for the data storage industry that are used to polish certain hard disk drive components, and we are pursuing a number of other demanding surface modification applications through our Engineered Surface Finishes business.

FINANCIAL HIGHLIGHTS



In millions, except per share and percentage amounts

	FY11	FY10	Change
Revenue	\$445.4	\$408.2	9.1%
Gross profit margin	48.1%	49.9%	(3.6)
Net income	51.7	49.5	4.5
Diluted earnings per share	2.20	2.13	3.3
Total assets	628.2	571.8	9.9
Stockholders' equity	566.4	514.3	10.1
Cash and short-term investments	302.5	254.2	19.0
Cash from operations	93.6	88.4	5.9
After tax return on invested capital	18.8%	18.8%	—





(Left)
William P. Noglows,
Chairman, President & CEO

(Right)
William S. Johnson,
Vice President & CFO

TO OUR STOCKHOLDERS, CUSTOMERS, SUPPLIERS AND EMPLOYEES

We are very pleased to have achieved strong financial performance in 2011 with record revenue of \$445 million, net income of \$51.7 million and earnings per share of \$2.20. These results were on top of the record levels we achieved in fiscal 2010. We also achieved record annual revenue in each of our CMP slurry business areas, Tungsten, Dielectrics, Copper and Data Storage, as well as in our CMP polishing Pads business and our Engineered Surface Finishes business.

Our vision is to be the trusted industry partner to our customers, providing high quality solutions with speed and delivering superior cost of ownership. In order to execute on our primary strategy to strengthen and grow our core CMP consumables business, we must demonstrate our commitment to this vision each and every day. I believe our financial performance in 2011 and the strategic investments we made during the year reflect our commitment to achieving our vision, and to further strengthening our global position.

EXPANDED GLOBAL FOOTPRINT

Cabot Microelectronics' global infrastructure includes sales, manufacturing and technical capabilities across the United States, Europe and the Asia Pacific region to serve our customers around the world. During 2011, we implemented an aggressive capital investment program to significantly expand our existing footprint in the Asia Pacific region to better meet the needs of our customers. Our investments this year included a new research, development and manufacturing facility in South Korea, as well as expansions of our manufacturing capacity in our existing facilities in Japan and Singapore.

Less than a year after breaking ground, we celebrated the grand opening of our new facility in South Korea in August 2011. We believe this investment will enhance our manufacturing and technical capabilities there and help enable more real time collaboration with our key memory customers, similar to investments we made in additional capabilities in Taiwan a number of years ago that enabled us to better serve and grow with our foundry customers. We look forward to leveraging this new facility in South Korea to further strengthen our ability to serve the second largest CMP consumables market in the world.

We expanded our manufacturing capacity in Japan to meet increased demand for our CMP slurry products. Our manufacturing facility in Japan is our largest plant, supplying customers in Japan as well as throughout the Asia Pacific region. In addition, during the year we invested in expanding our slurry manufacturing facility in Singapore to meet higher demand from our Data Storage customers. Our Data Storage business had an outstanding year in fiscal 2011 and this facility expansion prepares us well for future potential growth in this business, which is closely adjacent to our core CMP consumables business for semiconductor applications.

INNOVATED AND COMMERCIALIZED NEW PRODUCTS

As the semiconductor industry continues to evolve and advance to smaller technology nodes, customers require greater customization of CMP solutions, and our ability to collaborate with our customers with speed becomes increasingly critical. As the industry leader in CMP slurries and the second largest supplier of CMP pads, one of our

highest priorities is to develop reliable and innovative solutions, while partnering with our customers. In fiscal 2011 we invested \$58 million in research and development activities. We are proud that we developed and commercialized new, high quality products in all of our business areas during fiscal 2011 to address traditional CMP applications as well as new and emerging areas. We believe our product portfolio is rich and robust, serving virtually all applications and technology nodes.

During the year, we launched a number of leading edge products that are designed to provide our customers with high quality solutions while delivering superior cost of ownership. We introduced products to enable our customers' advanced process integration schemes and provide higher throughput and enhanced defectivity performance, while optimizing removal rates. We also collaborated with customers on several joint development projects for future slurry applications for 22 nanometer technology and beyond.

In response to the needs of our pad customers, we introduced new pad products from our existing Epic[®] D100 product platform to improve pad life and defectivity performance, and we developed a next generation Epic D200 pad platform, which is tunable to meet a variety of specific customers' needs. We have approximately 50 specific pad business opportunities around the world in various stages of evaluation and qualification across our Epic D100 and D200 offerings.

We also have leveraged investments in technology and infrastructure related to our core CMP consumables businesses to expand into adjacent markets. During the year, we made progress in commercializing new slurries for polishing silicon wafers and continued to develop optics polishing and metrology systems in our Engineered Surface Finishes (ESF) business.

PATH FORWARD

I am pleased with the strategic investments we made during the year to expand our global footprint and develop innovative products for our customers. I look forward to the years ahead, in which we intend to capitalize on these strategic investments and further strengthen our global position. I am confident

that these investments will serve us well as we continue to collaborate with our customers around the world to provide high value solutions to meet their evolving business needs.

Over the years, our strong financial model has demonstrated solid revenue growth, a consistent level of profitability, and strong, consistent free cash flow. In turn, this has enabled us to invest in the organic growth of our business, complete several acquisitions, and purchase a significant amount of our stock. Even as we have pursued these growth and investment strategies, we have accumulated a sizeable cash balance over time to slightly over \$300 million at the end of fiscal 2011.

In light of this, and with confidence in the future success of our company, we announced a new capital management initiative in December 2011. This initiative includes a planned leveraged recapitalization of the company with a proposed special cash dividend of \$15 per share, or approximately \$345 million in total, as well as an increase in our existing share repurchase program to \$150 million.

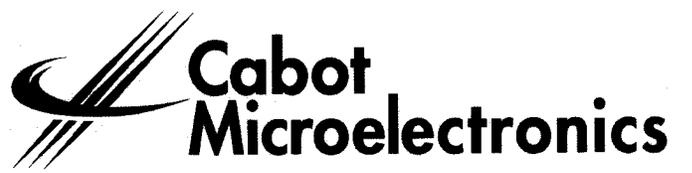
While this new capital management initiative represents a significant change in our capital allocation strategy compared to our historical practices, our growth and investment strategies remain unchanged. We will continue to invest in our business and pursue organic growth opportunities, as well as consider attractive acquisition opportunities that can profitably grow our company. In addition, we will balance these investments in our business with consideration of future opportunities to provide value to shareholders on an ongoing basis.

I would like to thank our stockholders, customers, suppliers and employees for your continued support and confidence in our company. We believe our strategic investments coupled with our efforts toward achieving our vision and our new capital management initiative, will translate into long-term profitable growth and value for our company.

Sincerely,



WILLIAM P. NOGLOWS



Form 10-K

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2011

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 000-30205

CABOT MICROELECTRONICS CORPORATION

(Exact name of registrant as specified in its charter)

DELAWARE

(State of Incorporation)

36-4324765

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

**870 NORTH COMMONS DRIVE
AURORA, ILLINOIS**

(Address of principal executive offices)

60504

(Zip Code)

Registrant's telephone number, including area code: **(630) 375-6631**

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

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
Common Stock, \$0.001 par value	The NASDAQ Stock Market LLC

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.
Yes No

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 whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). 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 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 a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of the registrant's Common Stock held beneficially or of record by stockholders who are not affiliates of the registrant, based upon the closing price of the Common Stock on March 31, 2011, as reported by the NASDAQ Global Select Market, was approximately \$1,203,000. For the purposes hereof, "affiliates" include all executive officers and directors of the registrant.

As of October 31, 2011, the Company had 22,937,476 shares of Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the Annual Meeting of Stockholders to be held on March 6, 2012, are incorporated by reference in Part III of this Form 10-K to the extent stated herein.

This Form 10-K includes statements that constitute "forward-looking statements" within the meaning of federal securities regulations. For more detail regarding "forward-looking statements" see Item 7 of Part II of this Form 10-K.

CABOT MICROELECTRONICS CORPORATION

FORM 10-K

For the Fiscal Year Ended September 30, 2011

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PART I

Item 1. Business

Our Company

Cabot Microelectronics Corporation (“Cabot Microelectronics”, “the Company”, “us”, “we”, or “our”), which was incorporated in the state of Delaware in 1999, is the leading supplier of high-performance polishing slurries and a growing CMP pad supplier used in the manufacture of advanced integrated circuit (IC) devices within the semiconductor industry, in a process called chemical mechanical planarization (CMP). CMP is a polishing process used by IC device manufacturers to planarize or flatten many of the multiple layers of material that are deposited upon silicon wafers in the production of advanced ICs. Our products play a critical role in the production of advanced IC devices, thereby enabling our customers to produce smaller, faster and more complex IC devices with fewer defects.

We currently operate predominantly in one industry segment—the development, manufacture and sale of CMP consumable products. We develop, produce and sell CMP slurries for polishing many of the conducting and insulating materials used in IC devices, and also for polishing the disk substrates and magnetic heads used in hard disk drives. We also develop, manufacture and sell CMP polishing pads, which are used in conjunction with slurries in the CMP process. We also pursue other demanding surface modification applications through our Engineered Surface Finishes (ESF) business where we believe we can leverage our expertise in CMP consumables for the semiconductor industry to develop products for demanding surface applications in other industries.

CMP Process Within IC Device Manufacturing

IC devices, or “chips”, are components in a wide range of electronic systems for computing, communications, manufacturing and transportation. Individual consumers most frequently encounter IC devices as microprocessors in their desktop or laptop computers and as memory chips in computers, tablets, smart phones, cell phones and digital cameras. The multi-step manufacturing process for IC devices typically begins with a circular wafer of pure silicon, with the first manufacturing step referred to as a “wafer start”. A large number of identical IC devices, or dies, are manufactured on each wafer at the same time. The initial steps in the manufacturing process build transistors and other electronic components on the silicon wafer. These are isolated from each other using a layer of insulating material, most often silicon dioxide, to prevent electrical signals from bridging from one transistor to another. These components are then wired together using conducting materials such as aluminum

or copper in a particular sequence to produce a functional IC device with specific characteristics. When the conducting wiring on one layer of the IC device is completed, another layer of insulating material is added. The process of alternating insulating and conducting layers is repeated until the desired wiring within the IC device is achieved. At the end of the process, the wafer is cut into the individual dies, which are then packaged to form individual chips.

Demand for CMP consumable products, including slurries and pads, for IC devices is primarily based on the number of wafer starts by semiconductor manufacturers and the type and complexity of the IC devices they produce. To enhance the performance of IC devices, IC device manufacturers have progressively increased the number and density of electronic components and wiring layers in each IC device. This is typically done in conjunction with shrinking the key dimensions on an IC device from one technology generation, or “node”, to another. As a result, the number of transistors, wires and the number of discrete wiring layers have increased, increasing the complexity of the IC device and the related demand for CMP consumable products to polish those devices. As semiconductor technology has advanced and performance requirements of IC devices have increased, the percentage of IC devices that utilize CMP in the manufacturing process has increased steadily over time. We believe that CMP is used in the majority of all IC devices made today, and we expect that the use of CMP will continue to increase in the future.

In the CMP polishing process, CMP consumables are used to remove excess material that is deposited during the IC manufacturing process, and to level and smooth the surfaces of the layers of IC devices, via a combination of chemical reactions and mechanical abrasion, leaving minimal residue and defects on the surface, and leaving only the material necessary for circuit integrity. CMP slurries are liquid solutions generally composed of high-purity deionized water and a proprietary mix of chemical additives and engineered abrasives that chemically and mechanically interact at an atomic level with the surface material of the IC device. CMP pads are engineered polymeric materials designed to distribute and transport the slurry to the surface of the wafer and distribute it evenly across the wafer. Grooves are cut into the surface of the pad to facilitate distribution of the slurry. The CMP process is performed on a CMP polishing tool. During the CMP process, the wafer is held on a rotating carrier, which is pressed down against a CMP pad. The CMP pad is attached to a rotating polishing table that spins in a circular motion. A CMP slurry is continuously applied to the polishing pad to facilitate and enhance the polishing process. Hard disk drive and silicon wafer manufacturers use similar processes to smooth the surface of substrate disks before depositing magnetic media onto the disk.

An effective CMP process is achieved through technical optimization of the CMP consumables in conjunction with an appropriately designed CMP process. Prior to introducing new or different CMP slurries or pads into its manufacturing process, an IC device manufacturer generally requires the product to be qualified in its processes through an extensive series of tests and evaluations. These qualifications are intended to ensure that the CMP consumable product will function properly within the customers' overall manufacturing process. These tests and evaluations may require minor changes to the CMP process or the CMP slurry or pad. While this qualification process varies depending on numerous factors, it is generally quite costly and may take six months or longer to complete. IC device manufacturers usually take into account the cost, time required and impact on production when they consider implementing or switching to a new CMP slurry or pad.

CMP enables IC device manufacturers to produce smaller, faster and more complex IC devices with a greater density of transistors and other electronic components than is possible without CMP. By enabling IC device manufacturers to make smaller IC devices, CMP also allows them to increase the number of IC devices that fit on a wafer. This increase in the number of IC devices per wafer in turn increases the throughput, or the number of IC devices that can be manufactured in a given time period, and thereby reduces the cost per device. CMP also helps reduce the number of defective or substandard IC devices produced, which increases the device yield. Improvements in throughput and yield reduce an IC device manufacturer's unit production costs, and reducing costs is one of the highest priorities of a semiconductor manufacturer as the return on its significant investment in manufacturing capacity can be enhanced by lower unit costs. More broadly, sustained growth in the semiconductor industry traditionally has been fueled by enhanced performance and lower unit costs, making IC devices more affordable in an expanding range of applications.

Precision Polishing

Through our ESF business, we are applying our technical expertise in CMP consumables and polishing techniques developed for the semiconductor industry to demanding applications in other industries where shaping, enabling and enhancing the performance of surfaces is critical to success, such as for precision optics and electronic substrates, including silicon and silicon-carbide wafers.

Many of the production processes currently used in precision machining and polishing have been based on traditional, labor-intensive techniques, which are being replaced by computer-controlled, deterministic processes. Our wholly-owned subsidiary, QED Technologies International, Inc. (QED), is a leading provider of deterministic finishing technology for the precision optics industry. We believe precision optics are pervasive,

serving several existing large markets such as semiconductor equipment, aerospace, defense, security, biomedical and consumer imaging.

Our Products

CMP Consumables for IC Devices

We develop, produce and sell CMP slurries for polishing a wide range of materials that conduct electrical signals, including tungsten, copper, tantalum (commonly referred to as "barrier" which is used in copper wiring applications) and aluminum. Slurries for polishing tungsten are used heavily in the production of advanced memory devices for a multitude of end applications such as computers, tablets, MP3 players, cellphones, gaming devices, digital photography and digital video recorders, as well as in mature logic applications such as those used in automobiles. Our most advanced slurries for tungsten polishing are designed to be customized to provide customers greater flexibility, improved performance and a reduced cost of ownership. Our slurries for polishing copper and barrier materials are used in the production of advanced IC logic devices such as microprocessors for computers, and devices for graphic systems, gaming systems and communication devices, as well as in the production of advanced memory devices. These products include different slurries for polishing the copper film and the thin barrier layer used to separate copper from the adjacent insulating material. Slurries for polishing aluminum are relatively new in the CMP consumables market and are used in the most advanced transistor designs currently in production. We offer multiple products for each technology node to enable different integration schemes depending on specific customer needs.

We also develop, manufacture and sell slurry products used to polish the dielectric insulating materials that separate conductive layers within logic and memory IC devices. Our core slurry products for these materials are primarily used for high volume applications called Interlayer Dielectric or ILD. Our advanced dielectrics products are designed to meet the more stringent and complex performance requirements of lower-volume, more specialized dielectric polishing applications, such as pre-metal dielectric (PMD) and shallow trench isolation (STI), at advanced technology nodes.

We develop, produce and sell CMP polishing pads, which are consumable materials that work in conjunction with CMP slurries in the CMP polishing process. We believe that CMP polishing pads represent a natural adjacency to our CMP slurry business, since the technologies are closely related and utilize the same technical, sales and support infrastructure. We believe our unique pad material and our continuous pad manufacturing process enable us to produce a pad with a longer pad life, greater consistency from pad to pad, and enhanced

performance, resulting in lower cost of ownership for our customers. We are producing and selling pads that can be used on a variety of polishing tools, over a range of applications including tungsten, copper and dielectrics, over a range of technology nodes, and on both 200mm and 300mm wafers. Our pad product offerings include our EPIC D100 series of pads and our next generation D200 series.

CMP Consumables for the Data Storage Industry

We develop and produce CMP slurries for polishing certain materials that are used in the production of rigid disks and magnetic heads used in hard disk drives for computer and other data storage applications, which represent an extension of our core CMP slurry technology and manufacturing capabilities established for the semiconductor industry. We believe CMP significantly improves the surface finish of these rigid disk coatings, resulting in greater storage capacity of the hard disk drive systems, and also improves the production efficiency of manufacturers of hard disk drives by helping increase their throughput and yield. We expanded our manufacturing capacity for data storage applications in fiscal 2011 to accommodate the growth we have experienced in this area of our business.

Precision Optics Products

Through our QED subsidiary, we design and produce precision polishing and metrology systems for advanced optic applications that allow customers to attain near-perfect shape and surface finish on a range of optical components such as mirrors, lenses and prisms. Historically, advanced optics have been produced using labor-intensive artisanal processes, and variability has been common. QED has automated the polishing process for advanced optics to enable rapid, deterministic and repeatable surface correction to the most demanding levels of precision in dramatically less time than with traditional means. QED's polishing systems use Magneto-Rheological Finishing (MRF), a proprietary surface figuring and finishing technology, which employs magnetic fluids and sophisticated computer technology to polish a variety of shapes and materials. QED's metrology systems use Subaperture Stitching Interferometry (SSI) technology that captures precise metrology data for large and/or strongly curved optical parts and Aspheric Stitching Interferometry (ASI) technology, which is designed to measure increasingly complex shapes, including non-spherical surfaces, or aspheres.

Strategy

We collaborate closely with our customers to develop and manufacture products that offer innovative and reliable solutions to our customers' challenges and we strive to consistently and reliably deliver and support these products around the world through what we believe is a robust global infrastructure and supply chain. We

continue to focus on the execution of our primary strategy of strengthening and growing our core CMP consumables business within the semiconductor and hard disk drive industries. We are also leveraging our expertise in CMP process and slurry formulation to expand our ESF business in the optics and electronic substrates markets.

Strengthening and Growing Our Core CMP Consumables Business

We intend to grow our core CMP consumables business by leveraging the capabilities and global infrastructure we have developed as the leader in the CMP slurry industry. We dedicate significant time and resources to new product innovation, and we work closely with our customers to deliver reliable solutions on a global scale that are designed to provide superior quality and lower overall cost of ownership. We believe our strong financial position allows us to fund growth opportunities in our core CMP consumables business through internally developed technologies as well as through potential acquisitions of technologies and businesses such as our acquisition of Epoch Material Co., Ltd. (Epoch), a Taiwan-based CMP consumable provider, in fiscal 2009.

Developing Innovative Solutions: We believe that technology and innovation are vital to success in our CMP consumables business and we devote significant resources to research and development. We need to stay ahead of the rapid technological advances in the electronics industry in order to deliver a broad line of CMP consumables products that meet or exceed our customers' evolving needs. We have established research and development facilities in the United States, Japan, Taiwan, Singapore, and most recently in South Korea, in order to meet our customers' technology needs on a global basis.

In fiscal 2011, we launched a number of new products within our existing slurry and polishing pad businesses that cross multiple applications over a range of technology nodes and we have also expanded our offerings within new and emerging technology areas. Several of our newest product offerings are discussed below:

- We have expanded our solutions within our tungsten slurry business due to the increasing importance of a "buff" step to address more stringent customer performance and selectivity requirements. A buff step is a short polishing step for minimal material removal that complements our existing tungsten slurries for bulk removal applications.
- We have introduced new products for Through Silicon Via (TSV) polishing. TSV is a new advancement in chip design where multiple layers of stacked IC devices are connected into three dimensional chips. This enables semiconductor manufacturers to add speed and performance to IC devices without having to reduce the critical dimensions of the chip.

- We have commercialized CMP solutions for emerging applications such as for High K Metal Gates, which utilize aluminum CMP.
- We have developed post CMP cleaning solutions, referred to as the Epoch Clean series, which are designed to deliver optimal post CMP wafer surface properties for more advanced applications.

Close Collaboration With Our Customers: We believe that building close relationships with our customers is key to achieving long-term success in our business. We collaborate with our customers on joint projects to identify and develop new and better CMP solutions, to integrate our products into their manufacturing processes, and to assist them with supply, warehousing and inventory management. Our customers demand a highly reliable supply source, and we believe we have a competitive advantage because of our ability to timely deliver high-quality products and service from the early stages of product development through the high-volume commercial use of our products. We strategically locate our research facilities and clean rooms, manufacturing operations and the related technical and customer support teams to be responsive to our customers' needs. We believe our extensive research and development facilities, in close proximity to our customers, provide a competitive advantage.

In fiscal 2011, we expanded our facilities at several locations in the Asia Pacific region to further enhance our customer relationships. We completed construction of a new 56,000 square foot research, development and manufacturing facility in Oseong, South Korea. We believe this facility will enhance our ability to support our customers as South Korea is home to some of the largest manufacturers of memory devices in the world. We have also expanded manufacturing capacity in Japan and Singapore to support continued growth in customer demand and to respond more quickly to our customers' needs in the Asia Pacific region.

Robust Global Supply Chain: We believe that product and supply chain quality is critical to success in our business. Our customers demand continuous improvement in the performance of our products in terms of product quality and consistency. We strive to drive out variation in our products and processes in order to increase quality, productivity and efficiency, and improve the uniformity and consistency of performance of our CMP consumable products. Our global manufacturing sites are managed to ensure we have the people, training and systems needed to support the unique industry demands for product quality. To support our quality initiative, we practice the concepts of Six Sigma across our Company. Six Sigma is a systematic, data-driven approach and methodology for improving quality by reducing variability. We believe our Six Sigma initiatives have contributed to significant, sustained improvement in productivity in

our operations. We also believe the key supplier award we received in fiscal 2011 from Intel is evidence of our commitment to providing our customers with high quality solutions.

We also believe that the depth and breadth of our global supply chain are critical to our success and the success of our customers. We believe our global supply chain differentiates us from our competitors. We now have five slurry manufacturing plants worldwide and a global network of suppliers, which we believe positions us well to mitigate supply interruptions when unexpected events occur. The major earthquake and resulting tsunami in Japan in March 2011 was a prime example of such unexpected events, in which our global supply chain capabilities enabled us to proactively address the needs of our customers and suppliers to assist them through that difficult time. We believe that our ability to address our customers' concerns with openness and speed reflects the strength of our customer relationships and their trust in us as a global supplier and business partner.

Leveraging Our Expertise into New Markets— Engineered Surface Finishes Business

In addition to strengthening and growing our core CMP business, we continue to pursue development of our ESF business. We believe we can leverage our expertise in CMP consumables for the semiconductor industry to develop products for demanding polishing applications in other industries that are synergistic to our CMP consumables business. Our primary focus, in this regard, is on opportunities in precision optics and electronic substrates.

Our QED subsidiary continues to be the technology leader in deterministic finishing for the precision optics industry. QED's polishing and metrology technology enables customers to replace manual processes with automated solutions that provide more precise and repeatable results. Another focus of our ESF business is the polishing of electronic substrates, including silicon and silicon-carbide wafers. A key step in the production of these wafers is CMP, which is utilized to ensure the wafers meet the stringent specifications required by IC manufacturers.

Industry Trends

Semiconductor Industry

We believe the semiconductor industry continues to demonstrate several clear trends: the semiconductor business is defined by cyclical growth; there is constant pressure to reduce costs while advancing technology; and, the customer base continued to consolidate.

The cyclical nature of the semiconductor industry is closely tied to the global economy as well as to supply and demand within the industry. The semiconductor

industry growth that we saw during fiscal 2010 continued through fiscal 2011, although at a slower pace. We began to see some softening of demand within the industry during the second half of fiscal 2011 that we attribute to general uncertainty in the global economy and a modest correction of IC device inventory. Overall industry growth in fiscal 2011 positively affected demand for our products as evidenced by the 7.4% growth in our fiscal 2011 revenue from CMP consumables products compared to fiscal 2010. We believe that semiconductor industry demand will grow over the long term based on increased usage of IC devices in existing applications, as well as an expanding range of new uses of these devices. This trend of increased usage of IC devices is most evident in the area of mobile connectivity, including devices such as smart-phones and tablets. However, at present, there is uncertainty regarding macro-economic factors and the outlook for the global economy. Therefore, we believe the near-term outlook for the semiconductor industry is also uncertain. We believe that our Company is well positioned to operate successfully over a range of demand environments as we have successfully navigated our business through industry and macroeconomic cycles in the past.

As the demand for more advanced and lower cost electronic devices grows, there is continued pressure on IC device manufacturers to reduce their costs. Many manufacturers reduce costs by pursuing ever-increasing scale in their operations. In addition, manufacturers seek ways to increase their production yield while reducing their production costs regardless of the number of units they produce. They look for CMP consumables products with quality and performance attributes that can reduce their overall cost of ownership, pursue ways to use less CMP materials, and also aggressively pursue price reductions on the materials they buy. The pressure on manufacturers to reduce costs has led a number of integrated device manufacturers to increase their use of foundries where they can outsource some or all of their manufacturing to reduce their fixed costs. This approach also leads to increasing scale and lower costs for these foundries.

The number of companies that manufacture semiconductor devices continues to decline both through mergers and acquisitions as well as through alliances among different companies. Smaller manufacturers may not have the technology or resources necessary to compete with the larger manufacturers on a global basis as needed in the market today. In fiscal 2011, we saw evidence of this in the memory segment of the industry. For example, prices of DRAM chips declined significantly during the second half of 2011 causing some of the smaller manufacturers to reduce their production since they do not appear to be able to operate profitably at prevailing market prices. Some larger manufacturers have increased their production, and their market share,

as they are able to produce at lower costs, yet still operate profitably. Additionally, several of our customers have formed consortia and research and development alliances to better manage the high cost of their development activities, thus reducing the number of design centers we serve.

CMP Consumables Industry

Demand for CMP consumables is primarily driven by wafer starts, so the CMP consumables industry reflects the cyclicality of the semiconductor industry as well as changes in global economic conditions. Our revenue and net income for fiscal years 2010 and 2011 clearly demonstrated these effects, improving dramatically from fiscal 2009 as wafer starts grew following the severe downturn associated with the global economic recession of 2009. Growth in wafer starts in fiscal 2011 was more modest than in fiscal 2010, and macroeconomic uncertainty clouds the near-term outlook for the semiconductor industry. Over the long term, we anticipate the worldwide market for CMP consumables used by IC device manufacturers will grow as a result of expected long-term growth in wafer starts, growth in the percentage of IC devices produced that require CMP, an increase in the number of CMP polishing steps required to produce these devices and the introduction of new materials in the manufacture of semiconductor devices that will require CMP.

We expect the anticipated long-term growth in demand will be somewhat mitigated by continued increase in efficiency in CMP consumable usage as customers seek to reduce their costs. Semiconductor manufacturers look for ways to lower the cost of CMP consumables in their production operations, including improvements in technology, diluting slurry or reducing the slurry flow rate during production to reduce the total amount of slurry used, and extending the polishing time before replacing pads.

As semiconductor technology continues to advance, we believe that CMP technical solutions are becoming more complex, and leading-edge technologies generally require greater customization by customer, tool set and process integration approach. Leading-edge device designs are introducing more materials and processes into next generation chips, and these new materials and processes must be considered in developing CMP solutions. As a result, we generally see customers selecting suppliers earlier in their development processes and maintaining preferred supplier relationships through production. Therefore, we believe that close collaboration with our customers offers the best opportunity for optimal CMP solutions. We also believe that research and development programs continue to be vital to our success as we develop and commercialize innovative, high-performing and more cost-effective CMP solutions.

Competition

We compete in the CMP consumables industry, which is characterized by rapid advances in technology and demanding product quality and consistency requirements. We face competition from other CMP consumables suppliers, and we also may face competition in the future from significant changes in technology or emerging technologies. However, we believe we are well positioned to continue our leadership in CMP slurries, and to continue to grow our CMP pad business. We believe we have the experience, scale, capabilities and infrastructure that are required for success, and we work closely with the largest customers in the semiconductor industry to meet their growing expectations as a trusted business partner.

Our CMP slurry competitors range from small companies that compete with a single product and/or in a single geographic region to divisions of global companies with multiple lines of CMP products for IC manufacturers. However, we believe we have more CMP slurry business than any other provider. In our view, we are the only CMP slurry supplier today that serves a broad range of customers by offering and supporting a full line of CMP slurry solutions for all major applications over a range of technologies, and that has a proven track record of supplying these products globally in high volumes with the attendant required high level of technical support services.

With respect to CMP polishing pads, a division of Dow Chemical has held the dominant market position for a number of years. We believe we are the second largest supplier of polishing pads in the world. A number of other companies are attempting to enter this market, providing potentially viable product alternatives. We believe our pad materials and our continuous pad manufacturing process have enabled us to produce a pad with a longer pad life, lower defectivity and greater consistency for our customers than traditional offerings, thus reducing their total pad cost. We believe this has fueled significant growth in sales of our pad products in recent years.

Our QED subsidiary operates in the precision optics industry. There are few direct competitors of QED because its technology is relatively new and unique. We believe QED's technology provides a competitive advantage to customers in the precision optics industry, which still relies heavily on traditional artisanal methods of fabrication.

Customers, Sales and Marketing

Within the semiconductor industry, our customers are primarily producers of logic IC devices, producers of memory IC devices and IC foundries. Logic customers often outsource some or all of the production of their devices to foundries, which provide contract manufacturing services, in order to avoid the high cost of process

development, constructing and operating a fab, or to provide additional capacity when needed.

Based upon our own observations and customer survey results, we believe the following factors are the primary influences of our customers' CMP buying decisions: overall cost of ownership, which represents the cost to purchase, use and maintain a product; product quality and consistency; product performance and its impact on a customer's overall yield; engineering support; and delivery/supply assurance. We believe that greater customer sophistication in the CMP process, more demanding integration schemes, additional and unique polishing materials and cost pressures will add further demands on CMP consumable suppliers like us. When these factors are combined with our customers' desires to gain purchasing leverage and lower their cost of ownership, we believe that only the most reliable, innovative, cost effective, service-driven CMP consumables suppliers will thrive.

We use a highly collaborative approach to build close relationships with our customers in a variety of areas, and we have customer-focused teams located in each major geographic region of sales. Our sales process begins long before the actual sale of our products and occurs on a number of levels. Due to the long lead times from research and development to product commercialization and sales, we have research teams that collaborate with customers on emerging applications years before the products are required by the market. We also have development teams that interact closely with our customers, using our research and development facilities and capabilities to design CMP products tailored to their precise needs. Next, our applications engineers work with customers to integrate our products into their manufacturing processes. Finally, as part of our sales process, our logistics and sales personnel provide supply, warehousing and inventory management for our customers.

We market our products primarily through direct sales to our customers, although we use distributors in select areas. We believe this strategy provides us an additional means to collaborate with our customers.

Our QED subsidiary supports customers in the semiconductor equipment, aerospace, defense, security, research, biomedical and consumer imaging markets. QED counts among its worldwide customers leading precision optics manufacturers, major semiconductor original equipment manufacturers, research institutions, and the United States government and its contractors.

In fiscal 2011, our five largest customers accounted for approximately 47% of our revenue, with TSMC and Samsung accounting for approximately 17% and 10% of our revenue, respectively. For additional information on concentration of customers, refer to Note 2 of "Notes to

the Consolidated Financial Statements" included in Item 8 of Part II of this Form 10-K.

Research, Development and Technical Support

We believe that technology is vital to success in our CMP and ESF businesses, and we plan to continue to devote significant resources to research, development and technical support (R&D), and balance our efforts between the shorter-term market needs and the longer-term investments required of us as a technology leader. We develop and formulate new and enhanced CMP solutions tailored to our customers' requirements. We work closely with our customers at their facilities to identify their specific technology and manufacturing challenges and to translate these challenges into viable CMP process solutions.

Our technology efforts are currently focused on five main areas that span the early conceptual stage of product development involving new materials, processes and designs several years in advance of commercialization, through to continuous improvement of already commercialized products in daily use in our customers' manufacturing facilities. These five areas are:

- Research related to fundamental CMP technology;
- Development and formulation of new and enhanced CMP consumables products, including collaborating on joint development projects with our customers;
- Process development to support rapid and effective commercialization of new products;
- Technical support of our CMP products in our customers' manufacturing facilities, including the application of Six Sigma as a tool to reduce variation and drive process improvements; and
- Evaluation and development of new polishing and metrology applications outside of the semiconductor industry.

Our research in CMP slurries and pads addresses a breadth of complex and interrelated performance criteria that relate to the functional performance of the chip, our customers' manufacturing yields, and their overall cost of ownership. We design slurries and pads that are capable of polishing one or more materials of differing hardness, sometimes at the same time, that make up the semiconductor circuitry. Additionally, our products must achieve the desired surface conditions at high polishing rates, high processing yields and low consumables costs in order to provide acceptable system economics for our customers. As dimensions become smaller and as materials and designs increase in complexity, these challenges require significant investments in R&D.

We also commit internal R&D resources to our ESF business. We believe that application areas we are currently developing, such as precision optics and electronic

substrates, represent natural adjacencies to our core CMP business and technology. Products under development include products used to polish silicon and silicon-carbide wafers to improve the surface quality of these wafers and reduce the customers' total cost of ownership.

We believe that a competitive advantage can be gained through technology, and that our investments in R&D provide us with polishing and metrology capabilities that support the most advanced and challenging customer technology requirements on a global basis. In fiscal 2011, 2010 and 2009, we incurred approximately \$58.0 million, \$51.8 million and \$48.2 million, respectively, in R&D expenses. We believe our Six Sigma initiatives in our R&D efforts allow us to conduct more research at a lower cost. Investments in property, plant and equipment to support our R&D efforts are capitalized and depreciated over their useful lives.

Our global R&D team includes experts from the semiconductor industry and scientists from key disciplines required for the development of high-performance CMP consumable products. We operate an R&D facility in Aurora, Illinois, that features a Class 1 clean room and advanced equipment for product development, including 300mm polishing and metrology capabilities; a technology center in Japan, which includes a Class 1 clean room with 300mm polishing, metrology and slurry development capability; an R&D facility in Taiwan within our Epoch subsidiary that includes a clean room with 200mm polishing capability; a new R&D facility in South Korea that was opened in August 2011; an R&D laboratory in Singapore that provides slurry formulation capability for the data storage industry; and a research facility in Rochester, New York to support our QED business. All of these facilities underscore our commitment both to continuing to invest in our technology infrastructure to maintain our technology leadership, and to becoming even more responsive to the needs of our customers.

Raw Materials Supply

Metal oxides, such as silica and alumina, are significant raw materials we use in many of our CMP slurries. In the interest of supply assurance, our strategy is to secure multiple sources of raw materials and qualify and monitor those sources as necessary to ensure our supply of raw materials remains uninterrupted. Also, we have entered into multi-year supply agreements with a number of suppliers for the purchase of raw materials in the interest of supply assurance and to control costs. For additional information regarding these agreements, refer to "Tabular Disclosure of Contractual Obligations", included in "Management's Discussion and Analysis of Financial Condition and Results of Operations", in Item 7 of Part II of this Form 10-K.

Intellectual Property

Our intellectual property is important to our success and ability to compete. As of October 31, 2011, we had 210 active U.S. patents and 78 pending U.S. patent applications. In most cases we file counterpart foreign patent applications. Many of these patents are important to our continued development of new and innovative products for CMP and related processes, as well as for new businesses. Our patents have a range of duration and we do not expect to lose any material patent through expiration in the next four years. We attempt to protect our intellectual property rights through a combination of patent, trademark, copyright and trade secret laws, as well as employee and third-party nondisclosure and assignment agreements. We vigorously and proactively pursue parties that attempt to compromise our investments in research and development by infringing our intellectual property. For example, from 2007 to 2011, we were involved in a legal action against DuPont Air Products NanoMaterials LLC (DA Nano), a competitor of ours, regarding whether certain specific formulations of slurry products used for tungsten CMP infringe certain CMP slurry patents that we own, and the validity of those and other of our patents. All of our patents at issue in the case were found valid, but the specific products at issue were found to not infringe the asserted claims of these patents. With respect to the same patents, we have been successful before the United States International Trade Commission in prohibiting the importation and sale within the United States of infringing products by another competitor.

Most of our intellectual property has been developed internally, but we also may acquire intellectual property from others to enhance our intellectual property portfolio. These enhancements may be via licenses or assignments or we may acquire certain proprietary technology and intellectual property when we make acquisitions, such as through our acquisitions of Epoch, QED and Surface Finishes Co. We believe these technology rights continue to enhance our competitive advantage by providing us with future product development opportunities and expanding our already substantial intellectual property portfolio.

Environmental Matters

Our facilities are subject to various environmental laws and regulations, including those relating to air emissions, wastewater discharges, the handling and disposal of solid and hazardous wastes, and occupational safety and health. We believe that our facilities are in substantial compliance with applicable environmental laws and regulations. By utilizing Six Sigma in our environmental management system process, we believe we have improved operating efficiencies while protecting the environment. Our operations in the United States, Japan, Singapore, Europe and Taiwan are ISO 14001 certified,

which requires that we implement and operate according to various procedures that demonstrate our dedication to waste reduction, energy conservation and other environmental concerns. We are committed to maintaining these certifications and are actively pursuing ISO 18001 Safety and Health certification for our existing operations over the next two years. We will also obtain additional certifications, as applicable, in the areas in which we do business. We have incurred, and will continue to incur, capital and operating expenditures and other costs in complying with these laws and regulations in both the United States and abroad. However, we currently do not anticipate that the future costs of environmental compliance will have a material adverse effect on our business, financial condition or results of operations.

Employees

We believe we have a world-class team of employees who make our Company successful. As of October 31, 2011, we employed 1,025 individuals, including 558 in operations, 242 in research and development and technical, 101 in sales and marketing and 124 in administration. None of our employees are covered by collective bargaining agreements. We have not experienced any work stoppages and in general consider our relations with our employees to be good.

Financial Information About Geographic Areas

We sell our products worldwide. Our geographic coverage allows us to utilize our business and technical expertise from a worldwide workforce, provides stability to our operations and revenue streams to offset geography-specific economic trends, and offers us an opportunity to take advantage of new markets for products.

For more financial information about geographic areas, see Note 19 of "Notes to the Consolidated Financial Statements" included in Item 8 of Part II of this Form 10-K.

Available Information

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, definitive proxy statements on Form 14A, current reports on Form 8-K, and any amendments to those reports are made available free of charge on our Company website, www.cabotcmp.com, as soon as reasonably practicable after such reports are filed with the Securities and Exchange Commission (SEC). Statements of changes in beneficial ownership of our securities on Form 4 by our executive officers and directors are made available on our Company website by the end of the business day following the submission to the SEC of such filings. In addition, the SEC's website (<http://www.sec.gov>) contains reports, proxy statements, and other information that we file electronically with the SEC.

Item 1A. Risk Factors

We do not believe there have been any material changes in our risk factors since the filing of our Annual Report on Form 10-K for the fiscal year ended September 30, 2010. However, we may update our risk factors in our SEC filings from time to time for clarification purposes or to include additional information, at management's discretion, even when there have been no material changes.

Risks Relating to Our Business

Demand for Our Products Fluctuates and Our Business May Be Adversely Affected by Worldwide Economic and Industry Conditions

Our business is affected by economic and industry conditions and our revenue is primarily dependent upon semiconductor demand. Semiconductor demand, in turn, is impacted by semiconductor industry cycles, and these cycles can dramatically affect our business. These cycles may be characterized by rapid increases or decreases in product demand, excess or low customer inventories, and rapid changes in prices of IC devices. For example, the semiconductor industry grew significantly during the past two years following a severe economic downturn, and generally, overall demand for our products has followed this same cycle. However, we began to see some softening of demand in the second half of fiscal 2011. Some industry analysts predict this softening may continue through the first half of fiscal 2012. In addition, our business has experienced historical seasonal trends as evidenced by a decrease in our revenue in the second quarter of fiscal 2011 from the revenue recorded in the first quarter of 2011, and an increase in revenue in the third quarter of fiscal 2011. Our limited visibility to future customer orders makes it difficult for us to predict industry trends. If the global economy weakens further and/or the semiconductor industry weakens, whether in general or as a result of specific factors, such as the current European sovereign debt crisis, the March 2011 natural disasters in Japan, or the November 2011 flooding in Thailand, that have had effects on the semiconductor, data storage and information technology industries, we could experience material adverse impacts on our results of operations and financial condition.

Adverse global economic conditions may have other negative effects on our Company. For instance, we may experience negative impacts on cash flows due to the inability of our customers to pay their obligations to us or our production process may be harmed if our suppliers cannot fulfill their obligations to us. We may also have to reduce the carrying value of goodwill and other intangible assets, which could harm our financial position and results of operations.

Some additional factors that affect demand for our products include: the types of products that our customers may produce, such as logic devices versus memory devices; the various technology nodes at which those products are manufactured; customers' specific manufacturing process integration schemes; the short order to delivery time for our products; quarter-to-quarter changes in customer order patterns; market share gains and losses; and pricing changes by us and our competitors.

We Have a Narrow Product Range and Our Products May Become Obsolete, or Technological Changes May Reduce or Limit Increases in the Consumption of CMP Slurries and Pads

Our business is substantially dependent on a single class of products, CMP slurries, which account for the majority of our revenue. Our business in CMP pads is also developing and growing. Our business would suffer if these products became obsolete or if consumption of these products decreased. Our success depends on our ability to keep pace with technological changes and advances in the semiconductor industry and to adapt, improve and customize our products for advanced IC applications in response to evolving customer needs and industry trends. Since its inception, the semiconductor industry has experienced rapid technological changes and advances in the design, manufacture, performance and application of IC devices, and our customers continually pursue lower cost of ownership and higher performance of materials consumed in their manufacturing processes, including CMP slurries and pads, as a means to reduce the costs and increase the yield in their manufacturing facilities. We expect these technological changes and advances, and this drive toward lower costs and higher yields, will continue in the future. Potential technology developments in the semiconductor industry, as well as our customers' efforts to reduce consumption of CMP consumables and to possibly reuse or recycle these products, could render our products less important to the IC device manufacturing process.

A Significant Amount of Our Business Comes from a Limited Number of Large Customers and Our Revenue and Profits Could Decrease Significantly if We Lost One or More of These Customers

Our CMP consumables customer base is concentrated among a limited number of large customers. The number of semiconductor manufacturers has declined both through mergers and acquisitions as well as through strategic alliances. Industry analysts predict that this trend will continue, which means the semiconductor industry will be comprised of fewer and larger participants if their prediction is correct. One or more of these principal customers could stop buying CMP consumables from us or could substantially reduce the quantity

of CMP consumables purchased from us. Our principal customers also hold considerable purchasing power, which can impact the pricing and terms of sale of our products. Any deferral or significant reduction in CMP consumables sold to these principal customers, or a significant number of smaller customers, could seriously harm our business, financial condition and results of operations.

In fiscal 2011, our five largest customers accounted for approximately 47% of our revenue, with Taiwan Semiconductor Manufacturing Company (TSMC) and Samsung accounting for approximately 17% and 10%, respectively, of our revenue. In fiscal year 2010, our five largest customers accounted for approximately 48% of our revenue, with TSMC and United Microelectronics Corporation accounting for approximately 18% and 11%, respectively. Samsung accounted for less than 10% of our revenue in fiscal 2010.

Our Business Could Be Seriously Harmed if Our Competitors Develop Superior Slurry Products, Offer Better Pricing Terms or Service, or Obtain Certain Intellectual Property Rights

Competition from other CMP slurry manufacturers could seriously harm our business and results of operations. Competition from other providers of CMP slurries could continue to increase, and opportunities exist for other companies to emerge as potential competitors by developing their own CMP slurry products. Increased competition has and may continue to impact the prices we are able to charge for our slurry products as well as our overall business. In addition, our competitors could have or obtain intellectual property rights which could restrict our ability to market our existing products and/or to innovate and develop new products.

Any Problem or Disruption in Our Supply Chain, Including Supply of Our Most Important Raw Materials, or in Our Ability to Manufacture and Deliver Our Products to Our Customers, Could Adversely Affect Our Results of Operations

We depend on our supply chain to enable us to meet the demands of our customers. Our supply chain includes the raw materials we use to manufacture our products, our production operations, and the means by which we deliver our products to our customers. Our business could be adversely affected by any problem or interruption in our supply of the key raw materials we use in our CMP slurries and pads, including fumed silica, which we use for certain of our slurries, or any problem or interruption that may occur during production or delivery of our products, such as weather-related problems or natural disasters, such as the March 2011 earthquakes and tsunami in Japan. Consistent with our initial assessment in our second fiscal quarter of 2011, these natural disasters have not had a significant impact on the semiconductor

industry, or on our business or supply chain, although Japan was the only geographic region in which our business did not grow in fiscal 2011. Yet, it still is unclear what long-term effects these disasters may have on Japan's economy and on the global economic environment as Japan represents the world's third largest economy. Our supply chain may also be negatively impacted by unanticipated price increases due to supply restrictions beyond the control of our Company or our raw material suppliers.

For instance, Cabot Corporation continues to be our primary supplier of particular amounts and types of fumed silica. We believe it would be difficult to promptly secure alternative sources of key raw materials, including fumed silica, in the event one of our suppliers becomes unable to supply us with sufficient quantities of raw materials that meet the quality and technical specifications required by us and our customers. In addition, contractual amendments to the existing agreements with, or non-performance by, our suppliers, including any significant financial distress our suppliers may suffer, could adversely affect us. Also, if we change the supplier or type of key raw materials we use to make our CMP slurries or pads, or are required to purchase them from a different manufacturer or manufacturing facility or otherwise modify our products, in certain circumstances our customers might have to requalify our CMP slurries and pads for their manufacturing processes and products. The requalification process could take a significant amount of time and expense to complete and could motivate our customers to consider purchasing products from our competitors, possibly interrupting or reducing our sales of CMP consumables to these customers.

We Are Subject to Risks Associated With Our Foreign Operations

We currently have operations and a large customer base outside of the United States. Approximately 86%, 86% and 84% of our revenue was generated by sales to customers outside of the United States for the fiscal 2011, 2010 and 2009, respectively. We encounter risks in doing business in certain foreign countries, including, but not limited to, adverse changes in economic and political conditions, fluctuation in exchange rates, compliance with a variety of foreign laws and regulations, as well as difficulty in enforcing business and customer contracts and agreements, including protection of intellectual property rights. We also encounter the risks that we may not be able to repatriate the earnings from certain of our foreign operations, derive the anticipated tax benefits of our foreign operations or recover the investments made in our foreign operations.

We May Pursue Acquisitions of, Investments in, and Strategic Alliances with Other Entities, Which Could Disrupt Our Operations and Harm Our Operating Results if They Are Unsuccessful

We expect to continue to make investments in technologies, assets and companies, either through acquisitions, investments or alliances, in order to supplement our internal growth and development efforts. Acquisitions and investments, such as our fiscal 2009 acquisition of Epoch Material Co., Ltd., a Taiwan-based company, involve numerous risks, including the following: difficulties and risks in integrating the operations, technologies, products and personnel of acquired companies; diversion of management's attention from normal daily operations of the business; increased risk associated with foreign operations; potential difficulties and risks in entering markets in which we have limited or no direct prior experience and where competitors in such markets have stronger market positions; potential difficulties in operating new businesses with different business models; potential difficulties with regulatory or contract compliance in areas in which we have limited experience; initial dependence on unfamiliar supply chains or relatively small supply partners; insufficient revenues to offset increased expenses associated with acquisitions; potential loss of key employees of the acquired companies; or inability to effectively cooperate and collaborate with our alliance partners.

Further, we may never realize the perceived or anticipated benefits of a business combination, asset acquisition or investments in other entities. Acquisitions by us could have negative effects on our results of operations, in areas such as contingent liabilities, gross profit margins, amortization charges related to intangible assets and other effects of accounting for the purchases of other business entities. Investments in and acquisitions of technology-related companies or assets are inherently risky because these businesses or assets may never develop, and we may incur losses related to these investments. In addition, we may be required to write down the carrying value of these acquisitions or investments to reflect other than temporary declines in their value, which could harm our business and results of operations.

Because We Have Limited Experience in Business Areas Outside of CMP Slurries, Expansion of Our Business into New Products and Applications May Not Be Successful

An element of our strategy has been to leverage our current customer relationships and technological expertise to expand our CMP business from CMP slurries into other areas, such as CMP polishing pads. Additionally, pursuant to our Engineered Surface Finishes business, we are pursuing other surface modification applications. Expanding our business into new product areas could

involve technologies, production processes and business models in which we have limited experience, and we may not be able to develop and produce products or provide services that satisfy customers' needs or we may be unable to keep pace with technological or other developments. Also, our competitors may have or obtain intellectual property rights that could restrict our ability to market our existing products and/or to innovate and develop new products.

Because We Rely Heavily on Our Intellectual Property, Our Failure to Adequately Obtain or Protect It Could Seriously Harm Our Business

Protection of intellectual property is particularly important in our industry because we develop complex technical formulas for CMP products that are proprietary in nature and differentiate our products from those of our competitors. Our intellectual property is important to our success and ability to compete. We attempt to protect our intellectual property rights through a combination of patent, trademark, copyright and trade secret laws, as well as employee and third-party nondisclosure and assignment agreements. Due to our international operations, we pursue protection in different jurisdictions, which may provide varying degrees of protection, and we cannot provide assurance that we can obtain adequate protection in each such jurisdiction. Our failure to obtain or maintain adequate protection of our intellectual property rights for any reason, including through the patent prosecution process or in the event of litigation related to such intellectual property, such as the current litigation between us and DuPont Air Products NanoMaterials (DA Nano), in which the validity of all of our patents at issue in the matter was upheld as further described above in Part I, Item 1 under the heading "Intellectual Property" and in Part I, Item 3 under the heading "Legal Proceedings," could seriously harm our business. In addition, the costs of obtaining or protecting our intellectual property could negatively affect our operating results. For example, in fiscal 2010, costs associated with enforcing our intellectual property caused our operating expenses to increase.

We May Not Be Able to Monetize Our Investments in Auction Rate Securities in the Short Term and We Could Experience a Decline in Their Market Value, Which Could Adversely Affect Our Financial Results

We owned auction rate securities (ARS) with an estimated fair value of \$8.1 million (\$8.3 million par value) at September 30, 2011, which were classified as other long-term assets on our Consolidated Balance Sheet. If current illiquidity in the ARS market does not lessen, if issuers of our ARS are unable to refinance the underlying securities, or are unable to pay debt obligations and related bond insurance fails, or if credit ratings decline or other adverse developments occur in the credit markets, then we may not be able to monetize these

securities in the foreseeable future. We may also be required to further adjust the carrying value of these instruments through an impairment charge that may be deemed other-than-temporary which would adversely affect our financial results.

Our Inability to Attract and Retain Key Personnel Could Cause Our Business to Suffer

If we fail to attract and retain the necessary managerial, technical and customer support personnel, our business and our ability to maintain existing and obtain new customers, develop new products and provide acceptable levels of customer service could suffer. We compete with other industry participants for qualified personnel, particularly those with significant experience in the semiconductor industry. The loss of services of key employees could harm our business and results of operations.

Risks Relating to the Market for Our Common Stock

The Market Price May Fluctuate Significantly and Rapidly

The market price of our common stock has fluctuated and could continue to fluctuate significantly as a result of factors such as: economic and stock market conditions generally and specifically as they may impact participants in the semiconductor and related industries; changes in financial estimates and recommendations by securities analysts who follow our stock; earnings and other announcements by, and changes in market evaluations of, us or participants in the semiconductor and related industries; changes in business or regulatory conditions affecting us or participants in the semiconductor and related industries; announcements or implementation by us, our competitors, or our customers of technological innovations, new products or different business strategies; and trading volume of our common stock.

Anti-Takeover Provisions Under Our Certificate of Incorporation and Bylaws May Discourage Third Parties from Making an Unsolicited Bid for Our Company

Our certificate of incorporation, our bylaws, and various provisions of the Delaware General Corporation Law may make it more difficult or expensive to effect a change in control of our Company. For instance, our amended and restated certificate of incorporation provides for the division of our Board of Directors into three classes as nearly equal in size as possible with staggered three-year terms. Until April 2010, we had a rights plan which expired according to the terms of the plan.

We have adopted change in control arrangements covering our executive officers and other key employees. These arrangements provide for a cash severance payment, continued medical benefits and other ancillary payments and benefits upon termination of service of a covered employee's employment following a change in control, which may make it more expensive to acquire our Company.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our principal U.S. facilities that we own consist of:

- a global headquarters and research and development facility in Aurora, Illinois, comprising approximately 200,000 square feet;
- a commercial slurry manufacturing plant and distribution center in Aurora, Illinois, comprising approximately 175,000 square feet;
- a commercial polishing pad manufacturing plant and offices in Aurora, Illinois, comprising approximately 48,000 square feet;
- an additional 13.2 acres of vacant land in Aurora, Illinois; and
- a facility in Addison, Illinois, comprising approximately 15,000 square feet.

In addition, we lease a facility in Rochester, New York, comprising approximately 23,000 square feet.

Our principal foreign facilities that we or our subsidiaries own consist of:

- a commercial slurry manufacturing plant, automated warehouse, research and development facility and offices in Kaohsiung County, Taiwan, comprising approximately 170,000 square feet;
- a commercial slurry manufacturing plant and distribution center in Geino, Japan, comprising approximately 124,000 square feet;
- a development and technical support facility in Geino, Japan, comprising approximately 20,000 square feet.
- a commercial slurry manufacturing plant, research and development facility and business office in the Oseong, South Korea, comprising approximately 56,000 square feet.

Our principal foreign facilities that we lease consist of:

- an office, research and development laboratory and polishing pad manufacturing plant in Hsin-Chu, Taiwan, comprising approximately 31,000 square feet;

- a commercial slurry manufacturing plant, research and development facility and business office in Singapore, comprising approximately 24,000 square feet.

We believe that our facilities are suitable and adequate for their intended purpose and provide us with sufficient capacity and capacity expansion opportunities and technological capability to meet our current and expected demand in the foreseeable future. In fiscal 2011, we increased our manufacturing capacity and added new capabilities in the Asia Pacific region including the construction of a new research, development and manufacturing facility in South Korea, and expanded manufacturing capacity in our Geino, Japan and Singapore facilities.

Item 3. Legal Proceedings

While we are not involved in any legal proceedings that we believe will have a material impact on our consolidated financial position, results of operations or cash flows, we periodically become a party to legal proceedings in the ordinary course of business. For example, from 2007 to 2011, we were involved in a legal action in the United States against DuPont Air Products NanoMaterials LLC (DA Nano), a CMP slurry competitor, regarding whether certain specific formulations of slurry products used for tungsten CMP infringe certain CMP slurry patents that we own, and the validity of those and other of our patents. All of the Cabot Microelectronics Corporation patents at issue in the case were found valid, but the specific products at issue were found to not infringe the asserted claims of these patents.

Executive Officers of the Registrant

Set forth below is information concerning our executive officers and their ages as of October 31, 2011.

Name	Age	Position
William P. Noglows	53	Chairman of the Board, President and Chief Executive Officer
H. Carol Bernstein	51	Vice President, Secretary and General Counsel
Yumiko Damashek	55	Vice President, Japan and Operations in Asia
William S. Johnson	54	Vice President and Chief Financial Officer
David H. Li	38	Vice President, Asia Pacific Region
Ananth Naman	41	Vice President, Research and Development
Daniel J. Pike	48	Vice President, Corporate Development
Stephen R. Smith	52	Vice President, Marketing
Adam F. Weisman	49	Vice President, Business Operations
Daniel S. Wobby	48	Vice President, Global Sales
Thomas S. Roman	50	Principal Accounting Officer and Corporate Controller

WILLIAM P. NOGLOWS has served as our Chairman, President and Chief Executive Officer since November 2003. Mr. Noglows had previously served as a director of our Company from January 2000 until April 2002. Prior to joining us, Mr. Noglows served as an Executive Vice President of Cabot Corporation from 1998 to June 2003. Prior to that, Mr. Noglows held various management positions at Cabot Corporation including General Manager of Cabot Corporation's Cab-O-Sil Division, where he was one of the primary founders of our Company when our business was a division of Cabot Corporation, and was responsible for identifying and encouraging the development of the CMP application. Mr. Noglows received his B.S. in Chemical Engineering from the Georgia Institute of Technology. Mr. Noglows is also a director of Littelfuse, Inc. and Aspen Aerogels, Inc.

H. CAROL BERNSTEIN has served as our Vice President, Secretary and General Counsel since August 2000. From January 1998 until joining us, Ms. Bernstein served as the General Counsel and Director of Industrial Technology

Development of Argonne National Laboratory, which is operated by the University of Chicago for the United States Department of Energy. From May 1985 until December 1997, she served in various positions with the IBM Corporation, culminating in serving as an Associate General Counsel, and was the Vice President, Secretary and General Counsel of Advantis Corporation, an IBM joint venture. Ms. Bernstein received her B.A. from Colgate University and her J.D. from Northwestern University; she is a member of the Bar of the States of Illinois and New York.

YUMIKO DAMASHEK has served as our Vice President, Japan and Operations in Asia since June 2008. Previously, Ms. Damashek served as Managing Director of Japan since November 2005. Prior to joining us, Ms. Damashek served as President for Celerity Japan, Inc. Prior to that, she held various leadership positions at Global Partnership Creation, Inc. and Millipore Corporation. Ms. Damashek received her B.A. from the University of Arizona and her M.B.A. from San Diego State University.

WILLIAM S. JOHNSON has served as our Vice President and Chief Financial Officer since April 2003. Prior to joining us, Mr. Johnson served as Executive Vice President and Chief Financial Officer for Budget Group, Inc. from August 2000 to March 2003. Before that, Mr. Johnson spent 16 years at BP Amoco in various senior finance and management positions, the most recent of which was President of Amoco Fabrics and Fibers Company. Mr. Johnson received his B.S. in Mechanical Engineering from the University of Oklahoma and his M.B.A. from the Harvard Business School.

DAVID H. LI has served as our Vice President, Asia Pacific Region since June 2008. Prior to that, Mr. Li served as Managing Director of South Korea and China since February 2007. Previously, Mr. Li served as our Global Business Director for Tungsten and Advanced Dielectrics from 2005 to February 2007. Mr. Li held a variety of leadership positions for us in operations, sourcing and investor relations between 1998 and 2005. Prior to joining us, Mr. Li worked for UOP in marketing and process engineering. Mr. Li received a B.S. in Chemical Engineering from Purdue University and an M.B.A. from Northwestern University—Kellogg School of Management.

ANANTH NAMAN has served as our Vice President of Research and Development since January 2011. Previously, Dr. Naman was our Director of Product Development starting in April 2009 and Director of Pads Technology from January 2006 through March 2009. Prior to joining us, Dr. Naman managed research and development efforts at Honeywell International from July 2000 to December 2005, and from 1997 to 2000 he held positions in research and development at Seagate Technology. Dr. Naman earned B.S., M.S. and Ph.D. degrees in Materials Science and Engineering from the University of Florida.

DANIEL J. PIKE has served as our Vice President of Corporate Development since January 2004 and prior to that was our Vice President of Operations from December 1999. Mr. Pike served as Director of Global Operations for a division of Cabot Corporation from 1996 to 1999. Prior to that, Mr. Pike worked for FMC Corporation in various marketing and finance positions. Mr. Pike received his B.S. in Chemical Engineering from the University of Buffalo and his M.B.A. from the Wharton School of Business of the University of Pennsylvania.

STEPHEN R. SMITH has served as our Vice President of Marketing since September 2006, and previously was our Vice President of Marketing and Business Management since April 2005 and our Vice President of Sales and

Marketing from October 2001. Prior to joining us, Mr. Smith served as Vice President, Sales & Business Development for Buildpoint Corporation from 2000 to April 2001. Prior to that, Mr. Smith spent 17 years at Tyco Electronics Group, formerly known as AMP Incorporated, in various management positions. Mr. Smith earned a B.S. in Industrial Engineering from Grove City College and an M.B.A. from Wake Forest University.

ADAM F. WEISMAN has served as our Vice President of Business Operations since September 2006, and prior to that was our Vice President of Operations. Before joining us, Mr. Weisman held various engineering and senior operations management positions with the General Electric Company from 1988 through 2004, including having served as the General Manager of Manufacturing for GE Plastics—Superabrasives, and culminating in serving as the Executive Vice President of Operations for GE Railcar Services. Prior to joining GE, he worked as an engineering team leader and pilot plant manager for E.I. Du Pont de Nemours & Company. Mr. Weisman holds a B.S. in Ceramic Engineering from Alfred University.

DANIEL S. WOBBY has served as our Vice President of Global Sales since June 2008. Prior to that, Mr. Wobby served as Vice President, Asia Pacific Region since September 2005. Previously, Mr. Wobby served as Vice President, Greater China and Southeast Asia starting in February 2004 and as Corporate Controller and Principal Accounting Officer from 2000 to 2004. From 1989 to 2000, Mr. Wobby held various accounting and operations positions with Cabot Corporation culminating in serving as Director of Finance. Mr. Wobby earned a B.S. in Accounting from St. Michael's College and an M.B.A. from the University of Chicago.

THOMAS S. ROMAN has served as our Corporate Controller and Principal Accounting Officer since February 2004 and previously served as our North American Controller. Prior to joining us in April 2000, Mr. Roman was employed by FMC Corporation in various financial reporting, tax and audit positions. Before that, Mr. Roman worked for Gould Electronics and Arthur Andersen LLP. Mr. Roman is a C.P.A. and earned a B.S. in Accounting from the University of Illinois and an M.B.A. from DePaul University's Kellstadt Graduate School of Business.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock has traded publicly under the symbol "CCMP" since our initial public offering in April 2000, currently on the NASDAQ Global Select Market, and formerly the NASDAQ National Market. The following table sets forth the range of quarterly high and low closing sales prices for our common stock.

	High	Low
Fiscal 2010		
First Quarter	\$35.47	\$30.59
Second Quarter	37.83	31.99
Third Quarter	42.69	34.18
Fourth Quarter	36.65	29.81
Fiscal 2011		
First Quarter	\$42.80	\$32.22
Second Quarter	52.25	40.80
Third Quarter	51.88	43.18
Fourth Quarter	48.21	34.39
Fiscal 2012		
First Quarter (through October 31, 2011)	\$39.46	\$33.09

As of October 31, 2011, there were approximately 954 holders of record of our common stock. No dividends were declared or paid in either fiscal 2011 or fiscal 2010 and we have no current plans to pay cash dividends in the future.

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 Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (in thousands)
Jul. 1 through Jul. 31, 2011	—	\$ —	—	\$110,001
Aug. 1 through Aug. 31, 2011	367,000	\$38.44	367,000	\$ 95,894
Sep. 1 through Sep. 30, 2011	150	\$38.32	—	\$ 95,894
Total	367,150	\$38.44	367,000	\$ 95,894

In January 2008, our Board of Directors authorized a share repurchase program for up to \$75.0 million of our outstanding common stock. We repurchased 564,568 shares for \$25.0 million in fiscal 2011 under this program, which was completed during the fiscal quarter ended March 31, 2011. In November 2010, our Board of Directors authorized a new share repurchase program for up to \$125.0 million of our outstanding common stock, which became effective on the authorization date. We repurchased 671,100 shares for \$29.1 million during fiscal 2011 under this new program. Share repurchases are made from time to time, depending on market conditions, in open market transactions, at management's discretion. We fund share purchases under these programs from our available cash balance.

Separate from this share repurchase program, a total of 33,840 shares were purchased during fiscal 2011 pursuant to the terms of our Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan (EIP) as shares withheld from award recipients to cover payroll taxes on the vesting of shares of restricted stock granted under the EIP.

Equity Compensation Plan Information

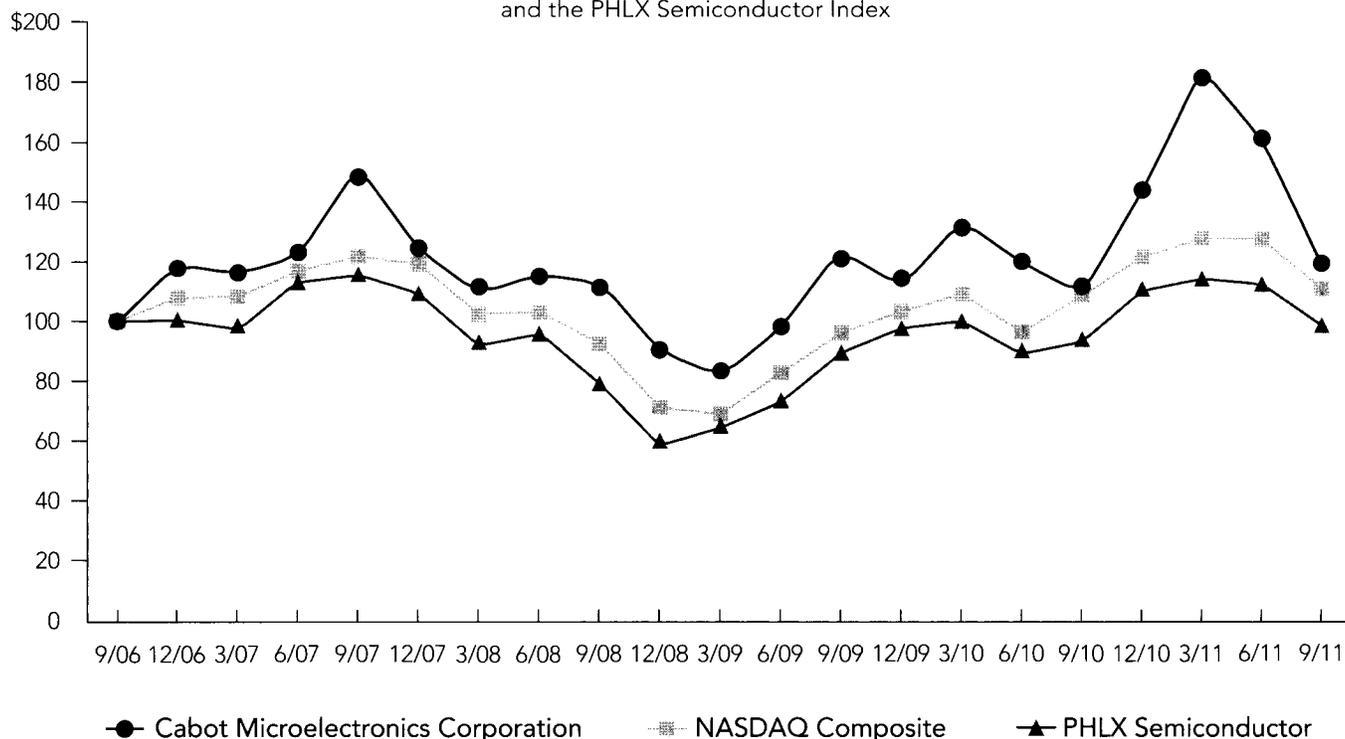
See Part II, Item 12 of this Form 10-K for information regarding shares of common stock that may be issued under the Company's existing equity compensation plans.

Stock Performance Graph

The following graph illustrates the cumulative total stockholder return on our common stock during the period from September 30, 2006 through September 30, 2011 and compares it with the cumulative total return on the NASDAQ Composite Index and the Philadelphia Semiconductor Index. The comparison assumes \$100 was invested on September 30, 2006 in our common stock and in each of the foregoing indices and assumes reinvestment of dividends, if any. The performance shown is not necessarily indicative of future performance. See "Risk Factors" in Part I, Item 1A above.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Cabot Microelectronics Corporation, the NASDAQ Composite Index and the PHLX Semiconductor Index



*\$100 invested on 9/30/06 in stock or index, including reinvestment of dividends.
Fiscal year ending September 30.

	9/06	12/06	3/07	6/07	9/07	12/07	3/08	6/08	9/08	12/08	3/09
Cabot Microelectronics Corporation	100.00	117.77	116.27	123.14	148.33	124.60	111.55	115.02	111.31	90.46	83.38
NASDAQ Composite	100.00	107.91	108.17	116.86	121.84	119.24	102.32	103.18	92.48	71.03	68.89
Philadelphia Semiconductor	100.00	100.41	98.60	113.01	115.85	109.37	93.10	95.95	79.21	60.01	64.99
	6/09	9/09	12/09	3/10	6/10	9/10	12/10	3/11	6/11	9/11	
Cabot Microelectronics Corporation	98.16	120.96	114.37	131.26	120.02	111.66	143.82	181.30	161.24	119.33	
NASDAQ Composite	82.80	96.08	103.21	109.08	96.30	108.39	121.45	127.65	127.41	110.99	
Philadelphia Semiconductor	73.49	89.57	97.71	100.07	90.23	93.99	110.84	114.20	112.37	98.62	

Item 6. Selected Financial Data

The following selected financial data for each year of the five-year period ended September 30, 2011, has been derived from the audited consolidated financial statements.

The information set forth below is not necessarily indicative of results of future operations and should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and the consolidated financial statements and notes to those statements included in Items 7 and 8 of Part II of this Form 10-K, as well as Risk Factors included in Item 1A of Part I of this Form 10-K.

CABOT MICROELECTRONICS CORPORATION SELECTED FINANCIAL DATA—FIVE YEAR SUMMARY

(Amounts in thousands, except per share amounts)

	Year Ended September 30,				
	2011	2010	2009	2008	2007
Consolidated Statement of Income Data:					
Revenue	\$445,442	\$408,201	\$291,372	\$375,069	\$338,205
Cost of goods sold	231,336	204,704	162,918	200,596	178,224
Gross profit	214,106	203,497	128,454	174,473	159,981
Operating expenses:					
Research, development and technical	58,035	51,818	48,150	49,155	49,970
Selling and marketing	29,758	26,885	22,239	28,281	24,310
General and administrative	45,928	50,783	40,632	47,595	39,933
Purchased in-process research and development	—	—	1,410	—	—
Total operating expenses	133,721	129,486	112,431	125,031	114,213
Operating income	80,385	74,011	16,023	49,442	45,768
Other income (expense), net	(1,473)	(734)	599	5,448	3,606
Income before income taxes	78,912	73,277	16,622	54,890	49,374
Provision for income taxes	27,250	23,819	5,435	16,552	15,538
Net income	\$ 51,662	\$ 49,458	\$ 11,187	\$ 38,338	\$ 33,836
Basic earnings per share	\$ 2.26	\$ 2.14	\$ 0.48	\$ 1.64	\$ 1.42
Weighted-average basic shares outstanding	22,896	23,084	23,079	23,315	23,748
Diluted earnings per share	\$ 2.20	\$ 2.13	\$ 0.48	\$ 1.64	\$ 1.42
Weighted-average diluted shares outstanding	23,435	23,273	23,096	23,348	23,754
Cash dividends per share	\$ —	\$ —	\$ —	\$ —	\$ —
	As of September 30,				
	2011	2010	2009	2008	2007
Consolidated Balance Sheet Data:					
Current assets	\$430,405	\$381,029	\$316,852	\$330,592	\$310,754
Property, plant and equipment, net	130,791	115,811	122,782	115,843	118,454
Other assets	67,033	74,916	75,510	31,002	25,921
Total assets	\$628,229	\$571,756	\$515,144	\$477,437	\$455,129
Current liabilities	\$ 55,550	\$ 53,330	\$ 39,536	\$ 37,801	\$ 36,563
Other long-term liabilities	6,325	4,083	4,879	5,403	5,362
Total liabilities	61,875	57,413	44,415	43,204	41,925
Stockholders' equity	566,354	514,343	470,729	434,233	413,204
Total liabilities and stockholders' equity	\$628,229	\$571,756	\$515,144	\$477,437	\$455,129

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following "Management's Discussion and Analysis of Financial Condition and Results of Operations" (MD&A), as well as disclosures included elsewhere in this Form 10-K, include "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. This Act provides a safe harbor for forward-looking statements to encourage companies to provide prospective information about themselves so long as they identify these statements as forward-looking and provide meaningful cautionary statements identifying important factors that could cause actual results to differ from the projected results. All statements other than statements of historical fact we make in this Form 10-K are forward-looking. In particular, the statements herein regarding future sales and operating results; Company and industry growth, contraction or trends; growth or contraction of the markets in which the Company participates; international events, regulatory or legislative activity, or various economic factors; product performance; the generation, protection and acquisition of intellectual property, and litigation related to such intellectual property; new product introductions; development of new products, technologies and markets; the acquisition of or investment in other entities; uses and investment of the Company's cash balance; the construction and operation of facilities by the Company; and statements preceded by, followed by or that include the words "intends", "estimates", "plans", "believes", "expects", "anticipates", "should", "could" or similar expressions, are forward-looking statements. Forward-looking statements reflect our current expectations and are inherently uncertain. Our actual results may differ significantly from our expectations. We assume no obligation to update this forward-looking information. The section entitled "Risk Factors" describes some, but not all, of the factors that could cause these differences.

The following discussion and analysis should be read in conjunction with our historical financial statements and the notes to those financial statements which are included in Item 8 of Part II of this Form 10-K.

Overview

Cabot Microelectronics Corporation ("Cabot Microelectronics", "the Company", "us", "we", or "our") supplies high-performance polishing slurries and pads used in the manufacture of advanced integrated circuit (IC) devices within the semiconductor industry, in a process called chemical mechanical planarization (CMP). CMP polishes surfaces at an atomic level, thereby enabling IC device manufacturers to produce smaller, faster and more complex IC devices with fewer defects. We

operate predominantly in one industry segment—the development, manufacture and sale of CMP consumables. We develop, produce and sell CMP slurries for polishing many of the conducting and insulating materials used in IC devices, and also for polishing the disk substrates and magnetic heads used in hard disk drives. We also develop, manufacture and sell CMP polishing pads, which are used in conjunction with slurries in the CMP process. We also pursue other demanding surface modification applications through our Engineered Surface Finishes (ESF) business where we believe we can leverage our expertise in CMP consumables for the semiconductor industry to develop products for demanding polishing applications in other industries.

The economic and industry growth that we saw during fiscal 2010 in the overall semiconductor industry and for our Company continued into fiscal 2011. Unit growth in the semiconductor industry has been driven in particular by increased demand for mobile internet products such as smart phones and tablets. However, we began to see a softening of demand within the semiconductor industry in the second half of fiscal 2011 based on certain factors including general uncertainty in the global economy and a modest correction of IC inventory. Some industry analysts project that this softening of demand may continue through the first half of our fiscal 2012. Consequently, we remain cautious regarding demand trends in fiscal 2012. There are many factors that make it difficult for us to predict future revenue trends for our business, including those discussed in Part I, Item 1A entitled "Risk Factors" in this Form 10-K.

Our fiscal 2011 performance was highlighted by a number of strategic investments we made to further strengthen our global position for the future. We completed construction of a new research, development and manufacturing facility in South Korea, which we believe will strengthen our ability to serve the second largest CMP market in the world. We expanded our manufacturing facility in Japan to meet increased demand for our CMP slurry products and we expanded our manufacturing facility in Singapore to meet higher demand for our data storage products. We also developed and commercialized innovative new products in all of our business areas to address traditional CMP applications as well as new and emerging technologies.

Revenue for fiscal 2011 was \$445.4 million, which represented an increase of 9.1% from the \$408.2 million reported for fiscal 2010, and was a record level for our Company. The increase in revenue from fiscal 2010 reflects increased sales volume primarily due to continued growth of the semiconductor industry. We experienced revenue growth across all of our product lines, including each of our slurry areas, our polishing pads business and our ESF business. We also experienced revenue growth in each geographic area in which we

operate, except in Japan, including a 32% increase in revenue in South Korea.

Gross profit expressed as a percentage of revenue for fiscal 2011 was 48.1%, which represents a decrease from the 49.9% reported for fiscal 2010, but was within our full year guidance range of 48% to 50% of revenue. The decrease in gross profit percentage from fiscal 2010 was primarily due to higher fixed manufacturing costs, the negative effects of foreign exchange rate changes, particularly with respect to the U.S. dollar against the Japanese yen, which accounted for approximately a 1.5 percentage point decrease in gross margin percentage, and selective price decreases, partially offset by a higher-valued product mix. We expect our gross profit percentage for full fiscal year 2012 to be in the range of 46% to 48%. Our fiscal 2012 guidance reflects anticipated continued adverse impacts of foreign exchange rate changes, fixed costs associated with our new facility in South Korea and uncertainty within the semiconductor industry and the global economy. However, we may experience fluctuations in our gross profit due to a number of factors, including the extent to which we utilize our manufacturing capacity and changes in our product mix, which may cause our quarterly gross profit to be above or below this range.

Operating expenses of \$133.7 million, which include research, development and technical, selling and marketing, and general and administrative expenses, increased 3.3%, or \$4.2 million, from the \$129.5 million reported for fiscal 2010. The increase was primarily due to higher staffing-related costs and higher expenses for clean room materials, partially offset by lower professional fees. In fiscal 2012, we expect our full year operating expenses to be in the range of \$135 million to \$140 million.

Diluted earnings per share of \$2.20 in fiscal 2011 increased 3.3%, or \$0.07, from \$2.13 reported in fiscal 2010, and represented a record level for our Company. The increase was primarily due to increased sales volume, partially offset by a lower gross margin percentage, higher operating expenses and a higher effective tax rate.

The results of operations for the fiscal year ended September 30, 2011 include certain adjustments to correct prior period amounts, which we have determined to be immaterial to the current period and the prior periods to which they relate. Adjustments in fiscal 2011 listed below, the first four of which were made in the first two quarters, are related to: (1) \$1.5 million (\$1.0 million, net of tax) in employer-paid fringe benefits for required contributions to our 401(k) Plan, Supplemental Employee Retirement Plan, and non-United States statutory pension plans as a result of our annual payment pursuant to our fiscal 2010 annual incentive cash bonus program (AIP); (2) income tax expense of \$0.7 million

recorded for certain compensation in fiscal 2008 through 2010 for which a previous tax benefit should not have been recorded; (3) the reversal of a \$0.5 million deferred tax asset regarding certain share-based compensation expense which is not subject to such tax treatment; (4) our under accrual of \$0.3 million (\$0.2 million, net of tax) for payments made pursuant to the AIP as a result of the calculation of results against goals under the AIP; and (5) other immaterial corrections to deferred tax assets and liabilities that reduced our income tax expense by \$0.1 million. Collectively, prior period adjustments reduced net income in fiscal 2011 by \$2.3 million and diluted earnings per share by approximately \$0.10.

Critical Accounting Policies and Estimates

This "Management's Discussion and Analysis of Financial Condition and Results of Operations" (MD&A), as well as disclosures included elsewhere in this Form 10-K, are based upon our audited consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingencies. On an ongoing basis, we evaluate the estimates used, including those related to bad debt expense, warranty obligations, inventory valuation, valuation and classification of auction rate securities, impairment of long-lived assets and investments, business combinations, goodwill, other intangible assets, share-based compensation, income taxes and contingencies. We base our estimates on historical experience, current conditions and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources, as well as for identifying and assessing our accounting treatment with respect to commitments and contingencies. Actual results may differ from these estimates under different assumptions or conditions. We believe the following critical accounting policies involve significant judgments and estimates used in the preparation of our consolidated financial statements.

Allowance for Doubtful Accounts

We maintain an allowance for doubtful accounts for estimated losses resulting from the potential inability of our customers to make required payments. Our allowance for doubtful accounts is based on historical collection experience, adjusted for any specific known conditions or circumstances. While historical experience may provide a reasonable estimate of uncollectible accounts, actual results may differ from what was recorded. In fiscal 2009, the global economic recession adversely affected our ability to collect accounts receivable from

some of our customers. The recession also caused a small number of our customers to file for bankruptcy or insolvency. We recorded a \$0.9 million increase in our allowance for doubtful accounts during fiscal 2009 to account for these bankruptcies and the increased risk regarding customer collections due to the continued uncertainty in the global economy. We will continue to monitor the financial solvency of our customers and, if global economic conditions worsen, we may have to record additional increases to our allowances for doubtful accounts. As of September 30, 2011, our allowance for doubtful accounts represented 2.0% of gross accounts receivable. If we had increased our estimate of bad debts to 3.0% of gross accounts receivable, our general and administrative expenses would have increased by \$0.5 million.

Warranty Reserve

We maintain a warranty reserve that reflects management's best estimate of the cost to replace product that does not meet customers' specifications and performance requirements, and costs related to such replacement. The warranty reserve is based upon a historical product replacement rate, adjusted for any specific known conditions or circumstances. Should actual warranty costs differ substantially from our estimates, revisions to the estimated warranty liability may be required. As of September 30, 2011, our warranty reserve represented 0.3% of the current quarter revenue. If we had increased our warranty reserve estimate to 1.3% of the current quarter revenue, our cost of goods sold would have increased by \$1.0 million.

Inventory Valuation

We value inventory at the lower of cost or market and write down the value of inventory for estimated obsolescence or if inventory is deemed unmarketable. An inventory reserve is maintained based upon a historical percentage of actual inventories written off applied against the inventory value at the end of the period, adjusted for known conditions and circumstances. We exercise judgment in estimating the amount of inventory that is obsolete. Should actual product marketability and fitness for use be affected by conditions that are different from those projected by management, revisions to the estimated inventory reserve may be required. If we had increased our reserve for obsolete inventory at September 30, 2011 by 10%, our cost of goods sold would have increased by \$0.2 million.

Valuation and Classification of Auction Rate Securities

As of September 30, 2011, we owned two auction rate securities (ARS) with an estimated fair value of \$8.1 million (\$8.3 million par value) which are classified as other long-term assets on our Consolidated Balance Sheet. In general, ARS investments are securities with long-term

nominal maturities for which interest rates are reset through a Dutch auction every seven to 35 days. Historically, these periodic auctions provided a liquid market for these securities. General uncertainties in the global credit markets reduced liquidity in the ARS market, and this illiquidity continues.

As discussed in Notes 4 and 8 of the Notes to the Consolidated Financial Statements, we have recorded a temporary impairment of \$0.2 million, net of tax, in the value of one of our ARS in other comprehensive income. The calculation of fair value and the balance sheet classification for our ARS requires critical judgments and estimates by management including an appropriate discount rate and the probabilities that a security may be monetized through a future successful auction, of a refinancing of the underlying debt, of a default in payment by the issuer, and of payments not being made by the bond insurance carrier in the event of default by the issuer. An other-than-temporary impairment must be recorded when a credit loss exists; that is when the present value of the expected cash flows from a debt security is less than the amortized cost basis of the security. We performed two discounted cash flow analyses, one using a discount rate based on a market index comprised of tax exempt variable rate demand obligations and one using a discount rate based on the LIBOR swap curve, and we applied a risk factor to reflect current liquidity issues in the ARS market. Key inputs to our discounted cash flow model include projected cash flows from interest and principal payments and the weighted probabilities of improved liquidity or debt refinancing by the issuer. We also incorporate certain Level 2 market indices into the discounted cash flow analysis, including published rates such as the LIBOR rate, the LIBOR swap curve and a municipal swap index published by the Securities Industry and Financial Markets Association. We also considered the probability of default in payment by the issuer of the securities, the strength of the insurance backing and the probability of failure by the insurance carrier in the case of default by the issuer of the securities. In November 2011, the municipality that issued our impaired ARS filed for bankruptcy protection. We considered these developments, in light of the continued insurance backing, and have concluded the impairment we have maintained remains adequate and temporary. We do not intend to sell the securities at a loss and we believe we will not be required to sell the securities at a loss in the future. If auctions involving our remaining ARS continue to fail, if issuers of our ARS are unable to refinance the underlying securities, if the issuing municipalities are unable to pay their debt obligations and the bond insurance fails, or if credit ratings decline or other adverse developments occur in the credit markets, we may not be able to monetize our remaining securities in the near term and may be required to further adjust the carrying value of these

instruments through an impairment charge that may be deemed other-than-temporary.

Impairment of Long-Lived Assets and Investments

We assess the recoverability of the carrying value of long-lived assets, including finite lived intangible assets, whenever events or changes in circumstances indicate that the assets may be impaired. We must exercise judgment in assessing whether an event of impairment has occurred. For purposes of recognition and measurement of an impairment loss, long-lived assets are grouped with other assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. We must exercise judgment in this grouping. If the sum of the undiscounted future cash flows expected to result from the identified asset group is less than the carrying value of the asset group, an impairment provision may be required. The amount of the impairment to be recognized is calculated by subtracting the fair value of the asset group from the net book value of the asset group. Determining future cash flows and estimating fair values require significant judgment and are highly susceptible to change from period to period because they require management to make assumptions about future sales and cost of sales generally over a long-term period. As a result of assessments performed during fiscal 2011, we recorded \$0.2 million in impairment expense. In fiscal 2010 and 2009, we recorded \$0.2 million and \$1.2 million in impairment expense, respectively.

We evaluate the estimated fair value of investments annually or more frequently if indicators of potential impairment exist, to determine if an other-than-temporary impairment in the value of the investment has taken place.

Business Combinations

We have accounted for all business combinations under the purchase method of accounting. As discussed in more detail in Note 3 of the Notes to the Consolidated Financial Statements, we were required to adopt new accounting standards for business combinations commencing after October 1, 2009. However, we have not made any acquisitions to which we were required to apply these new standards. We have allocated the purchase price of acquired entities to the tangible and intangible assets acquired, liabilities assumed, and in-process research and development (IPR&D) based on their estimated fair values. We engage independent third-party appraisal firms to assist us in determining the fair values of assets and liabilities acquired. This valuation requires management to make significant estimates and assumptions, especially with respect to long-lived and intangible assets. Contingent consideration was recorded as a liability when the outcome of the contingency became determinable. Goodwill represents

the excess of the purchase price over the fair value of net assets and amounts assigned to identifiable intangible assets. Purchased IPR&D, for which technological feasibility has not yet been established and no future alternative uses exist, has been expensed immediately.

Critical estimates in valuing certain of the intangible assets include but are not limited to: future expected cash flows related to acquired developed technologies and patents and assumptions about the period of time the technologies will continue to be used in the Company's product portfolio; expected costs to develop the IPR&D into commercially viable products and estimated cash flows from the products when completed; and discount rates. Management's estimates of value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable. Assumptions may be incomplete or inaccurate, and unanticipated events and circumstances may occur which may cause actual realized values to be different from management's estimates.

Goodwill and Intangible Assets

Purchased intangible assets with finite lives are amortized over their estimated useful lives and are evaluated for impairment using a process similar to that used to evaluate other long-lived assets. Goodwill and indefinite lived intangible assets are not amortized and are tested annually in the fourth fiscal quarter or more frequently if indicators of potential impairment exist, using a fair-value-based approach.

The recoverability of goodwill is measured at the reporting unit level, which is defined as either an operating segment or one level below an operating segment. A component is a reporting unit when the component constitutes a business for which discreet financial information is available and segment management regularly reviews the operating results of the component. Components may be combined into one reporting unit when they have similar economic characteristics. We had three reporting units to which we allocated goodwill and intangible assets as of September 30, 2011, the date of our annual impairment test. Initially, our Company had only one reporting unit as we were created from a division of our former parent company, Cabot Corporation, and we identified associated goodwill and intangible assets under one reporting unit at that time. Other amounts of goodwill and intangible assets have been attributed to acquired businesses at the time of acquisition through the use of independent appraisal firms.

We have historically determined the fair value of our reporting units using a discounted cash flow analysis ("step one" analysis) of our projected future results. The step one analysis we performed in the fourth quarter of fiscal 2010 indicated the fair value of our reporting units was significantly higher than the carrying value. As discussed

in Notes 2 and 7 of the Notes to the Consolidated Financial Statements, effective September 30, 2011, we adopted new accounting pronouncements related to our goodwill impairment analysis. The new accounting guidance allows an entity to first assess qualitative factors to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying amount (“step zero” analysis). In fiscal 2011, we used this new guidance in our annual impairment analysis for goodwill because our cash flows for all of our reporting units exceeded the expectations we had as of September 30, 2010.

The recoverability of indefinite lived intangible assets is measured using the royalty savings method. Factors requiring significant judgment include assumptions related to future growth rates, discount factors, royalty rates and tax rates, among others. Changes in economic and operating conditions that occur after the annual impairment analysis or an interim impairment analysis that impact these assumptions may result in future impairment charges.

As a result of the review performed in the fourth quarter of fiscal 2011, we determined that there was no impairment of our goodwill and intangible assets as of September 30, 2011.

Share-Based Compensation

We record share-based compensation expense for all share-based awards, including stock option grants, restricted stock and restricted stock unit awards and employee stock purchase plan purchases. We calculate share-based compensation expense using the straight-line approach based on awards expected to ultimately vest, which requires the use of an estimated forfeiture rate. Our estimated forfeiture rate is primarily based on historical experience, but may be revised in future periods if actual forfeitures differ from the estimate. We use the Black-Scholes option-pricing model to estimate the grant date fair value of our stock options and employee stock purchase plan purchases. This model requires the input of highly subjective assumptions, including the price volatility of the underlying stock, the expected term of our stock options and the risk-free interest rate. A small change in the underlying assumptions can have a relatively large effect on the estimated valuation. We estimate the expected volatility of our stock based on a combination of our stock’s historical volatility and the implied volatilities from actively-traded options on our stock. We calculate the expected term of our stock options using the simplified method, due to our limited amount of historical option exercise data, and we add a slight premium to this expected term for employees who meet the definition of retirement eligible pursuant to terms of their award agreements during the contractual term. The simplified method uses an average of the

vesting term and the contractual term of the option to calculate the expected term. The risk-free rate is derived from the U.S. Treasury yield curve in effect at the time of grant.

The fair value of our restricted stock and restricted stock unit awards represents the closing price of our common stock on the date of award.

Accounting for Income Taxes

Current income taxes are determined based on estimated taxes payable or refundable on tax returns for the current year. Deferred income taxes are determined using enacted tax rates for the effect of temporary differences between the book and tax bases of recorded assets and liabilities. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Provisions are made for both U.S. and any foreign deferred income tax liability or benefit. We recognize the tax benefit of an uncertain tax position only if it is more likely than not that the tax position will be sustained by the taxing authorities, based on the technical merits of the position. In fiscal 2011 and 2010, we elected to permanently reinvest the earnings of certain of our foreign subsidiaries outside the U.S. rather than repatriating the earnings to the U.S. See the section titled “Liquidity and Capital Resources” in this MD&A and Note 16 of the Notes to the Consolidated Financial Statements for additional information on income taxes and permanent reinvestment.

Commitments and Contingencies

We have entered into certain unconditional purchase obligations, which include noncancelable purchase commitments and take-or-pay arrangements with suppliers. We review our agreements on a quarterly basis and make an assessment of the likelihood of a shortfall in purchases and determine if it is necessary to record a liability. In addition, we are subject to the possibility of various loss contingencies arising in the ordinary course of business such as a legal proceeding or claim. An estimated loss contingency is accrued when it is probable that an asset has been impaired or a liability has been incurred and the amount of the loss can be reasonably estimated. We regularly evaluate current information available to us to determine whether such accruals should be adjusted and whether new accruals are required.

Effects of Recent Accounting Pronouncements

See Note 2 to the Consolidated Financial Statements for a description of recent accounting pronouncements including the expected dates of adoption and effects on our results of operations, financial position and cash flows.

Results of Operations

The following table sets forth, for the periods indicated, the percentage of revenue of certain line items included in our historical statements of income:

	Year Ended September 30,		
	2011	2010	2009
Revenue	100.0%	100.0%	100.0%
Cost of goods sold	51.9	50.1	55.9
Gross profit	48.1	49.9	44.1
Research, development and technical	13.1	12.7	16.5
Selling and marketing	6.7	6.6	7.6
General and administrative	10.3	12.5	14.0
Purchased in-process research and development	—	—	0.5
Operating income	18.0	18.1	5.5
Other income (expense), net	(0.3)	(0.2)	0.2
Income before income taxes	17.7	17.9	5.7
Provision for income taxes	6.1	5.8	1.9
Net income	11.6%	12.1%	3.8%

Year Ended September 30, 2011, Versus Year Ended September 30, 2010

Revenue

Revenue was \$445.4 million in fiscal 2011, which represented an increase of 9.1%, or \$37.2 million, from fiscal 2010. The increase in revenue was driven by a \$35.6 million increase in sales volume, a \$5.5 million increase due to the effect of foreign exchange rate changes, and a \$4.7 million increase due to a higher-priced product mix. These increases were partially offset by an \$8.9 million decrease in revenue due to a lower weighted-average selling price for our CMP consumables. The economic and industry growth that we saw during fiscal 2010 continued into fiscal 2011. However, we saw some softening of demand in the semiconductor industry in the second half of fiscal 2011 based on certain factors, including general uncertainty in the global economy and a modest correction of integrated circuit (IC) device inventory. Some industry analysts currently project this softening of demand to persist through the first half of our fiscal 2012, so we are cautious regarding future demand trends within the semiconductor industry.

Cost of Goods Sold

Total cost of goods sold was \$231.3 million in fiscal 2011, which represented an increase of 13.0%, or \$26.6 million, from fiscal 2010. The increase in cost of goods sold was primarily due to \$17.8 million from increased sales volume due to the increased demand for our products, a \$9.5 million increase due to the effect of foreign exchange rate changes, a \$6.9 million increase due to higher fixed manufacturing costs, a \$1.8 million increase due to higher freight and packaging costs, a \$1.3 million increase due to certain production variances and a \$0.7 million increase due to higher sample costs. These increases were partially offset by an \$11.5 million decrease in cost of goods sold due to a lower-cost product mix.

Metal oxides, such as silica and alumina, are significant raw materials that we use in many of our CMP slurries. In an effort to mitigate our risk to rising raw material costs and to increase supply assurance and quality performance requirements, we have entered into multi-year supply agreements with a number of suppliers. For more financial information about our supply contracts, see "Tabular Disclosure of Contractual Obligations" included in Item 7 of Part II of this Form 10-K.

Our need for additional quantities or different kinds of key raw materials in the future has required, and will continue to require, that we enter into new supply arrangements with third parties. Future arrangements may result in costs which are different from those in the existing agreements. In addition, a number of factors could impact the future cost of raw materials, packaging, freight and labor. We also expect to continue to invest in our operations excellence initiative to improve product quality, reduce variability and improve product yields in our manufacturing process.

Gross Profit

Our gross profit as a percentage of revenue was 48.1% in fiscal 2011 as compared to 49.9% for fiscal 2010. The decrease in gross profit as a percentage of revenue was primarily due to higher fixed manufacturing costs, the negative effects of foreign exchange rate changes, selective price decreases and the absence of a raw material supplier credit we recognized in the first quarter of fiscal 2010 related to our achieving a certain volume threshold in calendar 2009, partially offset by a higher-valued product mix. We expect our gross profit percentage for full fiscal year 2012 to be in the range of 46% to 48%. However, we may experience fluctuations in our gross profit due to a number of factors, including the extent to which we utilize our manufacturing capacity and changes in our product mix, which may cause our quarterly gross profit to be above or below this range.

Research, Development and Technical

Total research, development and technical expenses were \$58.0 million in fiscal 2011, which represented an increase of 12.0%, or \$6.2 million, from fiscal 2010. The increase was primarily due to \$3.6 million in higher staffing-related costs, related to higher staffing levels and separation costs related to the transition of one of our executive officers, and \$2.2 million in higher expenses for clean room materials.

Our research, development and technical efforts are focused on the following main areas:

- Research related to fundamental CMP technology;
- Development and formulation of new and enhanced CMP consumable products, including collaborating on joint development projects with our customers;
- Process development to support rapid and effective commercialization of new products;
- Technical support of CMP products in our customers' manufacturing facilities; and
- Evaluation and development of new polishing and metrology applications outside of the semiconductor industry.

Selling and Marketing

Selling and marketing expenses were \$29.8 million in fiscal 2011, which represented an increase of 10.7%, or \$2.9 million, from fiscal 2010. The increase was primarily due to \$1.3 million in higher staffing-related costs, \$0.6 million in higher travel-related costs and \$0.4 million in higher miscellaneous selling expenses.

General and Administrative

General and administrative expenses were \$45.9 million in fiscal 2011, which represented a decrease of 9.6%, or \$4.9 million, from fiscal 2010. The decrease was primarily due to \$6.8 million in lower professional fees, including costs to enforce our intellectual property, partially offset by \$1.1 million in higher staffing-related costs and \$0.6 million in higher depreciation expense. See Part I, Item 3 entitled "Legal Proceedings" and Note 17 of the Notes to the Consolidated Financial Statements for more information on the enforcement of our intellectual property.

Other Income (Expense), Net

Other expense was \$1.5 million in fiscal 2011, compared to \$0.7 million during fiscal 2010. The increase in other expense was primarily due to \$1.1 million in foreign exchange effects, primarily related to changes in the exchange rate of the Japanese yen and the New Taiwan dollar to the U.S. dollar, net of the gains and losses

incurred on forward foreign exchange contracts discussed in Note 10 of the Notes to the Consolidated Financial Statements.

Provision for Income Taxes

Our effective income tax rate was 34.5% in fiscal 2011 compared to 32.5% in fiscal 2010. The increase in the effective tax rate was primarily due to a number of factors related to share-based compensation expense, including tax impacts of stock option exercises and the vesting of restricted stock for certain employees, and taxable executive compensation in excess of limits defined in section 162(m) of the Internal Revenue Code, partially offset by the reinstatement of the U.S. research and experimentation tax credit in December 2010, which was retroactively effective as of January 1, 2010. As discussed in the "Overview" section of this MD&A, our income tax provision in fiscal 2011 included adjustments to correct prior period amounts, including \$0.7 million in tax expense related to executive compensation in fiscal 2008 through 2010 for which a previous tax benefit should not have been recorded, and the reversal of a \$0.5 million deferred tax asset related to certain share-based compensation expense.

Net Income

Net income was \$51.7 million in fiscal 2011, which represented an increase of 4.5%, or \$2.2 million, from fiscal 2010. The increase was primarily due to increased sales volume, partially offset by a lower gross margin percentage, increased operating expenses and a higher effective tax rate.

Year Ended September 30, 2010, Versus Year Ended September 30, 2009

Revenue

Revenue was \$408.2 million in fiscal 2010, which represented an increase of 40.1%, or \$116.8 million, from fiscal 2009. The increase in revenue was driven by a \$118.3 million increase in sales volume, a \$4.8 million increase due to the effect of foreign exchange rate changes, and \$2.6 million due to a slightly higher-priced product mix, partially offset by a decrease in revenue of \$8.9 million due to a lower weighted-average selling price for our CMP consumable products. We began to see improvement in economic and industry conditions during the second half of our fiscal 2009. These improvements, particularly in the semiconductor industry, continued through our fiscal 2010 and positively impacted the demand for our products.

Cost of Goods Sold

Total cost of goods sold was \$204.7 million in fiscal 2010, which represented an increase of 25.6%, or \$41.8 million, from fiscal 2009. The increase in cost of goods sold was primarily due to \$59.4 million from increased sales volume due to the increased demand for our products associated with the economic and industry recovery, and an \$8.4 million increase due to higher fixed costs. These costs were partially offset by a \$16.2 million decrease due to higher utilization of our manufacturing capacity on the increased sales volume, and a \$10.7 million benefit of a lower-cost product mix.

Gross Profit

Our gross profit as a percentage of revenue was 49.9% in fiscal 2010 as compared to 44.1% for fiscal 2009. The increase in gross profit as a percentage of revenue was primarily due to the significant increase in sales volume and the related increased utilization of our manufacturing capacity, as well as a higher-valued product mix, partially offset by a decrease in the weighted-average selling price of our CMP slurries and increased fixed manufacturing costs.

Research, Development and Technical

Total research, development and technical expenses were \$51.8 million in fiscal 2010, which represented an increase of 7.6%, or \$3.7 million, from fiscal 2009. The increase was mainly due to \$3.6 million in higher staffing-related costs, primarily related to our AIP, \$0.6 million in higher travel-related costs, and \$0.2 million in higher office equipment expenses, partially offset by the absence of \$1.1 million in pre-tax impairment charges recorded on certain research and development equipment during fiscal 2009.

Selling and Marketing

Selling and marketing expenses were \$26.9 million in fiscal 2010, which represented an increase of 20.9%, or \$4.6 million, from fiscal 2009. The increase was primarily due to \$2.6 million in higher staffing related costs, including costs associated with our AIP, \$1.0 million in higher travel-related costs, \$0.4 million in higher depreciation expense, and \$0.3 million in higher professional fees.

General and Administrative

General and administrative expenses were \$50.8 million in fiscal 2010, which represented an increase of 25.0%, or \$10.2 million, from fiscal 2009. The increase was mainly due to \$6.0 million in higher staffing-related costs, primarily related to our AIP, \$4.2 million in higher professional

fees, including costs to enforce our intellectual property, and \$0.5 million in higher travel-related expenses, partially offset by \$0.9 million due to lower bad debt expense. See Part I, Item 3 entitled "Legal Proceedings" and Note 17 of the Notes to the Consolidated Financial Statements for more information on the enforcement of our intellectual property.

Purchased In-Process Research and Development

Purchased in-process research and development (IPR&D) expense was \$1.4 million in fiscal 2009, related to the acquisition of Epoch in the second quarter of fiscal 2009. We did not make any acquisitions in fiscal 2010.

Other Income (Expense), Net

Other expense was \$0.7 million in fiscal 2010, compared to other income of \$0.6 million during fiscal 2009. The decrease in other income was primarily due to \$0.8 million in lower interest income resulting from lower interest rates on our cash balances and investments, and \$0.7 million due to net unfavorable foreign exchange effects, primarily related to changes in the exchange rate of the Japanese yen to the U.S. dollar, net of the gains and losses incurred on forward foreign exchange contracts discussed in Note 10 of the Notes to the Consolidated Financial Statements.

Provision for Income Taxes

Our effective income tax rate was 32.5% in fiscal 2010 compared to 32.7% in fiscal 2009. The decreases in the effective tax rate in fiscal 2010 was primarily due to our election to permanently reinvest earnings from certain of our foreign subsidiaries outside of the U.S., as well as decreased tax expense related to share-based compensation. Increases in the effective tax rate in fiscal 2010 that partially offset these decreases included decreases in tax-exempt interest income and the expiration of the research and experimentation tax credit effective December 31, 2009, which was not retroactively reinstated for our fiscal 2010 until the first quarter of our fiscal 2011.

Net Income

Net income was \$49.5 million in fiscal 2010, which represented an increase of 342.1%, or \$38.3 million, from fiscal 2009 as a result of the factors discussed above. The election to permanently reinvest the earnings of certain of our foreign subsidiaries outside the U.S. increased net income by \$2.0 million in fiscal 2010.

Liquidity and Capital Resources

We had cash flows from operating activities of \$93.6 million in fiscal 2011, \$88.4 million in fiscal 2010 and \$44.7 million in fiscal 2009. Our cash provided by operating activities in fiscal 2011 originated from \$51.7 million in net income, \$41.0 million in non-cash items, and a \$0.9 million increase in cash flow due to a net decrease in working capital. The increase in cash from operations in fiscal 2011 from fiscal 2010 was primarily due to increased net income and deferred tax expense, as well as decreased accounts receivable in fiscal 2011, partially offset by an increase in working capital associated with higher inventories and lower accrued expenses and accounts payable. The decrease in accounts receivable was primarily due to improved cash collections in fiscal 2011. The increase in inventories was primarily due to a general inventory build to meet the increased customer demand we experienced in fiscal 2011. The decrease in accrued expenses was primarily due to the payment made in the first quarter of fiscal 2011 of our fiscal 2010 annual incentive cash bonus, partially offset by the accrual of our fiscal 2011 annual incentive cash bonus, which we expect will be paid in the first quarter of fiscal 2012.

We used \$28.2 million in investing activities in fiscal 2011 representing \$28.1 million in purchases of property, plant and equipment and \$0.1 million in other investing cash outflows. Capital expenditures in fiscal 2011 included the construction of our new facility in South Korea and capacity expansions of our Japan and Singapore facilities, net of the amounts that remain in accounts payable and accrued expenses at year end. We used \$11.9 million in investing activities in fiscal 2010 representing \$11.7 million in purchases of property, plant and equipment and \$0.2 million in other investing cash outflows. We used \$69.0 million in investing activities in fiscal 2009, representing \$60.5 million used for our acquisition of Epoch, net of \$6.2 million in cash acquired, and \$8.5 million in purchases of property, plant and equipment. See Note 3 and Note 7 of the Notes to the Consolidated Financial Statements for more information on business combinations and intangible assets. We estimate that our total capital expenditures in fiscal 2012 will be between \$25 million and \$30 million.

In fiscal 2011, cash flows used in financing activities were \$17.9 million. We used \$54.1 million to repurchase common stock under our share repurchase program, \$1.4 million to repurchase common stock pursuant to the terms of our Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive

Plan (EIP) for shares withheld from employees to cover payroll taxes on the vesting of restricted stock awarded under the EIP, and we made \$1.3 million in principal payments under capital lease obligations. These cash outflows were partially offset by \$38.1 million received from the issuance of common stock related to the exercise of stock options granted under our EIP and our 2007 Employee Stock Purchase Plan, as amended and restated January 1, 2010 (ESPP). In addition, we received \$0.8 million in tax benefits related to stock options exercised and vesting of restricted stock awarded under our EIP. In fiscal 2010, cash flows used in financing activities were \$23.5 million. We used \$25.0 million to repurchase common stock under our share repurchase plan, \$0.8 million to repurchase common stock pursuant to the terms of our EIP for shares withheld from employees and purchased by the Company to cover payroll taxes on the vesting of restricted stock awarded under the EIP, and we made \$1.2 million in principal payments under capital lease obligations. These cash outflows were partially offset by \$3.4 million received from the issuance of common stock related to the exercise of stock options granted under our EIP and our ESPP. In fiscal 2009, cash flows provided by financing activities were \$0.7 million. We received \$2.2 million from the issuance of common stock related to the exercise of stock options granted under our EIP and our ESPP. These cash inflows were partially offset by \$1.1 million in principal payments on capital leases and \$0.3 million in repurchases of common stock pursuant to the terms of our EIP for shares withheld to cover payroll taxes on the vesting of restricted stock awarded under the EIP.

In January 2008, our Board of Directors authorized a share repurchase program for up to \$75.0 million of our outstanding common stock. We repurchased 564,568 shares for \$25.0 million in fiscal 2011 under this program, which was completed during the fiscal quarter ended March 31, 2011. We also repurchased 723,184 shares for \$25.0 million during fiscal 2010 under this program. In November 2010, our Board of Directors authorized a new share repurchase program for up to \$125.0 million of our outstanding common stock, which became effective on the authorization date. We repurchased 671,100 shares for \$29.1 million during fiscal 2011 under this new program. Share repurchases are made from time to time, depending on market conditions, in open market transactions, at management's discretion. We fund share purchases under these programs from our available cash balance.

We have an unsecured revolving credit facility of \$50.0 million with an option to increase the facility to \$80.0 million. Pursuant to an amendment we entered into in October 2008, the agreement extends through October 2011, with an option to renew for two additional one-year terms. In November 2010, the scheduled termination date was extended by one year through October 2012 and in August 2011, the scheduled termination date was extended another year through October 2013. Under this agreement, interest accrues on any outstanding balance at either the lending institution's base rate or the Eurodollar rate plus an applicable margin. We also pay a non-use fee. Loans under this facility are intended primarily for general corporate purposes, including financing working capital, capital expenditures and acquisitions. The credit agreement also contains various covenants. No amounts are currently outstanding under this credit facility and we believe we are currently in compliance with the covenants.

As of September 30, 2011, we had \$302.5 million of cash and cash equivalents, \$29.1 million of which was held at foreign subsidiaries in Singapore and Taiwan where we have made a current election to permanently reinvest the earnings rather than repatriate the earnings to the U.S. If we choose to repatriate these earnings in the future through dividends or loans to the U.S. parent company, the earnings could become subject to additional income tax expense.

We believe that our current balance of cash and long-term investments, cash generated by our operations and available borrowings under our revolving credit facility will be sufficient to fund our operations, expected capital expenditures, general merger and acquisition activities, and share repurchases for the foreseeable future. However, we plan to further expand our business; therefore, we may need to raise additional funds in the future through equity or debt financing, strategic relationships or other arrangements. Depending upon conditions in the capital and credit markets, we could encounter difficulty securing additional financing in the type or amount necessary to pursue these objectives.

Off-Balance Sheet Arrangements

At September 30, 2011 and 2010, we did not have any unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which might have been established for the purpose of facilitating off-balance sheet arrangements.

Tabular Disclosure of Contractual Obligations

The following summarizes our contractual obligations at September 30, 2011, and the effect such obligations are expected to have on our liquidity and cash flow in future periods.

Contractual Obligations (In millions)	Total	Less Than			
		1 Year	1-3 Years	3-5 Years	After 5 Years
Operating leases	\$10.2	\$ 3.6	\$3.6	\$1.7	\$1.3
Purchase obligations	33.4	31.4	1.1	0.3	0.6
Other long-term liabilities	6.3	—	—	—	6.3
Total contractual obligations	\$49.9	\$35.0	\$4.7	\$2.0	\$8.2

Operating Leases

We lease certain vehicles, warehouse facilities, office space, machinery and equipment under cancelable and noncancelable operating leases, most of which expire within ten years of their respective commencement dates and may be renewed by us. Operating lease obligations also include certain costs associated with our pad finishing operation located at Taiwan Semiconductor Manufacturing Company, which are accounted for as operating lease payments.

Purchase Obligations

We have entered into multi-year supply agreements with Cabot Corporation, our former parent company which is not a related party, for the purchase of certain fumed metal oxides. We purchase fumed silica primarily under a fumed silica supply agreement with Cabot Corporation that became effective in January 2004, and was amended in September 2006 and in April 2008, the latter of which extended the termination date of the agreement from December 2009 to December 2012 and also changed the pricing and some other non-material terms of the agreement to the benefit of both parties. We are generally obligated to purchase fumed silica for at least 90% of our six-month volume forecast for certain of our slurry products, to purchase certain minimum quantities every six months, and to pay for the shortfall if we purchase less than these amounts. We currently anticipate meeting all minimum forecasted purchase volume requirements. Since December 2001, we have purchased fumed alumina primarily under a fumed alumina supply agreement with Cabot Corporation that has an original term ending in December 2006 and was renewed for another five-year term ending in December 2011. Prices charged for fumed alumina from Cabot Corporation are pursuant to the terms of the supply

agreement and may fluctuate based upon the actual costs incurred by Cabot Corporation in the manufacture of fumed alumina. Under these agreements, Cabot Corporation continues to be the exclusive supplier of certain quantities and types of fumed silica and fumed alumina for certain products we produced as of the effective dates of these agreements. Subject to certain terms, Cabot Corporation is prohibited from selling certain types of fumed alumina to third parties for use in CMP applications, as well as engaging itself in CMP applications. If Cabot Corporation fails to supply us with our requirements for any reason, including if we require product specification changes that Cabot Corporation cannot meet, we have the right to purchase products meeting those specifications from other suppliers. We also may purchase fumed alumina and fumed silica from other suppliers for certain products, including those commercialized after certain dates related to these agreements and their amendments. Purchase obligations include an aggregate amount of \$7.8 million of contractual commitments related to our Cabot Corporation agreements for fumed silica and fumed alumina.

Other Long-Term Liabilities

Other long-term liabilities at September 30, 2011 consist of liabilities related to our Japan retirement allowance, which represents approximately \$4.9 million, our liability for future payments to be made under our Cabot Microelectronics Supplemental Employee Retirement Plan and our liability for uncertain tax positions.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Effect of Currency Exchange Rates and Exchange Rate Risk Management

We conduct business operations outside of the United States through our foreign operations. Some of our foreign operations maintain their accounting records in their local currencies. Consequently, period to period comparability of results of operations is affected by fluctuations in exchange rates. The primary currencies to which we have exposure are the Japanese yen and the New Taiwan dollar. As noted in the Overview section of Management's Discussion and Analysis of Financial Condition and Results of Operations, the negative effects of foreign exchange rate changes, primarily related to the Japanese yen, accounted for an approximate 1.5 percentage point decline in our gross profit margin in fiscal 2011 compared to fiscal 2010. From time to time

we enter into forward contracts in an effort to manage foreign currency exchange exposure on our balance sheet. However, we may be unable to hedge these exposures completely. During fiscal 2011, we recorded \$5.5 million in foreign currency translation gains that are included in other comprehensive income on our Consolidated Balance Sheet. These gains primarily relate to the revaluation of assets and liabilities denominated in the Japanese yen and the New Taiwan dollar at period end exchange rates. Approximately 13% of our revenue is transacted in currencies other than the U.S. dollar. However, we also incur expenses in foreign countries that are transacted in currencies other than the U.S. dollar, which reduces the net exposure on the Consolidated Statement of Income. We do not currently enter into forward exchange contracts or other derivative instruments for speculative or trading purposes.

Market Risk and Sensitivity Analysis Related to Foreign Exchange Rate Risk

Over the past 24 months, there has been a significant weakening of the U.S. dollar against the Japanese yen, which has had some negative impact on our results of operations. We have performed a sensitivity analysis assuming a hypothetical additional 10% adverse movement in foreign exchange rates. As of September 30, 2011, the analysis demonstrated that such market movements would not have a material adverse effect on our consolidated financial position, results of operations or cash flows over a one-year period. Actual gains and losses in the future may differ materially from this analysis based on changes in the timing and amount of foreign currency rate movements and our actual exposures.

Market Risk Related to Investments in Auction Rate Securities

At September 30, 2011, we owned two auction rate securities (ARS) with a total estimated fair value of \$8.1 million (\$8.3 million par value) which were classified as other long-term assets on our Consolidated Balance Sheet. Beginning in 2008, general uncertainties in the global credit markets significantly reduced liquidity in the ARS market, and this illiquidity continues. For more information on our ARS, see "Risk Factors" set forth in Part I, Item 1A, "Critical Accounting Policies and Estimates" in Management's Discussion and Analysis of Financial Condition and Results of Operations in Part II, Item 7, and Notes 4 and 8 of the Notes to the Consolidated Financial Statements in Part II, Item 8 of this Annual Report on Form 10-K.

Item 8. Financial Statements and Supplementary Data

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All other schedules are omitted, because they are not required, are not applicable, or the information is included in the consolidated financial statements and notes thereto.	

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of
Cabot Microelectronics Corporation:

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of Cabot Microelectronics Corporation and its subsidiaries at September 30, 2011 and 2010, and the results of their operations and their cash flows for each of the three years in the period ended September 30, 2011 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. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 30, 2011, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included 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. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial

reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide 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.

PricewaterhouseCoopers LLP

Chicago, IL
November 22, 2011

CABOT MICROELECTRONICS CORPORATION
CONSOLIDATED STATEMENTS OF INCOME

(In thousands, except per share amounts)

	Year Ended September 30,		
	2011	2010	2009
Revenue	\$445,442	\$408,201	\$291,372
Cost of goods sold	231,336	204,704	162,918
Gross profit	214,106	203,497	128,454
Operating expenses:			
Research, development and technical	58,035	51,818	48,150
Selling and marketing	29,758	26,885	22,239
General and administrative	45,928	50,783	40,632
Purchased in-process research and development	—	—	1,410
Total operating expenses	133,721	129,486	112,431
Operating income	80,385	74,011	16,023
Other income (expense), net	(1,473)	(734)	599
Income before income taxes	78,912	73,277	16,622
Provision for income taxes	27,250	23,819	5,435
Net income	\$ 51,662	\$ 49,458	\$ 11,187
Basic earnings per share	\$ 2.26	\$ 2.14	\$ 0.48
Weighted-average basic shares outstanding	22,896	23,084	23,079
Diluted earnings per share	\$ 2.20	\$ 2.13	\$ 0.48
Weighted-average diluted shares outstanding	23,435	23,273	23,096

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

CABOT MICROELECTRONICS CORPORATION
CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share amounts)

	September 30,	
	2011	2010
Assets		
Current assets:		
Cash and cash equivalents	\$ 302,546	\$ 254,164
Accounts receivable, less allowance for doubtful accounts of \$1,090 at September 30, 2011, and \$1,121 at September 30, 2010	52,747	57,456
Inventories	56,128	51,896
Prepaid expenses and other current assets	14,735	13,973
Deferred income taxes	4,249	3,540
Total current assets	430,405	381,029
Property, plant and equipment, net	130,791	115,811
Goodwill	41,148	40,436
Other intangible assets, net	14,651	17,089
Deferred income taxes	862	8,044
Other long-term assets	10,372	9,347
Total assets	\$ 628,229	\$ 571,756
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 22,436	\$ 17,521
Capital lease obligations	10	1,296
Accrued expenses and other current liabilities	33,104	34,513
Total current liabilities	55,550	53,330
Capital lease obligations, net of current portion	2	12
Other long-term liabilities	6,323	4,071
Total liabilities	61,875	57,413
Commitments and contingencies (Note 17)		
Stockholders' equity:		
Common stock: Authorized: 200,000,000 shares, \$0.001 par value; Issued: 27,652,336 shares at September 30, 2011, and 26,384,715 shares at September 30, 2010	28	26
Capital in excess of par value of common stock	278,360	228,103
Retained earnings	435,429	383,767
Accumulated other comprehensive income	24,127	18,538
Treasury stock at cost, 4,715,577 shares at September 30, 2011, and 3,446,069 shares at September 30, 2010	(171,590)	(116,091)
Total stockholders' equity	566,354	514,343
Total liabilities and stockholders' equity	\$ 628,229	\$ 571,756

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

CABOT MICROELECTRONICS CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Year Ended September 30,		
	2011	2010	2009
Cash flows from operating activities:			
Net income	\$ 51,662	\$ 49,458	\$ 11,187
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	23,992	24,994	24,832
Purchased in-process research and development	—	—	1,410
Provision for doubtful accounts	(18)	(113)	856
Share-based compensation expense	12,646	11,643	12,802
Deferred income tax expense (benefit)	4,934	(2,150)	(2,064)
Non-cash foreign exchange gain	(212)	(498)	(2,731)
Loss on disposal of property, plant and equipment	140	107	235
Impairment of property, plant and equipment	198	158	1,245
Other	(723)	92	938
Changes in operating assets and liabilities:			
Accounts receivable	6,623	(1,985)	(8,519)
Inventories	(2,816)	(5,715)	8,084
Prepaid expenses and other assets	(658)	(6,021)	4,889
Accounts payable	(1,021)	1,555	(464)
Accrued expenses, income taxes payable and other liabilities	(1,181)	16,860	(8,003)
Net cash provided by operating activities	<u>93,566</u>	<u>88,385</u>	<u>44,697</u>
Cash flows from investing activities:			
Additions to property, plant and equipment	(28,052)	(11,657)	(8,493)
Proceeds from the sale of property, plant and equipment	41	2	1
Acquisition of business, net of cash acquired	—	—	(60,520)
Purchase of intangible assets	(200)	(315)	—
Proceeds from the sale of investments	25	50	50
Net cash used in investing activities	<u>(28,186)</u>	<u>(11,920)</u>	<u>(68,962)</u>
Cash flows from financing activities:			
Repurchases of common stock	(55,499)	(25,764)	(336)
Net proceeds from issuance of stock	38,051	3,429	2,206
Tax benefits associated with the share-based compensation expense	830	—	—
Principal payments under capital lease obligations	(1,296)	(1,210)	(1,129)
Net cash provided by (used in) financing activities	<u>(17,914)</u>	<u>(23,545)</u>	<u>741</u>
Effect of exchange rate changes on cash	916	1,292	2,009
Increase (decrease) in cash	48,382	54,212	(21,515)
Cash and cash equivalents at beginning of year	254,164	199,952	221,467
Cash and cash equivalents at end of year	<u>\$302,546</u>	<u>\$254,164</u>	<u>\$199,952</u>
Supplemental disclosure of cash flow information:			
Cash paid for income taxes	\$ 19,788	\$ 29,174	\$ 4,283
Cash paid for interest	\$ 158	\$ 257	\$ 338
Supplemental disclosure of non-cash investing and financing activities:			
Purchases of property, plant and equipment in accrued liabilities and accounts payable at the end of period	\$ 6,322	\$ 974	\$ 429
Issuance of restricted stock	\$ 6,774	\$ 4,985	\$ 4,209

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

CABOT MICROELECTRONICS CORPORATION
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

(In thousands)

	Common Stock	Capital in Excess of Par	Retained Earnings	Accumulated Other Comprehensive Income	Comprehensive Income (Net of tax)	Treasury Stock	Total
Balance at September 30, 2008	\$26	\$ 198,022	\$ 323,122	\$ 3,054		\$ (89,991)	\$ 434,233
Share-based compensation expense		12,802					12,802
Repurchases of common stock—other, at cost						(336)	(336)
Exercise of stock options		680					680
Issuance of Cabot Microelectronics restricted stock under deposit share plan		170					170
Issuance of Cabot Microelectronics stock under Employee Stock Purchase Plan		1,357					1,357
Net income			11,187		\$11,187		
Foreign currency translation adjustment				10,275	10,275		
Minimum pension liability adjustment				361	361		
Total comprehensive income					\$21,823		21,823
Balance at September 30, 2009	\$26	\$ 213,031	\$ 334,309	\$ 13,690		\$ (90,327)	\$ 470,729
Share-based compensation expense		11,643					11,643
Repurchases of common stock under share repurchase plans, at cost						(24,998)	(24,998)
Repurchases of common stock—other, at cost						(766)	(766)
Exercise of stock options		2,283					2,283
Issuance of Cabot Microelectronics restricted stock under deposit share plan		45					45
Issuance of Cabot Microelectronics stock under Employee Stock Purchase Plan		1,101					1,101
Net income			49,458		\$49,458		
Foreign currency translation adjustment				4,580	4,580		
Minimum pension liability adjustment				268	268		
Total comprehensive income					\$54,306		54,306
Balance at September 30, 2010	\$26	\$ 228,103	\$ 383,767	\$ 18,538		\$ (116,091)	\$ 514,343
Share-based compensation expense		12,646					12,646
Repurchases of common stock under share repurchase plans, at cost						(54,106)	(54,106)
Repurchases of common stock—other, at cost						(1,393)	(1,393)
Exercise of stock options	2	35,953					35,955
Issuance of Cabot Microelectronics restricted stock under deposit share plan		145					145
Issuance of Cabot Microelectronics stock under Employee Stock Purchase Plan		1,951					1,951
Deferred tax effect of long-term incentives		(700)					(700)
Tax deduction for the exercise of stock options granted prior to the adoption of ASC 718		262					262
Net income			51,662		\$51,662		
Foreign currency translation adjustment				5,490	5,490		
Minimum pension liability adjustment				99	99		
Total comprehensive income					\$57,251		57,251
Balance at September 30, 2011	\$28	\$278,360	\$435,429	\$24,127		\$(171,590)	\$566,354

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

CABOT MICROELECTRONICS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except share and per share amounts)

1. Background and Basis of Presentation

Cabot Microelectronics Corporation ("Cabot Microelectronics", "the Company", "us", "we" or "our") supplies high-performance polishing slurries and pads used in the manufacture of advanced integrated circuit (IC) devices within the semiconductor industry, in a process called chemical mechanical planarization (CMP). CMP polishes surfaces at an atomic level, thereby enabling IC device manufacturers to produce smaller, faster and more complex IC devices with fewer defects. We develop, produce and sell CMP slurries for polishing many of the conducting and insulating materials used in IC devices, and also for polishing the disk substrates and magnetic heads used in hard disk drives. We also develop, manufacture and sell CMP polishing pads, which are used in conjunction with slurries in the CMP process. We also pursue other demanding surface modification applications through our Engineered Surface Finishes (ESF) business where we believe we can leverage our expertise in CMP consumables for the semiconductor industry to develop products for demanding polishing applications in other industries.

The audited consolidated financial statements have been prepared by us pursuant to the rules of the Securities and Exchange Commission (SEC) and accounting principles generally accepted in the United States of America. We operate predominantly in one industry segment—the development, manufacture, and sale of CMP consumables.

Results of Operations

The results of operations for the fiscal year ended September 30, 2011 include certain adjustments to correct prior period amounts, which we have determined to be immaterial to the current period and the prior periods to which they relate. Adjustments in fiscal 2011 listed below, the first four of which were made in the first two quarters of the fiscal year, related to: (1) \$1,474 (\$1,014, net of tax) in employer-paid fringe benefits for required contributions to our 401(k) Plan, Supplemental Employee Retirement Plan, and non-United States statutory pension plans as a result of our annual payment pursuant to our fiscal 2010 annual incentive cash bonus program (AIP); (2) income tax expense of \$671 recorded for certain compensation in fiscal 2008 through 2010 for which a previous tax benefit should not have been recorded; (3) the reversal of a \$497 deferred tax asset regarding certain share-based compensation expense which is not subject to such tax treatment; (4) our under-accrual of \$290 (\$199, net of tax) for payments made pursuant to the AIP as a result of the calculation of results against goals under the AIP; and

(5) other immaterial corrections to deferred tax assets and liabilities that reduced our income tax expense by \$101. Collectively, these adjustments reduced net income for fiscal 2011 by \$2,280 and diluted earnings per share by approximately \$0.10.

2. Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of Cabot Microelectronics and its subsidiaries. All inter-company transactions and balances between the companies have been eliminated as of September 30, 2011.

Use of Estimates

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, assumptions and estimates that affect the amounts reported in the consolidated financial statements and accompanying notes. The accounting estimates that require management's most difficult and subjective judgments include, but are not limited to, those estimates related to bad debt expense, warranty obligations, inventory valuation, valuation and classification of auction rate securities, impairment of long-lived assets and investments, business combinations, goodwill, other intangible assets, share-based compensation, income taxes and contingencies. We base our estimates on historical experience, current conditions and on various other assumptions that we believe are reasonable under the circumstances. However, future events are subject to change and estimates and judgments routinely require adjustment. Actual results may differ from these estimates under different assumptions or conditions.

Cash, Cash Equivalents and Short-Term Investments

We consider investments in all highly liquid financial instruments with original maturities of three months or less to be cash equivalents. Short-term investments include securities generally having maturities of 90 days to one year. We did not own any securities that were considered short-term as of September 30, 2011 or 2010. See Note 4 for a more detailed discussion of other financial instruments.

Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. We maintain an allowance for doubtful accounts for estimated losses resulting from the potential inability of our customers to make

required payments. Our allowance for doubtful accounts is based on historical collection experience, adjusted for any specific known conditions or circumstances such as customer bankruptcies and increased risk due to economic conditions. Uncollectible account balances are charged against the allowance when we believe that it is probable that the receivable will not be recovered. See Schedule II under Part IV, Item 15 of this Form 10-K for more information on our allowance for doubtful accounts.

Concentration of Credit Risk

Financial instruments that subject us to concentrations of credit risk consist principally of accounts receivable. We perform ongoing credit evaluations of our customers' financial conditions and generally do not require collateral to secure accounts receivable. Our exposure to credit risk associated with nonpayment is affected principally by conditions or occurrences within the semiconductor industry and global economy. We historically have not experienced material losses relating to accounts receivable from individual customers or groups of customers.

Customers who represented more than 10% of revenue are as follows:

	Year Ended September 30,		
	2011	2010	2009
Taiwan Semiconductor Manufacturing Co. (TSMC)	17%	18%	17%
Samsung	10%	*	*
United Microelectronics Corporation (UMC)	*	11%	*

*Denotes less than ten percent of total

TSMC accounted for 12.9% and 13.6% of net accounts receivable at September 30, 2011 and 2010, respectively. Samsung accounted for 11.4% of net accounts receivable at September 30, 2011. UMC accounted for 7.1% and 9.2% of net accounts receivable at September 30, 2011 and 2010, respectively.

Fair Values of Financial Instruments

The recorded amounts of cash, accounts receivable, and accounts payable approximate their fair values due to their short-term, highly liquid characteristics. The fair value of our long-term auction rate securities (ARS) is determined through discounted cash flow analyses. See Note 4 for a more detailed discussion of the fair value of financial instruments.

Inventories

Inventories are stated at the lower of cost, determined on the first-in, first-out (FIFO) basis, or market. Finished goods and work in process inventories include material, labor and manufacturing overhead costs. We regularly review and write down the value of inventory as required for estimated obsolescence or unmarketability. An inventory reserve is maintained based upon a historical

percentage of actual inventories written off applied against inventory value at the end of the period, adjusted for known conditions and circumstances.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Depreciation is based on the following estimated useful lives of the assets using the straight-line method:

Buildings	15–25 years
Machinery and equipment	3–10 years
Furniture and fixtures	5–10 years
Information systems	3–5 years
Assets under capital leases	Term of lease or estimated useful life

Expenditures for repairs and maintenance are charged to expense as incurred. Expenditures for major renewals and betterments are capitalized and depreciated over the remaining useful lives. As assets are retired or sold, the related cost and accumulated depreciation are removed from the accounts and any resulting gain or loss is included in the results of operations. We capitalize the costs related to the design and development of software used for internal purposes.

Impairment of Long-Lived Assets

Reviews are regularly performed to determine whether facts and circumstances exist that indicate the carrying amount of assets may not be recoverable or the useful life is shorter than originally estimated. Asset recoverability assessment begins by comparing the projected undiscounted cash flows associated with the related asset or group of assets over their remaining lives against their respective carrying amounts. Impairment, if any, is based on the excess of the carrying amount over the fair value of those assets. If assets are determined to be recoverable, but their useful lives are shorter than originally estimated, the net book value of the asset is depreciated over the newly determined remaining useful life.

Goodwill and Intangible Assets

We amortize intangible assets with finite lives over their estimated useful lives, which range from two to ten and one-half years. Intangible assets with finite lives are reviewed for impairment using a process similar to that used to evaluate other long-lived assets. Goodwill and indefinite-lived intangible assets are not amortized and are tested annually in the fourth fiscal quarter or more frequently if indicators of potential impairment exist, using a fair-value-based approach. The recoverability of goodwill is measured at the reporting unit level, which is defined as either an operating segment or one level below an operating segment, referred to as a component. A component is a reporting unit when the component constitutes a business for which discreet financial information is available and segment management regularly reviews the operating results of the component. Components may be combined into one reporting unit

when they have similar economic characteristics. We had three reporting units to which we allocated goodwill and intangible assets as of September 30, 2011. Goodwill impairment testing requires a comparison of the fair value of each reporting unit to the carrying value. If the carrying value exceeds fair value, goodwill is considered impaired. The amount of the impairment is the difference between the carrying value of goodwill and the "implied" fair value. The fair value of the reporting unit may be determined using a discounted cash flow analysis of our projected future results. As discussed later in this Note 2 under the heading "Effects of Recent Accounting Pronouncements", an entity now has the option to assess qualitative factors to determine if the two-step impairment test must be performed. We elected this option in fiscal 2011 when we performed our annual impairment review of goodwill. The recoverability of indefinite-lived intangible assets is measured using the royalty savings method, which requires a comparison between the fair value of the discounted royalty savings and the carrying value of the assets. We determined that goodwill and other intangible assets were not impaired as of September 30, 2011.

Warranty Reserve

We maintain a warranty reserve that reflects management's best estimate of the cost to replace product that does not meet customers' specifications and performance requirements. The warranty reserve is based upon a historical product return rate, adjusted for any specific known conditions or circumstances. Adjustments to the warranty reserve are recorded in cost of goods sold.

Foreign Currency Translation

Certain operating activities in Asia and Europe are denominated in local currency, considered to be the functional currency. Assets and liabilities of these operations are translated using exchange rates in effect at the end of the year, and revenue and costs are translated using weighted-average exchange rates for the year. The related translation adjustments are reported in comprehensive income in stockholders' equity.

Foreign Exchange Management

We transact business in various foreign currencies, primarily the Japanese yen and New Taiwan dollar. Our exposure to foreign currency exchange risks has not been significant because a large portion of our business is denominated in U.S. dollars. However, there has been a significant weakening of the U.S. dollar against the Japanese yen over the past 24 months, which has had some negative impact on our results of operations. As noted in the Overview section of Management's Discussion and Analysis of Financial Condition and Results of Operations, the negative effects of foreign exchange rate changes, primarily related to the Japanese yen, accounted for an approximate 1.5 percentage point

decline in our gross profit margin in fiscal 2011 compared to fiscal 2010. Periodically we enter into forward foreign exchange contracts in an effort to mitigate the risks associated with currency fluctuations on certain foreign currency balance sheet exposures. Our foreign exchange contracts do not qualify for hedge accounting under the accounting rules for derivative instruments. See Note 10 for a more detailed discussion of derivative financial instruments.

Intercompany Loan Accounting

We maintain intercompany loan agreements with our wholly-owned subsidiary, Nihon Cabot Microelectronics K.K. ("the K.K."), under which we provided funds to the K.K. to finance the purchase of certain assets from our former Japanese branch at the time of the establishment of this subsidiary, for the purchase of land adjacent to our Geino, Japan, facility, for the construction of our Asia Pacific technology center, and for the purchase of a 300 millimeter polishing tool and related metrology equipment, all of which are part of the K.K., as well as for general business purposes. Since settlement of the notes is expected in the foreseeable future, and our subsidiary has been consistently making timely payments on the loans, the loans are considered foreign-currency transactions. Therefore the associated foreign exchange gains and losses are recognized as other income or expense rather than being deferred in the cumulative translation account in other comprehensive income.

We also maintain intercompany loan agreements between some of our wholly-owned foreign subsidiaries, including Cabot Microelectronics Singapore Pte. Ltd., Epoch Material Co., Ltd. in Taiwan and Hanguk Cabot Microelectronics, LLC in South Korea. These loans provided funds for the construction of our new research, development and manufacturing facility in South Korea. These loans are also considered foreign currency transactions and are accounted for in the same manner as our intercompany loans to the K.K.

Purchase Commitments

We have entered into unconditional purchase obligations, which include noncancelable purchase commitments and take-or-pay arrangements with suppliers. We review our agreements and make an assessment of the likelihood of a shortfall in purchases and determine if it is necessary to record a liability.

Revenue Recognition

Revenue from CMP consumable products is recognized when title is transferred to the customer, provided acceptance and collectibility are reasonably assured. Title transfer generally occurs upon shipment to the customer or when inventory held on consignment is consumed by the customer, subject to the terms and conditions of the particular customer arrangement. We have consignment agreements with a number of our

customers that require, at a minimum, monthly consumption reports that enable us to record revenue and inventory usage in the appropriate period.

We market our products through distributors in a few areas of the world. We recognize revenue upon shipment and when title is transferred to the distributor. We do not have any arrangements with distributors that include payment terms, rights of return, or rights of exchange outside the normal course of business, or any other significant matters that would impact the timing of revenue recognition.

Within our Engineered Surface Finishes (ESF) business, sales of equipment are recorded as revenue upon delivery and customer acceptance. Amounts allocated to installation and training are deferred until those services are provided and are not material.

Revenues are reported net of any value-added tax or other such tax assessed by a governmental authority on our revenue-producing activities.

Shipping and Handling

Costs related to shipping and handling are included in cost of goods sold.

Research, Development and Technical

Research, development and technical costs are expensed as incurred and consist primarily of staffing costs, materials and supplies, depreciation, utilities and other facilities costs.

Income Taxes

Current income taxes are determined based on estimated taxes payable or refundable on tax returns for the current year. Deferred income taxes are determined using enacted tax rates for the effect of temporary differences between the book and tax bases of recorded assets and liabilities. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Provisions are made for both U.S. and any foreign deferred income tax liability or benefit. We recognize the tax benefit of an uncertain tax position only if it is more likely than not that the tax position will be sustained by the taxing authorities, based on the technical merits of the position. In fiscal 2011 and 2010, we elected to permanently reinvest the earnings of certain of our foreign subsidiaries outside the U.S. rather than repatriating the earnings to the U.S. See Note 16 for additional information on income taxes.

Share-Based Compensation

We record share-based compensation expense for all share-based awards, including stock option grants, restricted stock and restricted stock unit awards and employee stock purchase plan purchases. We calculate share-based compensation expense using the straight-line

approach based on awards ultimately expected to vest, which requires the use of an estimated forfeiture rate. Our estimated forfeiture rate is primarily based on historical experience, but may be revised in future periods if actual forfeitures differ from the estimate. We use the Black-Scholes option-pricing model to estimate the grant date fair value of our stock options and employee stock purchase plan purchases. This model requires the input of highly subjective assumptions, including the option's expected term, the price volatility of the underlying stock, the risk-free interest rate and the expected dividend rate, if any. A small change in the underlying assumptions can have a relatively large effect on the estimated valuation. We estimate the expected volatility of our stock based on a combination of our stock's historical volatility and the implied volatilities from actively-traded options on our stock. We calculate the expected term of our stock options using the simplified method, due to our limited amount of historical option exercise data, and we add a slight premium to this expected term for employees who would meet the definition of retirement eligible pursuant to the terms of their grant agreements during the contractual term of the grant. The simplified method uses an average of the vesting term and the contractual term of the option to calculate the expected term. The risk-free rate is derived from the U.S. Treasury yield curve in effect at the time of grant.

The fair value of our restricted stock and restricted stock unit awards represents the closing price of our common stock on the date of award.

For additional information regarding our share-based compensation plans, refer to Note 12.

Earnings Per Share

Basic earnings per share (EPS) is calculated by dividing net income available to common stockholders by the weighted-average number of common shares outstanding during the period. Diluted EPS is calculated by using the weighted-average number of common shares outstanding during the period increased to include the weighted-average dilutive effect of "in-the-money" stock options and unvested restricted stock shares using the treasury stock method.

Comprehensive Income

Comprehensive income primarily differs from net income due to foreign currency translation adjustments.

Effects of Recent Accounting Pronouncements

In October 2010, we adopted new accounting standards regarding the recognition of a controlling financial interest in a variable interest entity (VIE). The primary beneficiary of a VIE is defined as the enterprise that has both: 1) the power to direct the activities of a VIE that most significantly impact the entity's economic performance; and 2) the obligation to absorb losses of the entity that

could potentially be significant to the VIE or the right to receive benefits from the entity that could potentially be significant to the VIE. The new standards also require ongoing reassessments of whether an enterprise is the primary beneficiary of a VIE. The adoption of these new standards did not have any impact on our results of operations, financial position or cash flows as we do not currently have any interest or arrangements that are considered variable interest entities.

In October 2010, we adopted new accounting standards regarding the recognition of revenue for multiple deliverable revenue arrangements. The new standards modify the fair value requirements regarding the recognition of revenue under multiple deliverable arrangements by allowing the use of the best estimate of selling price in addition to vendor-specific objective evidence (VSOE) and third-party evidence (TPE) for determining the selling price of a deliverable. A vendor is now required to use its best estimate of the selling price when VSOE or TPE of the selling price cannot be determined. In addition, the residual method of allocating arrangement consideration is no longer permitted. The adoption of these new standards did not have a material effect on our results of operations, financial position or cash flows.

In October 2010, we adopted new accounting standards regarding revenue arrangements that include software elements. The guidance in these new standards modifies the existing accounting rules regarding the recognition of revenue from the sale of software to exclude: (a) non-software components of tangible products; and (b) software components of tangible products that are sold, licensed or leased with tangible products when the software components and non-software components of the tangible product function together to deliver the tangible product's essential functionality. The adoption of these new standards did not have a material effect on our results of operations, financial position or cash flows.

In January 2010, the FASB issued ASU No. 2010-06, "Fair Value Measurements and Disclosures (Topic 820)—Improving Disclosures about Fair Value Measurements" (ASU 2010-06). ASU 2010-06 provides amendments to the rules regarding the disclosure of fair value measurements and clarifies the language in certain existing disclosures. New disclosures include a discussion of the transfers in and out of Level 1 and 2 measurements as well as a reconciliation of gross activity for Level 3 measurements. ASU 2010-06 clarifies the disclosures an entity must make regarding inputs and valuation techniques used in fair value measurements. The ASU also clarifies that an entity should provide fair value disclosures for each class of assets and liabilities. ASU 2010-06 is effective for interim and annual reporting periods beginning after December 15, 2009, except for the disclosures about the reconciliation of Level 3 measurements which are effective for fiscal years beginning after December 15, 2010.

The adoption of the provisions relating to Level 1 and Level 2 measurements did not have a material impact on our results of operations, financial position or cash flows. Based on our current Level 3 fair value measurements, we believe that the adoption of the provisions related to Level 3 measurements will not have a material impact on the disclosures in our financial statements.

In May 2011, the FASB issued ASU No. 2011-04, "Fair Value Measurement (Topic 820)—Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs" (ASU 2011-04). The amendments in ASU 2011-04 change some of the wording used to describe certain U.S. GAAP requirements for measuring fair value and disclosing information about fair value measurements. Some of the amendments clarify the FASB's intent about the application of existing fair value measurement requirements and other amendments change a particular principle or requirement for measuring fair value or for disclosing information about fair value measurements. ASU 2011-04 is effective for interim and annual periods beginning after December 15, 2011. We believe that the adoption of ASU 2011-04 will not have a material impact on the fair value measurements and their related disclosures in our financial statements.

In June 2011, the FASB issued ASU No. 2011-05, "Comprehensive Income (Topic 220)—Presentation of Comprehensive Income" (ASU 2011-05). The provisions of ASU 2011-05 require an entity to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. If two separate statements are presented, the statement of other comprehensive income should immediately follow the statement of net income. ASU 2011-05 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2011. Early adoption of these provisions is permitted and will be applied retrospectively. The adoption of ASU 2011-05 will change the way we present comprehensive income as current U.S. GAAP permits an annual presentation of comprehensive income within the statement of equity and quarterly presentation of comprehensive income within the footnotes to the financial statements. We expect to present comprehensive income in a separate statement immediately following the statement of net income beginning in our fiscal quarter ending March 31, 2012.

September 2011, the FASB issued ASU No. 2011-08, "Intangibles-Goodwill and Other (Topic 350)—Testing Goodwill for Impairment" (ASU 2011-08). The provisions of ASU 2011-08 provide an entity with the option to assess qualitative factors to determine whether the existence of events or circumstances leads to the determination that it is more-likely-than-not that the fair value of a

reporting unit is less than its carrying amount. This qualitative assessment is referred to as a “step zero” approach. If, based on the review of the qualitative factors, an entity determines it is not more-likely-than-not that the fair value of a reporting unit is less than its carrying value, the entity may skip the two-step impairment test required by prior accounting guidance. If an entity determines otherwise, the first step (“step one”) of the two-step impairment test is required. This new accounting guidance also gives the entity the option to bypass “step zero” and proceed directly to “step one”; an entity may resume performing “step zero” in any subsequent period. ASU 2011-08 is effective for fiscal years beginning after December 15, 2011, with early adoption permitted if the financial statements for the most recent annual or interim period have not yet been issued. We have chosen to early adopt these new accounting provisions effective with our goodwill impairment review during the fourth quarter of fiscal 2011. We determined, based upon our qualitative assessment, that “step one” was not required as there were no indications that the fair value of our reporting units was less than the carrying value. See Note 7 for a more detailed discussion of our goodwill and intangible assets.

3. Business Combinations

All business combinations have been accounted for under the purchase method of accounting. Accordingly, the assets and liabilities of the acquired entities are recorded at their estimated fair values at the date of acquisition. Goodwill represents the excess of the purchase price over the fair value of net assets and amounts assigned to identifiable intangible assets. Purchased in-process research and development (IPR&D), for which technological feasibility has not yet been established and no future alternative uses exist, has been expensed immediately. In December 2007, the FASB issued new standards for the accounting for business combinations. The new standards retain the purchase method of accounting for acquisitions, but require a number of changes, including changes in the way assets and liabilities are recognized in purchase accounting. They also change the recognition of assets acquired and liabilities assumed arising from contingencies, require the capitalization of IPR&D at fair value, and require acquisition-related costs to be charged to expense as incurred. The new standards were effective for us October 1, 2009 and will apply prospectively to business combinations completed on or after that date.

On February 27, 2009, we completed the acquisition of Epoch Material Co., Ltd. (Epoch), which previously was a consolidated subsidiary of Eternal Chemical Co., Ltd. (Eternal). Epoch is a Taiwan-based company specializing primarily in the development, manufacture and sale of

copper CMP consumables. We paid \$59,391 to obtain 90% of Epoch’s stock, plus \$728 of transaction costs, from our available cash balance. We paid an additional \$6,600 from an escrow account which was held in Taiwan to Eternal in August 2010 to acquire the remaining 10% of Epoch’s stock. During this interim period, Eternal held the remaining 10% ownership interest in Epoch. However, Eternal waived rights to any interest in the earnings of Epoch during the interim period, including any associated dividends. Consequently, we have recorded 100% of Epoch’s results of operations from February 27, 2009 through the end of our fiscal 2011 in our Consolidated Statement of Income, rather than recording any noncontrolling interest in Epoch.

The purchase price for Epoch was allocated to tangible assets, liabilities assumed, identified intangible assets acquired, as well as IPR&D, based on our estimation of their fair values. The excess of the purchase price over the aggregate fair values was recorded as goodwill and is generally fully deductible for tax purposes. The following table summarizes the final purchase price allocation.

Current assets	\$11,453
Long-term assets	13,965
In-process research and development	1,410
Identified intangible assets	11,510
Goodwill	<u>29,877</u>
Total assets acquired	<u>68,215</u>
Total liabilities assumed	<u>1,496</u>
Net assets acquired	<u>\$66,719</u>

The following unaudited pro forma consolidated results of operations have been prepared as if the acquisition of Epoch had occurred on October 1, 2008:

	Fiscal Year Ended September 30, 2009
Revenues	\$296,120
Net income	\$ 10,205
Net income per share:	
Basic	\$ 0.44
Diluted	\$ 0.44

The unaudited pro forma consolidated results of operations do not purport to be indicative of the results that would have been achieved if the acquisition had actually occurred as of the dates indicated, or of those results that may be achieved in the future. The unaudited pro forma consolidated results of operations include adjustments to net income to give effect to: expensing of IPR&D on October 1, 2008; amortization of intangible assets acquired; depreciation of property, plant and equipment acquired; and, income taxes.

4. Fair Value of Financial Instruments

On October 1, 2009, we adopted the accounting provisions that relate to the fair value of non-financial assets and non-financial liabilities. We did not elect the fair value options for any non-financial assets or non-financial liabilities that were not previously required to be measured at fair value under other generally accepted accounting principles. The adoption of these provisions did not have a material impact on our results of operations, financial position or cash flows.

Fair value is defined as the price that would be received from the sale of an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The FASB established a three-level hierarchy for disclosure based on the extent and level of judgment used to estimate fair value. Level 1 inputs consist of valuations based on quoted market prices in active markets for identical assets or liabilities. Level 2 inputs consist of valuations based on quoted prices for similar assets or liabilities, quoted prices for identical assets or liabilities in an inactive market, or other observable inputs. Level 3 inputs consist of valuations based on unobservable inputs that are supported by little or no market activity.

The following tables present financial assets that we measured at fair value on a recurring basis at September 30, 2011 and 2010. As permitted under the relevant standards, we have chosen to not measure any of our liabilities at fair value as we believe our liabilities approximate their fair value due to their short-term, highly liquid characteristics. We have classified the following assets in accordance with the fair value hierarchy set forth in the applicable standards. In instances where the inputs used to measure the fair value of an asset fall into more than one level of the hierarchy, we have classified them based on the lowest level input that is significant to the determination of the fair value.

September 30, 2011	Level 1	Level 2	Level 3	Total Fair Value
Cash and cash equivalents	\$302,546	\$—	\$ —	\$302,546
Auction rate securities (ARS)	—	—	8,041	8,041
Other long-term investments	827	—	—	827
Total	\$303,373	\$—	\$ 8,041	\$311,414

September 30, 2010	Level 1	Level 2	Level 3	Total Fair Value
Cash and cash equivalents	\$ 254,164	\$—	\$ —	\$ 254,164
Auction rate securities (ARS)	—	—	8,066	8,066
Total	\$ 254,164	\$—	\$ 8,066	\$ 262,230

Our cash and cash equivalents consist of various bank accounts used to support our operations and investments in institutional money-market funds which are traded in active markets. The ARS and other long-term investments are included in other long-term assets on our Consolidated Balance Sheet. The fair value of our long-term ARS is determined through two discounted cash flow analyses, one using a discount rate based on a market index comprised of tax exempt variable rate demand obligations and one using a discount rate based on the LIBOR swap curve, adding a risk factor to reflect current liquidity issues in the ARS market. Our other long-term investments represent the fair value of investments under the Cabot Microelectronics Supplemental Employee Retirement Plan (SERP), which is a nonqualified supplemental savings plan. The fair value of the investments is determined through quoted market prices within actively traded markets. Although the investments are allocated to individual participants and investment decisions are made solely by those participants, the SERP has been deemed a nonqualified plan. Consequently, the Company owns the assets and the related liability for disbursement until such time a participant makes a qualifying withdrawal, and should have recorded the assets and liability in our Consolidated Balance Sheet in prior periods. As a result, during the quarter ended March 31, 2011, we established a long-term asset of \$952 representing the fair value of SERP investments held at March 31 and a corresponding liability of \$952 in other long-term liabilities on our Consolidated Balance Sheet. The long-term asset and long-term liability were adjusted to \$827 in the fourth quarter of fiscal 2011 to reflect their fair value as of September 30, 2011.

We applied accounting standards regarding the classification and valuation of financial instruments to the valuation of our investment in ARS at September 30, 2011 and 2010. Our ARS investments at September 30, 2011 consisted of two tax exempt municipal debt securities with a total par value of \$8,275. The ARS market began to experience illiquidity in early 2008, and this illiquidity continues. Despite this lack of liquidity, there have been no defaults of the underlying securities and interest income on these holdings continues to be received on scheduled interest payment dates. Our ARS, when purchased, were generally issued by A-rated municipalities. Although the credit ratings of both municipalities have been downgraded since our original investment, the ARS are credit enhanced with bond insurance and currently carry a credit rating of AA+ by Standard and Poors.

Since an active market for ARS does not currently exist, we determine the fair value of these investments using a Level 3 discounted cash flow analysis and also consider other factors such as the reduced liquidity in the ARS market and nature of the insurance backing. Key inputs to our discounted cash flow model include projected

cash flows from interest and principal payments and the weighted probabilities of improved liquidity or debt refinancing by the issuer. We also incorporate certain Level 2 market indices into the discounted cash flow analysis, including published rates such as the LIBOR rate, the LIBOR swap curve and a municipal swap index published by the Securities Industry and Financial Markets Association. The following table presents a reconciliation of the activity in fiscal 2011 for fair value measurements using level 3 inputs:

Balance as of September 30, 2010	\$ 8,066
Net sales of ARS	(25)
Balance as of September 30, 2011	<u>\$8,041</u>

Based on our fair value assessment, we determined that one ARS continues to be impaired as of September 30, 2011. This security has a fair value of \$3,091 (par value \$3,325). We assessed the impairment in accordance with the applicable standards and determined that the impairment was due to the lack of liquidity in the ARS market rather than to credit risk. We have maintained the \$234 temporary impairment that we previously recorded. We believe that this ARS is not permanently impaired because in the event of default by the issuer, we expect the insurance provider would pay interest and principal following the original repayment schedule, we successfully monetized at par value \$25 of this security during our fiscal quarter ended March 31, 2011 and we do not intend to sell the security nor do we believe we will be required to sell the security before the value recovers, which may be at maturity. We determined that the fair value of the other ARS was not impaired as of September 30, 2011. In November 2011, the municipality that issued our impaired ARS filed for bankruptcy protection. We considered these developments, in light of the continued insurance backing, and have concluded the impairment we have maintained remains adequate and temporary. See Note 8 for more information on these investments.

5. Inventories

Inventories consisted of the following:

	September 30,	
	2011	2010
Raw materials	\$26,217	\$23,542
Work in process	4,964	3,189
Finished goods	24,947	25,165
Total	<u>\$56,128</u>	<u>\$51,896</u>

6. Property, Plant and Equipment

Property, plant and equipment consisted of the following:

	September 30,	
	2011	2010
Land	\$ 21,597	\$ 20,381
Buildings	100,779	86,965
Machinery and equipment	171,595	156,653
Furniture and fixtures	6,247	5,969
Information systems	23,318	19,290
Capital leases	9,820	9,820
Construction in progress	5,166	3,624
Total property, plant and equipment	<u>338,522</u>	<u>302,702</u>
Less: accumulated depreciation and amortization of assets under capital leases	<u>(207,731)</u>	<u>(186,891)</u>
Net property, plant and equipment	<u>\$ 130,791</u>	<u>\$ 115,811</u>

Depreciation expense, including amortization of assets recorded under capital leases, was \$21,271, \$22,568 and \$22,310 for the years ended September 30, 2011, 2010 and 2009, respectively.

In fiscal 2009, we recorded \$1,245 in impairment expense primarily related to the decision to write-off certain research and development equipment in accordance with the applicable accounting standards for the impairment and disposal of long-lived assets. Of this amount, \$22 and \$1,223 was included in cost of goods sold and research, development and technical expense, respectively. Impairment expense for fiscal 2011 and 2010 was not material.

7. Goodwill and Other Intangible Assets

Goodwill was \$41,148 and \$40,436 as of September 30, 2011 and 2010, respectively. The increase in goodwill was due to foreign exchange fluctuations of the New Taiwan dollar.

The components of other intangible assets are as follows:

	September 30, 2011		September 30, 2010	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Other intangible assets subject to amortization:				
Product technology	\$ 8,266	\$ 3,890	\$ 8,206	\$ 2,926
Acquired patents and licenses	8,115	6,446	8,115	6,135
Trade secrets and know-how	2,550	2,550	2,550	2,550
Customer relationships, distribution rights and other	12,154	4,738	11,939	3,300
Total other intangible assets subject to amortization	31,085	17,624	30,810	14,911
Total other intangible assets not subject to amortization*	1,190		1,190	
Total other intangible assets	\$32,275	\$17,624	\$32,000	\$14,911

*Total other intangible assets not subject to amortization primarily consist of trade names.

In fiscal 2011, other intangible assets increased by \$275 due to foreign exchange fluctuations of the New Taiwan dollar. In fiscal 2010, we acquired \$515 in other intangible assets and other intangible assets increased by \$323 due to foreign exchange fluctuations of the New Taiwan dollar.

Goodwill and indefinite lived intangible assets are tested for impairment annually in the fourth fiscal quarter or more frequently if indicators of potential impairment exist, using a fair-value-based approach. The recoverability of goodwill is measured at the reporting unit level, which is defined as either an operating segment or one level below an operating segment. We have consistently determined the fair value of our reporting units using a discounted cash flow analysis ("step one") of our projected future results. As discussed in Note 2 under the heading "Effects of Recent Accounting Pronouncements", effective September 30, 2011, we adopted new accounting pronouncements related to our goodwill impairment analysis, which allows an entity to perform a "step zero" assessment of the fair value of their reporting units. In the fourth quarter of fiscal 2011, we used this new guidance in our annual impairment analysis for goodwill. The recoverability of indefinite lived intangible assets is measured using the royalty savings method. The use of discounted projected future results is based on assumptions that are consistent with our estimates of future growth within the strategic plan used to manage the underlying business. Factors requiring significant judgment include assumptions related to future growth rates, discount factors, royalty rates and tax rates, among others. Changes in economic and operating conditions that occur after the annual impairment analysis or an interim impairment analysis that impact these assumptions may result in future impairment charges. As a result of the review performed in the fourth quarter of fiscal 2011, we determined that there was no impairment of our goodwill and intangible assets as of September 30, 2011.

Amortization expense was \$2,720, \$2,426 and \$2,522 for fiscal 2011, 2010 and 2009, respectively. Estimated future amortization expense for the five succeeding fiscal years is as follows:

Fiscal Year	Estimated Amortization Expense
2012	\$2,627
2013	2,460
2014	2,417
2015	2,378
2016	1,968

8. Other Long-Term Assets

Other long-term assets consisted of the following:

	September 30,	
	2011	2010
Auction rate securities	\$ 8,041	\$8,066
Other long-term assets	1,504	1,281
Other long-term investments	827	—
Total	\$10,372	\$9,347

As discussed in Note 4 of this Form 10-K, the two ARS that we owned as of September 30, 2011 are classified as long-term investments. The securities are credit enhanced with bond insurance to an AA+ credit rating and all interest payments continue to be received on a timely basis. Although we believe these securities will ultimately be collected in full, we believe that it is not likely that we will be able to monetize the securities in our next business cycle (which for us is generally one year). We maintain a \$234 pretax reduction (\$151 net of tax) in fair value on one of the ARS that we had first recognized in fiscal 2008. We continue to believe this decline in fair value is temporary based on: (1) the nature of the underlying debt; (2) the presence of bond insurance; (3) the fact that all interest payments have been received; (4) our successful monetization of \$25 of this

ARS during the quarter ended March 31, 2011; and (5) our intention not to sell the security nor be required to sell the security until the value recovers, which may be at maturity, given our current cash position, our expected future cash flow, and our unused debt capacity.

As discussed in Note 4 of this Form 10-K, we recorded a long-term asset and a corresponding long-term liability of \$827 representing the fair value of our SERP investments as of September 30, 2011.

9. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following:

	September 30,	
	2011	2010
Accrued compensation	\$23,922	\$25,752
Goods and services received, not yet invoiced	3,457	4,359
Deferred revenue and customer advances	2,420	303
Warranty accrual	384	375
Taxes, other than income taxes	808	1,162
Acquisition related	—	—
Other	2,113	2,562
Total	\$33,104	\$34,513

The decrease in accrued compensation was primarily due to the payment of our AIP earned in fiscal 2010, partially offset by the accrual of our AIP related to fiscal 2011. The increase in deferred revenue and customer advances was due to the timing of customer advances and revenue not yet earned in our Engineered Surface Finishes business.

10. Derivative Financial Instruments

Periodically we enter into forward foreign exchange contracts in an effort to mitigate the risks associated with currency fluctuations on certain foreign currency balance sheet exposures. Our foreign exchange contracts do not qualify for hedge accounting; therefore, the gains and losses resulting from the impact of currency exchange rate movements on our forward foreign exchange contracts are recognized as other income or expense in the accompanying consolidated income statements in the period in which the exchange rates change. We do not use derivative financial instruments for trading or speculative purposes. In addition, all derivatives, whether designated in hedging relationships or not, are required to be recorded on the balance sheet at fair value. At September 30, 2011, we had one forward foreign exchange contract selling Japanese Yen related to intercompany notes with one of our subsidiaries in Japan and for the purpose of hedging the risk associated with a net transactional exposure in Japanese Yen.

The fair value of our derivative instrument included in the Consolidated Balance Sheet, which was determined using Level 1 inputs, was as follows:

Derivatives Not Designated as Hedging Instruments	Balance Sheet Location	Asset Derivatives		Liability Derivatives	
		Fair Value at September 30, 2011	Fair Value at September 30, 2010	Fair Value at September 30, 2011	Fair Value at September 30, 2010
Foreign exchange contracts	Prepaid expenses and other current assets	\$48	\$ 5	\$—	\$—
	Accrued expenses and other current liabilities	\$—	\$—	\$—	\$—

The following table summarizes the effect of our derivative instrument on our Consolidated Statement of Income for the fiscal years ended September 30, 2011, 2010 and 2009:

Derivatives Not Designated as Hedging Instruments	Statement of Income Location	Gain (Loss) Recognized in Statement of Income Fiscal Year Ended		
		September 30, 2011	September 30, 2010	September 30, 2009
Foreign exchange contracts	Other income (expense), net	\$(806)	\$(555)	\$(2,573)

11. Revolving Credit Facility

We have an unsecured revolving credit facility of \$50,000 with an option to increase the facility up to \$80,000. Pursuant to an amendment in October 2008, the agreement extends through October 2011, with an option to renew for two additional one-year terms. In November 2010, the scheduled termination date was extended by one year through October 2012, and in August 2011, the scheduled termination date was extended another year through October 2013. Under this agreement, interest accrues on any outstanding balance at either the lending institution's base rate or the Eurodollar rate plus an applicable margin. We also pay a non-use fee. Loans under this facility are intended primarily for general corporate purposes, including financing working capital, capital expenditures and acquisitions. The credit agreement also contains various covenants. No amounts are currently outstanding under this credit facility and we believe we are currently in compliance with its covenants.

12. Share-Based Compensation Plans

Equity Incentive Plan

In March 2004, our stockholders approved our Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan (the "EIP"), as amended and restated September 23, 2008, which is administered by the Compensation Committee of the Board of Directors and is intended to provide management with the flexibility to attract, retain and reward our employees, directors, consultants and advisors. The EIP allows for the granting of four types of equity incentive awards: stock options, restricted stock, restricted stock units and substitute awards. Substitute awards are those awards that, in connection with an acquisition, may be granted to employees, directors, consultants or advisors of the acquired company, in substitution for equity incentives held by them in the seller or the acquired company. No substitute awards have been granted to date. The EIP authorizes up to 9,500,000 shares of stock to be granted thereunder, including up to 1,900,000 shares in the aggregate of restricted stock or restricted stock units and up to 1,750,000 incentive stock options (ISO). Shares issued under our share-based compensation plans are issued from new shares rather than from treasury shares.

Non-qualified stock options issued under the EIP are generally time-based and provide for a ten-year term, with options generally vesting equally over a four-year period, with first vesting on the first anniversary of the award date. Beginning in March 2011, non-qualified stock options granted to non-employee directors on an annual basis vest 100% on the first anniversary of the award date. Compensation expense related to our stock option awards was \$6,871, \$7,081 and \$9,507 in fiscal 2011, 2010 and 2009, respectively. For additional information

on our accounting for share-based compensation, see Note 2 to the consolidated financial statements. Under the EIP, employees and non-employees may also be granted ISOs to purchase common stock at not less than the fair value on the date of the grant. No ISOs have been granted to date.

Under the EIP, employees and non-employees may be awarded shares of restricted stock or restricted stock units, which generally vest over a four-year period, with first vesting on the anniversary of the grant date. Beginning in March 2011, restricted stock units granted to non-employee directors on an annual basis vest 100% on the first anniversary of the award date. In general, shares of restricted stock and restricted stock units may not be sold, assigned, transferred, pledged, disposed of or otherwise encumbered. Holders of restricted stock, and restricted stock units, if specified in the award agreements, have all the rights of stockholders, including voting and dividend rights, subject to the above restrictions, although the current holders of restricted stock units do not have such rights. Restricted shares under the EIP also may be purchased and placed "on deposit" by executive officers pursuant to the 2001 Deposit Share Plan. Shares purchased under this Deposit Share Plan receive a 50% match in restricted shares ("Award Shares"). These Award Shares vest at the end of a three-year period, and are subject to forfeiture upon early withdrawal of the deposit shares. Compensation expense related to our restricted stock and restricted stock unit awards and restricted shares matched at 50% pursuant to the Deposit Share Plan was \$5,184, \$4,134 and \$2,893 for fiscal 2011, 2010 and 2009, respectively.

Employee Stock Purchase Plan

In March 2008, our stockholders approved our 2007 Cabot Microelectronics Employee Stock Purchase Plan (the "ESPP"), which amended the ESPP for the primary purpose of increasing the authorized shares of common stock to be purchased under the ESPP from 475,000 designated shares to 975,000 shares. The ESPP allows all full and certain part-time employees of Cabot Microelectronics and its subsidiaries to purchase shares of our common stock through payroll deductions. Employees can elect to have up to 10% of their annual earnings withheld to purchase our stock, subject to a maximum number of shares that a participant may purchase and a maximum dollar expenditure in any six-month offering period, and certain other criteria. The provisions of the ESPP allow shares to be purchased at a price no less than the lower of 85% of the closing price at the beginning or end of each semi-annual stock purchase period. Prior to January 1, 2009, the shares were purchased at the maximum 15% discount. In conjunction with certain cost reduction initiatives we implemented in the second quarter of fiscal 2009, the ESPP was amended as of

January 19, 2009 to suspend the 15% discount. Pursuant to the amended ESPP, effective with the six-month period beginning January 1, 2009, the ESPP shares were purchased at a price equal to the lower of the closing price at the beginning or end of each semi-annual offering period. In light of improved economic and industry conditions, the ESPP was amended again as of January 1, 2010 to reinstate the 15% discount effective January 1, 2010. A total of 61,364, 38,050, and 57,815 shares were issued under the ESPP during fiscal 2011, 2010 and 2009, respectively. Compensation expense related to the ESPP was \$508, \$360 and \$324 in fiscal 2011, 2010 and 2009, respectively.

Directors' Deferred Compensation Plan

The Directors' Deferred Compensation Plan, as amended and restated September 23, 2008, became effective in March 2001 and applies only to our non-employee directors. The cumulative number of shares deferred under the plan was 47,530 and 45,572 as of September 30, 2011 and 2010, respectively. Compensation expense related to our Directors' Deferred Compensation Plan was \$83, \$68 and \$78 for fiscal 2011, 2010 and 2009, respectively.

Accounting for Share-Based Compensation

We record share-based compensation expense for all share-based awards, including stock option grants, restricted stock and restricted stock unit awards and employee stock purchase plan purchases. We calculate share-based compensation expense using the straight-line approach based on awards ultimately expected to vest, which requires the use of an estimated forfeiture rate. Our estimated forfeiture rate is primarily based on historical experience, but may be revised in future periods if actual forfeitures differ from the estimate. We use the Black-Scholes model to estimate the grant date fair value of our stock options and employee stock purchase plan purchases. This model requires the input of highly subjective assumptions, including the price volatility of the underlying stock, the expected term of our stock options and the risk-free interest rate. We estimate the expected volatility of our stock options based on a combination of our stock's historical volatility and the implied volatilities from actively-traded options on our stock. We calculate the expected term of our stock options using the simplified method, due to our limited amount of historical option exercise data, and we add a slight premium to this expected term for employees who meet the definition of retirement eligible pursuant to their grants during the contractual term of the grant. The simplified method uses an average of the vesting term and the contractual term of the option to calculate the expected term. The risk-free rate is derived from the U.S. Treasury yield curve in effect at the time of grant.

The fair value of our share-based awards was estimated using the Black-Scholes model with the following weighted-average assumptions:

	Year Ended September 30,		
	2011	2010	2009
Stock Options			
Weighted-average grant date fair value	\$16.49	\$13.42	\$11.63
Expected term (in years)	6.28	6.35	6.50
Expected volatility	36%	39%	50%
Risk-free rate of return	2.1%	2.6%	2.1%
Dividend yield	—	—	—
ESPP			
Weighted-average grant date fair value	\$ 9.05	\$ 7.45	\$ 6.38
Expected term (in years)	0.50	0.50	0.50
Expected volatility	28%	33%	48%
Risk-free rate of return	0.2%	0.3%	1.2%
Dividend yield	—	—	—

The Black-Scholes model is primarily used in estimating the fair value of short-lived exchange traded options that have no vesting restrictions and are fully transferable. Because employee stock options and employee stock purchases have certain characteristics that are significantly different from traded options, and because changes in the subjective assumptions can materially affect the estimated value, our use of the Black-Scholes model for estimating the fair value of stock options and employee stock purchases may not provide an accurate measure. Although the value of our stock options and employee stock purchases are determined in accordance with applicable accounting standards using an option-pricing model, those values may not be indicative of the fair values observed in a willing buyer/willing seller market transaction.

The fair value of our restricted stock and restricted stock unit awards represents the closing price of our common stock on the date of grant. Share-based compensation expense related to restricted stock and restricted stock unit awards is recorded net of expected forfeitures.

Share-Based Compensation Expense

Total share-based compensation expense for the year ended September 30, 2011, 2010 and 2009, is as follows:

	Year Ended September 30,		
	2011	2010	2009
Income statement classifications:			
Cost of goods sold	\$ 1,221	\$ 986	\$ 982
Research, development and technical	1,060	908	1,079
Selling and marketing	1,124	1,025	1,207
General and administrative	9,241	8,724	9,534
Tax benefit	(4,060)	(4,145)	(4,574)
Total share-based com- pensation expense, net of tax	<u>\$ 8,586</u>	<u>\$ 7,498</u>	<u>\$ 8,228</u>

The costs presented in the preceding table for share-based compensation expense may not be representative of the total effects on reported income for future years. Factors that may impact future years include, but are not limited to, changes to our historical approaches to long-term incentives such as described above, the timing and number of future grants of share-based awards, the vesting period and contractual term of

share-based awards and types of equity awards granted. Further, share-based compensation may be impacted by changes in the fair value of future awards through variables such as fluctuations in and volatility of our stock price, as well as changes in employee exercise behavior and forfeiture rates.

Our non-employee directors received their annual equity award in March 2011. The award agreements provide for immediate vesting of the award at the time of termination of service for any reason other than by reason of Cause, Death, Disability or a Change in Control, as defined in the Cabot Microelectronics Corporation 2000 Equity Incentive Plan, if at such time the non-employee director has completed an equivalent of at least two full terms as a director of the Company, as defined in the Company's bylaws. Five of the Company's non-employee directors had completed at least two full terms of service as of the date of the March 2011 award. Consequently, the requisite service period for the award has already been satisfied and we recorded the fair value of \$1,010 of the awards to these five directors to share-based compensation expense in the fiscal quarter ended March 31, 2011 rather than recording that expense over the one-year vesting period stated in the award agreement.

Stock Option Activity

A summary of stock option activity under the EIP as of September 30, 2011, and changes during the fiscal 2011 are presented below:

	Stock Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at September 30, 2010	4,732,591	\$ 37.94		
Granted	466,362	42.18		
Exercised	(1,085,965)	33.11		
Forfeited or canceled	(162,451)	43.77		
Outstanding at September 30, 2011	3,950,537	\$39.52	4.7	\$7,497
Exercisable at September 30, 2011	2,856,861	\$41.51	3.3	\$3,707
Expected to vest at September 30, 2011	968,710	\$34.81	8.3	\$3,130

The aggregate intrinsic value in the table above represents the total pretax intrinsic value (i.e., for all in-the-money stock options, the difference between our closing stock price of \$34.39 on the last trading day of fiscal 2011 and the exercise price, multiplied by the number of

shares) that would have been received by the option holders had all option holders exercised their options on the last trading day of fiscal 2011. The total intrinsic value of options exercised was \$13,135, \$492 and \$68 for fiscal 2011, 2010 and 2009, respectively.

The total cash received from options exercised was \$35,955, \$2,283 and \$680 for fiscal 2011, 2010 and 2009, respectively. The actual tax benefit realized for the tax deductions from options exercised was \$4,401, \$175 and \$24 for fiscal 2011, 2010 and 2009, respectively. The total fair value of stock options vested during fiscal years 2011, 2010 and 2009 was \$6,321, \$8,494 and \$12,560, respectively. As of September 30, 2011, there was \$9,169 of total unrecognized share-based compensation expense related to unvested stock options under the EIP. That cost is expected to be recognized over a weighted-average period of 2.5 years.

Restricted Stock

A summary of the status of the restricted stock awards and restricted stock unit awards outstanding under the EIP as of September 30, 2011, and changes during fiscal 2011, are presented below:

	Restricted Stock Awards and Units	Weighted-Average Grant Date Fair Value
Nonvested at		
September 30, 2010	377,460	\$29.34
Granted	160,677	42.16
Vested	(146,470)	30.40
Forfeited	(21,986)	32.83
Nonvested at		
September 30, 2011	369,681	\$34.29

As of September 30, 2011, there was \$7,197 of total unrecognized share-based compensation expense related to nonvested restricted stock awards and restricted stock units under the EIP. That cost is expected to be recognized over a weighted-average period of 2.6 years. The total fair values of restricted stock awards and restricted stock units vested during fiscal years 2011, 2010 and 2009 were \$4,452, \$3,209 and \$2,471, respectively.

13. Savings Plan

Effective in May 2000, we adopted the Cabot Microelectronics Corporation 401(k) Plan (the "401(k) Plan"), which is a qualified defined contribution plan, covering all eligible U.S. employees meeting certain minimum age and eligibility requirements, as defined by the 401(k) Plan. Participants may make elective contributions of up

to 60% of their eligible compensation. All amounts contributed by participants and earnings on these contributions are fully vested at all times. The 401(k) Plan provides for matching and fixed non-elective contributions by the Company. Under the 401(k) Plan, the Company will match 100% of the first four percent of the participant's eligible compensation and 50% of the next two percent of the participant's eligible compensation that is contributed, subject to limitations required by government regulations. Under the 401(k) Plan, all U.S. employees, even those who do not contribute to the 401(k) Plan, receive a contribution by the Company in an amount equal to four percent of eligible compensation, and thus are participants in the 401(k) Plan. Participants are 100% vested in all Company contributions at all times. The Company's expense for the 401(k) Plan totaled \$4,201, \$2,981 and \$2,813 for the fiscal years ended September 30, 2011, 2010 and 2009, respectively.

14. Other Income (Expense), Net

Other income (expense), net, consisted of the following:

	Year Ended September 30,		
	2011	2010	2009
Interest income	\$ 238	\$ 228	\$1,057
Interest expense	(155)	(233)	(365)
Other expense	(1,556)	(729)	(93)
Total other income (expense), net	\$(1,473)	\$(734)	\$ 599

The decrease in other income (expense) in fiscal 2011 from fiscal 2010 was primarily due to foreign exchange effects, primarily related to changes in the exchange rate of the Japanese yen and the New Taiwan dollar to the U.S. dollar, net of the gains and losses incurred on forward foreign exchange contracts discussed in Note 10 of this Form 10-K. The decrease in other income (expense) in fiscal 2010 from fiscal 2009 was primarily due to lower interest income resulting from lower interest rates earned on our cash balances and investments compared to fiscal 2009, and the foreign exchange effects, primarily related to changes in the exchange rate of the Japanese yen to the U.S. dollar, net of the gains and losses incurred on forward foreign exchange contracts discussed in Note 10 of this Form 10-K.

15. Stockholders' Equity

The following is a summary of our capital stock activity over the past three years:

	Number of Shares	
	Common Stock	Treasury Stock
September 30, 2008	25,906,990	2,683,809
Exercise of stock options	21,617	
Restricted stock under EIP, net of forfeitures	146,881	
Restricted stock under Deposit Share Plan	9,813	
Common stock under ESPP	57,815	
Repurchases of common stock under share repurchase plans		14,425
September 30, 2009	26,143,116	2,698,234
Exercise of stock options	74,019	
Restricted stock under EIP, net of forfeitures	127,390	
Restricted stock under Deposit Share Plan, net of forfeitures	2,140	
Common stock under ESPP	38,050	
Repurchases of common stock under share repurchase plans		723,184
Repurchases of common stock—other		24,651
September 30, 2010	26,384,715	3,446,069
Exercise of stock options	1,085,965	
Restricted stock under EIP, net of forfeitures	115,069	
Restricted stock under Deposit Share Plan, net of forfeitures	5,223	
Common stock under ESPP	61,364	
Repurchases of common stock under share repurchase plans		1,235,668
Repurchases of common stock—other		33,840
September 30, 2011	<u>27,652,336</u>	<u>4,715,577</u>

Common Stock

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of Cabot Micro-electronics' stockholders. Common stockholders are entitled to receive ratably the dividends, if any, as may be declared by the Board of Directors. The number of authorized shares of common stock is 200,000,000 shares.

Stockholder Rights Plan

In March 2000 the Board of Directors of Cabot Micro-electronics approved a stock rights agreement and declared a dividend distribution of one right to purchase one one-thousandth of a share of Series A Junior Participating Preferred Stock for each outstanding share of common stock to stockholders of record on April 7, 2000. This rights agreement expired in April 2010 according to its terms.

Share Repurchases

In January 2008, our Board of Directors authorized a share repurchase program for up to \$75,000 of our outstanding common stock. We repurchased 564,568 shares for \$25,000 in fiscal 2011 under this program, which was completed during the fiscal quarter ended March 31, 2011. During fiscal 2010, we repurchased 723,184 shares of common stock under this program at a cost of \$24,998. We did not repurchase any shares under the share repurchase program in fiscal 2009. In November 2010, our Board of Directors authorized a new share repurchase program for up to \$125,000 of our outstanding common stock, which became effective on the authorization date. We repurchased 671,100 shares for \$29,105 during fiscal 2011 under this new program. Shares are repurchased from time to time, depending on market conditions, in open market transactions, at management's discretion. We fund share repurchases from our existing cash balance. The program, which became effective on the authorization date, may be suspended or terminated at any time, at the Company's discretion. For additional information on share repurchases, see Part II, Item 5. "Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities".

Separate from this share repurchase program, a total of 33,840, 24,651 and 14,425 shares were purchased during fiscal 2011, 2010 and 2009, respectively, pursuant to the terms of our EIP as shares withheld from award recipients to cover payroll taxes on the vesting of shares of restricted stock granted under the EIP.

16. Income Taxes

Income before income taxes was as follows:

	Year Ended September 30,		
	2011	2010	2009
Domestic	\$54,886	\$39,835	\$ 2,909
Foreign	24,026	33,442	13,713
Total	<u>\$78,912</u>	<u>\$73,277</u>	<u>\$16,622</u>

Taxes on income consisted of the following:

	Year Ended September 30,		
	2011	2010	2009
U.S. federal and state:			
Current	\$15,700	\$15,372	\$ 2,688
Deferred	6,194	(2,643)	(2,163)
Total	<u>\$21,894</u>	<u>\$12,729</u>	<u>\$ 525</u>
Foreign:			
Current	\$ 6,616	\$10,597	\$ 4,811
Deferred	(1,260)	493	99
Total	<u>5,356</u>	<u>11,090</u>	<u>4,910</u>
Total U.S. and foreign	<u>\$27,250</u>	<u>\$23,819</u>	<u>\$ 5,435</u>

The provision for income taxes at our effective tax rate differed from the statutory rate as follows:

	Year Ended September 30,		
	2011	2010	2009
Federal statutory rate	35.0%	35.0%	35.0%
U.S. benefits from research and experimentation activities	(2.0)	(0.6)	(5.0)
State taxes, net of federal effect	0.6	0.5	0.6
Foreign income at other than U.S. rates	(2.8)	(2.7)	—
Executive compensation	1.4	—	—
Share-based compensation	3.3	0.3	2.9
Domestic production deduction	(0.8)	(0.1)	(0.2)
Tax-exempt interest income	(0.1)	(0.1)	(1.9)
Other, net	(0.1)	0.2	1.3
Provision for income taxes	34.5%	32.5%	32.7%

In fiscal 2011 and 2010, we elected to permanently reinvest the earnings of certain of our foreign subsidiaries outside the U.S. rather than repatriating the earnings to the U.S. We have not provided deferred taxes on approximately \$25.5 million of undistributed earnings of such subsidiaries. These earnings could become subject to additional income tax if they are remitted as dividends to the U.S. parent company, loaned to the U.S. parent company, or upon sale of subsidiary stock. This election reduced our effective income tax rate by 3.0 and 2.7 percentage points in fiscal 2011 and 2010, respectively.

The increase in our effective tax rate in fiscal 2011 was primarily due to a number of factors related to share-based compensation expense, including tax impacts of stock option exercises and the vesting of restricted stock for certain employees, and taxable executive compensation in excess of limits defined in section 162(m) of the Internal Revenue Code. As discussed in footnote 1 of this 10-K under the heading "Results of Operations", income tax expense in fiscal 2011 included \$671 related to executive compensation in fiscal 2008 through 2010 and a \$497 reversal of a deferred tax asset for certain share-based compensation expense. These increases in our effective tax rate were partially offset by the reinstatement of the U.S. research and experimentation tax credit in December 2010, which was retroactively effective as of January 1, 2010.

The accounting guidance regarding the uncertainty in income taxes prescribes a threshold for the financial statement recognition and measurement of tax positions taken or expected to be taken on a tax return. Under these standards, we may recognize the tax benefit of an uncertain tax position only if it is more likely than not that the tax position will be sustained by the taxing authorities, based on the technical merits of the position.

The following table presents the changes in the balance of gross unrecognized tax benefits during the last three fiscal years:

Balance September 30, 2008	\$ 316
Additions for tax positions relating to the current fiscal year	—
Additions for tax positions relating to prior fiscal years	79
Settlements with taxing authorities	(10)
Lapse of statute of limitations	(136)
Balance September 30, 2009	249
Additions for tax positions relating to the current fiscal year	—
Additions for tax positions relating to prior fiscal years	153
Settlements with taxing authorities	(28)
Lapse of statute of limitations	(201)
Balance September 30, 2010	173
Additions for tax positions relating to the current fiscal year	123
Additions for tax positions relating to prior fiscal years	307
Settlements with taxing authorities	—
Lapse of statute of limitations	—
Balance September 30, 2011	\$ 603

We recognize interest and penalties related to uncertain tax positions as income tax expense in our financial statements. Interest and penalties accrued on our Consolidated Balance Sheet were \$19 and \$6 at September 30, 2011 and 2010, respectively, and interest and penalties charged to expense were not material.

We believe the tax periods open to examination by the U.S. federal government include fiscal years 2008 through 2010. We believe the tax periods open to examination by U.S. state and local governments include fiscal years 2007 through 2010 and the tax periods open to examination by foreign jurisdictions include fiscal years 2004 through 2010. We do not anticipate a significant change to the total amount of unrecognized tax benefits within the next 12 months.

Significant components of deferred income taxes were as follows:

	September 30,	
	2011	2010
Deferred tax assets:		
Employee benefits	\$ 3,246	\$ 1,318
Inventory	2,886	2,356
Depreciation and amortization	—	3,143
Product warranty	137	178
Bad debt reserve	387	397
Share-based compensation expense	12,184	18,457
Other, net	2,189	455
Total deferred tax assets	\$21,029	\$26,304
Deferred tax liabilities:		
Translation adjustment	\$13,835	\$10,839
Depreciation and amortization	1,568	
Other, net	515	3,881
Total deferred tax liabilities	\$15,918	\$14,720

17. Commitments and Contingencies

Legal Proceedings

While we are not involved in any legal proceedings that we believe will have a material impact on our consolidated financial position, results of operations or cash flows, we periodically become a party to legal proceedings in the ordinary course of business. For example, from 2007 to 2011, we were involved in a legal action against DuPont Air Products NanoMaterials LLC (DA Nano), a CMP slurry competitor, regarding whether certain specific formulations of slurry products used for tungsten CMP infringe certain CMP slurry patents that we own, and the validity of those and other of our patents. All of the Cabot Microelectronics Corporation patents at issue in the case were found valid, but the specific products at issue were found to not infringe the asserted claims of these patents.

Product Warranties

We maintain a warranty reserve that reflects management's best estimate of the cost to replace product that does not meet customers' specifications and performance requirements, and costs related to such replacement. The warranty reserve is based upon a historical product replacement rate, adjusted for any specific known conditions or circumstances. Additions and deductions to the warranty reserve are recorded in cost of goods sold. Our warranty reserve requirements changed during fiscal 2011 as follows:

Balance as of September 30, 2010	\$ 375
Reserve for product warranty during the reporting period	1,074
Settlement of warranty	<u>(1,065)</u>
Balance as of September 30, 2011	<u>\$ 384</u>

Indemnification

In the normal course of business, we are a party to a variety of agreements pursuant to which we may be obligated to indemnify the other party with respect to certain matters. Generally, these obligations arise in the context of agreements entered into by us, under which we customarily agree to hold the other party harmless against losses arising from items such as a breach of

certain representations and covenants including title to assets sold, certain intellectual property rights and certain environmental matters. These terms are common in the industries in which we conduct business. In each of these circumstances, payment by us is subject to certain monetary and other limitations and is conditioned on the other party making an adverse claim pursuant to the procedures specified in the particular agreement, which typically allow us to challenge the other party's claims.

We evaluate estimated losses for such indemnifications under the accounting standards related to contingencies and guarantees. We consider such factors as the degree of probability of an unfavorable outcome and the ability to make a reasonable estimate of the amount of loss. To date, we have not experienced material costs as a result of such obligations and, as of September 30, 2011, have not recorded any liabilities related to such indemnifications in our financial statements as we do not believe the likelihood of such obligations is probable.

Lease Commitments

We lease certain vehicles, warehouse facilities, office space, machinery and equipment under cancelable and noncancelable leases, all of which expire within six years from now and may be renewed by us. Lease commitments also include certain costs associated with our pad finishing operation located at Taiwan Semiconductor Manufacturing Company, which are accounted for as an operating lease which is currently scheduled to end in August 2012. Rent expense under such arrangements during fiscal 2011, 2010 and 2009 totaled \$2,934, \$2,480 and \$1,883, respectively.

In December 2001 we entered into a fumed alumina supply agreement with Cabot Corporation under which we agreed to pay Cabot Corporation for the expansion of a fumed alumina manufacturing facility in Tuscola, Illinois. The arrangement for the facility has been treated as a capital lease for accounting purposes and the present value of the minimum quarterly payments resulted in an initial \$9,776 lease obligation and related leased asset. The initial term of the agreement expired in December 2006, but it was renewed for another five-year term ending in December 2011.

Future minimum rental commitments under noncancelable leases as of September 30, 2011 are as follows:

Fiscal Year	Operating	Capital
2012	\$ 3,656	\$10
2013	1,944	2
2014	1,640	—
2015	856	—
2016	849	—
Thereafter	1,285	—
	<u>\$10,230</u>	<u>12</u>
Amount related to interest		—
Capital lease obligation		<u>\$12</u>

Purchase Obligations

Purchase obligations include our take-or-pay arrangements with suppliers, and purchase orders and other obligations entered into in the normal course of business regarding the purchase of goods and services.

We purchase fumed silica primarily under a fumed silica supply agreement with Cabot Corporation, our former parent company that is not a related party, that became effective in January 2004, and was amended in September 2006 and in April 2008, the latter of which extended the termination date of the agreement from December 2009 to December 2012 and also changed the pricing and some other non-material terms of the agreement to the benefit of both parties. We are generally obligated to purchase fumed silica for at least 90% of our six-month volume forecast for certain of our slurry products, to purchase certain non-material minimum quantities every six months, and to pay for the shortfall if we purchase less than these amounts. We currently anticipate meeting minimum forecasted purchase volume requirements. We also operate under a fumed alumina supply agreement with Cabot Corporation which runs through December 2011, under which we are obligated to pay certain fixed, capital and variable costs, which are no longer material to our business. Purchase obligations include \$7,755 of contractual commitments for fumed silica and fumed alumina under these contracts.

18. Earnings Per Share

The standards of accounting for earnings per share require companies to provide a reconciliation of the numerator and denominator of the basic and diluted earnings per share computations. Basic and diluted earnings per share were calculated as follows:

	Year Ended September 30,		
	2011	2010	2009
Numerator:			
Net Income	<u>\$51,662</u>	\$49,458	\$11,187
Denominator:			
Weighted-average common shares (Denominator for basic calculation)	22,895,568	23,083,807	23,078,967
Weighted-average effect of dilutive securities: Share-based compensation	<u>539,036</u>	188,772	17,457
Diluted weighted-average common shares (Denominator for diluted calculation)	<u>23,434,604</u>	23,272,579	23,096,424
Earnings per share:			
Basic	<u>\$ 2.26</u>	\$ 2.14	\$ 0.48
Diluted	<u>\$ 2.20</u>	\$ 2.13	\$ 0.48

For the twelve months ended September 30, 2011, 2010, and 2009, approximately 1.3 million, 2.6 million and 3.9 million shares, respectively, attributable to outstanding stock options were excluded from the calculation of diluted earnings per share because the exercise price of the options was greater than the average market price of our common stock and, therefore, their inclusion would have been anti-dilutive.

19. Financial Information by Industry Segment, Geographic Area and Product Line

We operate predominantly in one industry segment—the development, manufacture, and sale of CMP consumables.

Revenues are attributed to the United States and foreign regions based upon the customer location and not the geographic location from which our products were shipped. Financial information by geographic area was as follows:

	Year Ended September 30,		
	2011	2010	2009
Revenue:			
United States	\$ 61,540	\$ 55,666	\$ 46,781
Asia	356,074	327,202	227,142
Europe	27,828	25,333	17,449
Total	\$445,442	\$408,201	\$291,372
Property, plant and equipment, net:			
United States	\$ 50,503	\$ 55,576	\$ 62,462
Asia	80,280	60,235	60,319
Europe	8	—	1
Total	\$130,791	\$115,811	\$122,782

The following table shows revenue from sales to customers in foreign countries that accounted for more than ten percent of our total revenue in fiscal 2011, 2010 and 2009:

	Year Ended September 30,		
	2011	2010	2009
Revenue:			
Taiwan	\$132,089	\$129,533	\$ 92,023
Japan	57,889	60,207	44,307
South Korea	56,321	42,669	30,873
Singapore	47,441	44,316	*

*Denotes less than ten percent of total

The following table shows net property, plant and equipment in foreign countries that accounted for more than ten percent of our total net property, plant and equipment in fiscal 2011, 2010 and 2009:

	Year Ended September 30,		
	2011	2010	2009
Property, plant and equipment, net:			
Japan	\$ 50,236	\$ 42,225	\$ 43,362
Taiwan	17,577	17,542	16,430

*Denotes less than ten percent of total

The following table shows revenue generated by product line in fiscal 2011, 2010 and 2009:

	Year Ended September 30,		
	2011	2010	2009
Revenue:			
Tungsten slurries	\$164,098	\$147,788	\$111,364
Dielectric slurries	121,543	117,484	85,761
Copper slurries	76,285	75,898	49,311
Polishing pads	31,045	29,909	17,704
Data storage slurries	27,786	20,806	15,532
Engineered Surface Finishes	24,685	16,316	11,700
Total	\$445,442	\$408,201	\$291,372

SELECTED QUARTERLY OPERATING RESULTS

(Unaudited and in thousands, except per share amounts)

The following table presents our unaudited financial information for the eight quarterly periods ended September 30, 2011. This unaudited financial information has been prepared in accordance with accounting principles generally accepted in the United States of America, applied on a basis consistent with the annual audited financial statements and in the opinion of management, include all necessary adjustments, which consist only of normal recurring adjustments necessary to present fairly the financial results for the periods. The results for any quarter are not necessarily indicative of results for any future period.

	Sept. 30, 2011	June 30, 2011	March 31, 2011	Dec. 31, 2010	Sept. 30, 2010	June 30, 2010	March 31, 2010	Dec. 31, 2009
Revenue	\$109,731	\$111,846	\$109,660	\$114,205	\$110,318	\$101,655	\$98,556	\$97,672
Cost of goods sold	58,814	58,821	56,927	56,774	56,590	51,759	49,091	47,264
Gross profit	50,917	53,025	52,733	57,431	53,728	49,896	49,465	50,408
Operating expenses:								
Research, development and technical	14,687	14,573	14,919	13,856	13,454	12,875	12,908	12,581
Selling and marketing	7,702	7,785	6,791	7,480	7,024	7,009	6,530	6,322
General and administrative	11,677	11,008	11,567	11,676	12,202	14,637	12,699	11,245
Total operating expenses	34,066	33,366	33,277	33,012	32,680	34,521	32,137	30,148
Operating income (loss)	16,851	19,659	19,456	24,419	21,048	15,375	17,328	20,260
Other income (expense), net	(873)	(311)	646	(935)	(527)	172	(440)	61
Income (loss) before income taxes	15,978	19,348	20,102	23,484	20,521	15,547	16,888	20,321
Provision (benefit) for income taxes	6,689	6,559	7,010	6,992	5,231	5,450	5,941	7,197
Net income (loss)	\$ 9,289	\$ 12,789	\$ 13,092	\$ 16,492	\$ 15,290	\$ 10,097	\$10,947	\$13,124
Basic earnings (loss) per share	\$ 0.41	\$ 0.55	\$ 0.57	\$ 0.73	\$ 0.67	\$ 0.44	\$ 0.47	\$ 0.57
Weighted-average basic shares outstanding	22,816	23,119	23,032	22,710	22,821	23,143	23,263	23,167
Diluted earnings (loss) per share	\$ 0.40	\$ 0.54	\$ 0.55	\$ 0.71	\$ 0.66	\$ 0.43	\$ 0.47	\$ 0.56
Weighted-average diluted shares outstanding	23,191	23,797	23,693	23,131	23,002	23,478	23,485	23,294

SCHEDULE II—VALUATION AND QUALIFYING ACCOUNTS

The following table sets forth activities in our allowance for doubtful accounts:

Allowance for Doubtful Accounts	Balance at Beginning of Year	Amounts Charged to Expenses	Deductions and Adjustments	Balance at End of Year
Year ended:				
September 30, 2011	\$1,121	\$ (18)	\$(13)	\$1,090
September 30, 2010	1,277	(113)	(43)	1,121
September 30, 2009	403	856	18	1,277

We maintain a warranty reserve that reflects management's best estimate of the cost to replace product that does not meet customers' specifications and performance requirements, and costs related to such replacement. The warranty reserve is based upon a historical product replacement rate, adjusted for any specific known conditions or circumstances. Additions and deductions to the warranty reserve are recorded in cost of goods sold. Charges to expenses and deductions, shown below, represent the net change required to maintain an appropriate reserve.

Warranty Reserves	Balance at Beginning of Year	Reserve for Product Warranty During the Reporting Period	Adjustments to Pre-Existing Warranty Reserve	Settlement of Warranty	Balance at End of Year
Year ended:					
September 30, 2011	\$375	\$1,074	\$—	\$(1,065)	\$384
September 30, 2010	360	1,161	—	(1,146)	375
September 30, 2009	863	1,067	—	(1,570)	360

MANAGEMENT RESPONSIBILITY

The accompanying consolidated financial statements were prepared by the Company in conformity with accounting principles generally accepted in the United States of America. The Company's management is responsible for the integrity of these statements and of the underlying data, estimates and judgments.

The Company's management establishes and maintains a system of internal accounting controls designed to provide reasonable assurance that its assets are safeguarded from loss or unauthorized use, transactions are properly authorized and recorded, and that financial records can be relied upon for the preparation of the consolidated financial statements. This system includes written policies and procedures, a code of business conduct and an organizational structure that provides for appropriate division of responsibility and the training of personnel. This system is monitored and evaluated on an ongoing basis by management in conjunction with its internal audit function.

The Company's management assesses the effectiveness of its internal control over financial reporting on an annual basis. In making this assessment, management uses the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control—Integrated Framework*. Management acknowledges, however, that all internal control systems, no matter how well designed, have inherent limitations and can provide only reasonable assurance with respect to financial statement preparation and presentation. In addition, the Company's independent registered public accounting firm evaluates the Company's internal control over financial reporting and performs such tests and other procedures as it deems necessary to reach and express an opinion on the fairness of the financial statements.

In addition, the Audit Committee of the Board of Directors provides general oversight responsibility for the financial statements. Composed entirely of Directors who are independent and not employees of the Company, the Committee meets periodically with the Company's management, internal auditors and the independent registered public accounting firm to review the quality of financial reporting and internal controls, as well as results of auditing efforts. The internal auditors and independent registered public accounting firm have full and direct access to the Audit Committee, with and without management present.

/s/ William P. Noglows
William P. Noglows
Chief Executive Officer

/s/ William S. Johnson
William S. Johnson
Chief Financial Officer

/s/ Thomas S. Roman
Thomas S. Roman
Principal Accounting Officer

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

Our management, with the participation of our Chief Executive Officer (CEO) and Chief Financial Officer (CFO), has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended ("the Exchange Act")), as of September 30, 2011. Based on that evaluation, our CEO and CFO have concluded that our disclosure controls and procedures were effective to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and to ensure that such information is accumulated and communicated to management, including the CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

While we believe the present design of our disclosure controls and procedures is effective enough to make known to our senior management in a timely fashion all material information concerning our business, we intend to continue to improve the design and effectiveness of our disclosure controls and procedures to the extent necessary in the future to provide our senior management with timely access to such material information, and to correct any deficiencies that we may discover in the future, as appropriate.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Internal control over financial reporting is defined in Rule 13a-15(f) or Rule 15d-15(f) promulgated under the Securities Exchange Act of 1934 as a process designed by, or under the supervision of, the Company's CEO and CFO to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States of America. Internal control over financial reporting includes policies and procedures that: pertain to the maintenance of records that in reasonable detail accurately and fairly reflect our transactions and dispositions of the Company's assets; provide reasonable assurance that transactions are recorded as necessary for preparation of our financial statements in accordance with generally

accepted accounting principles; provide reasonable assurance that receipts and expenditures of Company assets are made in accordance with management authorization; and provide reasonable assurance that unauthorized acquisition, use or disposition of Company assets that could have a material effect on our financial statements would be prevented or detected on a timely basis. 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.

Our management evaluated the effectiveness of our internal control over financial reporting based on the framework in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, our management concluded that the Company's internal control over financial reporting was effective as of September 30, 2011. The effectiveness of the Company's internal control over financial reporting as of September 30, 2011 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their attestation report which appears under Item 8 of this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Because of inherent limitations, our disclosure controls or our internal control over financial reporting may not prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of

controls 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; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by Item 10 of Form 10-K with respect to identification of directors, the existence of a separately-designated standing audit committee, identification of members of such committee and identification of an audit committee financial expert is incorporated by reference from the information contained in the sections captioned "Election of Directors" and "Board Structure and Compensation" in our definitive Proxy Statement for the Annual Meeting of Stockholders to be held March 6, 2012 (the "Proxy Statement"). In addition, for information with respect to the executive officers of our Company, see "Executive Officers" at the end of Part I of this Form 10-K and the section captioned "Section 16(a) Beneficial Ownership Reporting Compliance" in the Proxy Statement. Information required by Item 405 of Regulation S-K is incorporated by reference from the information contained in the section captioned "Section 16(a) Beneficial Ownership Reporting Compliance" in the Proxy Statement.

We have adopted a code of business conduct for all of our employees and directors, including our principal executive officer, other executive officers, principal

financial officer and senior financial personnel. A copy of our code of business conduct is available free of charge on our Company website at www.cabotcmp.com. We intend to post on our website any material changes to, or waivers from our code of business conduct, if any, within two days of any such event.

Item 11. Executive Compensation

The information required by Item 11 of Form 10-K is incorporated by reference from the information contained in the section captioned "Executive Compensation" in the Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Equity Compensation Plan Information

The information required by Item 12 of Form 10-K is incorporated by reference from the information contained in the section captioned "Stock Ownership" in the Proxy Statement.

Item 13. Certain Relationships and Related Transactions and Director Independence

The information required by Item 13 of Form 10-K is incorporated by reference from the information contained in the section captioned "Certain Relationships and Related Transactions" in the Proxy Statement.

Item 14. Principal Accountant Fees and Services

The information required by Item 14 of Form 10-K is incorporated by reference from the information contained in the section captioned "Fees of Independent Auditors and Audit Committee Report" in the Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) The following Financial Statements and Financial Statement Schedule are included in Item 8 herein:

1. Financial Statements:

Report of Independent Registered Public Accounting Firm
Consolidated Statements of Income for the years ended September 30, 2011, 2010 and 2009
Consolidated Balance Sheets at September 30, 2011 and 2010
Consolidated Statements of Cash Flows for the years ended September 30, 2011, 2010 and 2009
Consolidated Statements of Changes in Stockholders' Equity for the years ended September 30, 2011, 2010 and 2009
Notes to the Consolidated Financial Statements

2. Financial Statement Schedule: Schedule II—Valuation and Qualifying Accounts

3. Exhibits—The following exhibits are filed as part of, or incorporated by reference into, this Report on Form 10-K:

Exhibit Number	Description
3.2 (14)	Amended and Restated By-Laws of Cabot Microelectronics Corporation.
3.3 (1)	Form of Amended and Restated Certificate of Incorporation of Cabot Microelectronics Corporation.
3.4 (2)	Form of Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock.
4.1 (2)	Form of Cabot Microelectronics Corporation Common Stock Certificate.
4.2 (3)	Rights Agreement.
4.3 (4)	Amendment to Rights Agreement.
10.1 (15)	Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan, as amended and restated September 23, 2008.*
10.2 (20)	Form of Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan Non-Qualified Stock Option Grant Agreement (non-employee directors).*
10.4 (19)	Form of Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan Non-Qualified Stock Option Grant Agreement (employees (including executive officers)).*
10.5 (19)	Form of Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan Restricted Stock Award Agreement (employees (including executive officers)).*
10.6 (20)	Form of Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan Restricted Stock Units Award Agreement (non-employee directors).*
10.15 (18)	Cabot Microelectronics Corporation 2007 Employee Stock Purchase Plan, as Amended and Restated January 1, 2010.*
10.22 (18)	Cabot Microelectronics Corporation 401(k) Plan, as amended.*
10.23 (15)	Form of Amended and Restated Change in Control Severance Protection Agreement.**
10.28 (15)	Directors' Deferred Compensation Plan, as amended September 23, 2008.*
10.29 (6)	Amended and Restated Credit Agreement dated November 24, 2003 among Cabot Microelectronics Corporation, Various Financial Institutions and LaSalle Bank National Association, as Administrative Agent, and National City Bank of Michigan/Illinois, as Syndication Agent.
10.30 (5)	Form of Deposit Share Agreement.***
10.31 (5)	Amendment No. 1 to Fumed Metal Oxide Agreement, between Cabot Microelectronics Corporation and Cabot Corporation.+
10.32 (5)	Fumed Alumina Supply Agreement.+
10.33 (15)	Adoption Agreement, as amended September 23, 2008, of Cabot Microelectronics Corporation Supplemental Employee Retirement Plan.*
10.34 (19)	Code of Business Conduct.
10.36 (6)	Directors' Cash Compensation Umbrella Program.*
10.37 (7)	Employment and Transition Agreement dated November 3, 2003.*
10.38 (7)	Employment Offer Letter dated November 2, 2003.*
10.39 (7)	Employment Offer Letter dated November 17, 2003.*

Exhibit Number	Description
10.40 (8)	Amendment No. 2 to Fumed Metal Oxide Agreement, between Cabot Microelectronics Corporation and Cabot Corporation.
10.41 (8)	Amendment No. 3 to Fumed Metal Oxide Agreement, between Cabot Microelectronics Corporation and Cabot Corporation.
10.42 (8)	Fumed Silica Supply Agreement.+
10.43 (8)	General Release, Waiver and Covenant Not to Sue.*
10.44 (9)	Amendment as of January 17, 2005 to Four Grant Agreements for Non-Qualified Stock Option Awards with Grant Dates of March 13, 2001, March 12, 2002, March 11, 2003 and March 9, 2004, respectively.*
10.45 (9)	Amendment as of January 29, 2005 to Three Grant Agreements for Non-Qualified Stock Option Awards with Grant Dates of March 13, 2001, March 12, 2002 and March 11, 2003, respectively.*
10.46 (19)	Non-Employee Directors' Compensation Summary effective March 2011.*
10.47 (11)	Asset Purchase Agreement by and among Cabot Microelectronic Corporation, QED Technologies International, Inc., QED Technologies, Inc., Don Golini and Lowell Mintz dated June 15, 2006.
10.48 (11)	Technology Asset Purchase Agreement dated June 15, 2006 by and among Cabot Microelectronics Corporation, QED Technologies International, Inc., and Byelocorp Scientific, Inc.
10.49 (12)	Amendment No. 1 to Fumed Silica Supply Agreement, between Cabot Microelectronics Corporation and Cabot Corporation.+
10.50 (13)	Amendment No. 2 to Fumed Silica Supply Agreement, between Cabot Microelectronics Corporation and Cabot Corporation.+
10.51 (15)	First Amendment to the Employment Offer Letter dated November 2, 2003.*
10.52 (15)	First Amendment to the Employment Offer Letter dated November 23, 2003.*
10.53 (15)	Cabot Microelectronics Corporation Supplemental Employee Retirement Plan, as amended.*
10.54 (19)	Cabot Microelectronics Corporation Annual Incentive and Sales Incentive Programs.*
10.55 (16)	Share Purchase Agreement dated December 19, 2008 among Cabot Microelectronics Global Corporation, Eternal Chemical Co., Ltd., Major Co-Sellers, and Epoch Material Co., Ltd.+
10.56 (17)	First Amendment to Amended and Restated Credit Agreement dated October 30, 2008 among Cabot Microelectronics Corporation, Bank of America, N.A., as Administrative Agent, Issuing Bank, and Swing Line Bank, and JPMorgan Chase Bank, N.A., as Syndication Agent.
10.57 (18)	Adoption Agreement, as amended January 1, 2010, of Cabot Microelectronics Corporation 401(k) Plan.*
10.58 (19)	Employee Stock Purchase Plan Prospectus as on November 24, 2010.*
10.59	General Release, Waiver and Covenant Not to Sue.*
21.1	Subsidiaries of Cabot Microelectronics Corporation.
23.1	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney.
31.1	Certification of Chief Executive Officer as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

- (1) Filed as an exhibit to, and incorporated by reference from the Registrant's Registration Statement on Form S-1 (No. 333-95093) filed with the Commission on March 27, 2000.
- (2) Filed as an exhibit to, and incorporated by reference from the Registrant's Registration Statement on Form S-1 (No. 333-95093) filed with the Commission on April 3, 2000.
- (3) Filed as an exhibit to, and incorporated by reference from the Registrant's Registration Statement on Form S-1 (No. 333-95093) filed with the Commission on April 4, 2000.
- (4) Filed as an exhibit to, and incorporated by reference from the Registrant's Current Report on Form 8-K (No. 000-30205) filed with the Commission on October 6, 2000.
- (5) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on February 12, 2002.
- (6) Filed as an exhibit to, and incorporated by reference from the Registrant's Annual Report on Form 10-K (No. 000-30205) filed with the Commission on December 10, 2003.
- (7) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on February 12, 2004.
- (8) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on May 7, 2004.
- (9) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on May 9, 2005.
- (10) Filed as an exhibit to, and incorporated by reference from the Registrant's Annual Report on Form 10-K (No. 000-30205) filed with the Commission on December 7, 2005.
- (11) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on August 9, 2006.
- (12) Filed as an exhibit to, and incorporated by reference from the Registrant's Annual Report on Form 10-K (No. 000-30205) filed with the Commission on November 29, 2006.
- (13) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on August 8, 2008.
- (14) Filed as an exhibit to, and incorporated by reference from the Registrant's Current Report on Form 8-K (No. 000-30205) filed with the Commission on September 24, 2008.
- (15) Filed as an exhibit to, and incorporated by reference from the Registrant's Annual Report on Form 10-K (No. 000-30205) filed with the Commission on November 25, 2008.
- (16) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on February 5, 2009.
- (17) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on May 8, 2009.
- (18) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on February 8, 2010.
- (19) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on February 8, 2011.
- (20) Filed as an exhibit to, and incorporated by reference from the Registrant's Current Report on Form 10-Q (No. 000-30205) filed with the Commission on May 9, 2011.

*Management contract, or compensatory plan or arrangement.

**Substantially similar change in control severance protection agreements have been entered into with William P. Noglows, H. Carol Bernstein, Yumiko Damashek, David H. Li, William S. Johnson, Ananth Naman, Daniel J. Pike, Thomas S. Roman, Stephen R. Smith, Adam F. Weisman and Daniel S. Wobby, with differences only in the amount of payments and benefits to be received by such persons.

***Substantially similar deposit share agreements have been entered into with William P. Noglows, H. Carol Bernstein, David H. Li, William S. Johnson, Daniel J. Pike, Thomas S. Roman and Daniel S. Wobby with differences only in the amount of initial deposit made and deposit shares purchased by such persons.

+ This Exhibit has been filed separately with the Commission pursuant to the grant of a confidential treatment request. The confidential portions of this Exhibit have been omitted and are marked by an asterisk.

SIGNATURES

Pursuant to the requirements of section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized:

CABOT MICROELECTRONICS CORPORATION

Date: November 22, 2011

/s/ WILLIAM P. NOGLOWS

William P. Noglows
Chairman of the Board, President and Chief Executive Officer
[Principal Executive Officer]

Date: November 22, 2011

/s/ WILLIAM S. JOHNSON

William S. Johnson
Vice President and Chief Financial Officer
[Principal Financial Officer]

Date: November 22, 2011

/s/ THOMAS S. ROMAN

Thomas S. Roman
Corporate Controller
[Principal Accounting Officer]

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

Date: November 22, 2011

/s/ WILLIAM P. NOGLOWS

William P. Noglows
Chairman of the Board, President and Chief Executive Officer
[Director]

Date: November 22, 2011

/s/ ROBERT J. BIRGENEAU*

Robert J. Birgeneau
[Director]

Date: November 22, 2011

/s/ JOHN P. FRAZEE, JR.*

John P. Frazee, Jr.
[Director]

Date: November 22, 2011

/s/ H. LAURANCE FULLER*

H. Laurance Fuller
[Director]

Date: November 22, 2011

/s/ BARBARA A. KLEIN*

Barbara A. Klein
[Director]

Date: November 22, 2011

/s/ EDWARD J. MOONEY*

Edward J. Mooney
[Director]

Date: November 22, 2011

/s/ STEVEN V. WILKINSON*

Steven V. Wilkinson
[Director]

Date: November 22, 2011

/s/ BAILING XIA*

Bailing Xia
[Director]

**by H. Carol Bernstein as Attorney-in-fact pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934.*

Exhibit 31.1
CERTIFICATION

I, William P. Noglows, certify that:

1. I have reviewed this Annual Report on Form 10-K of Cabot Microelectronics Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors:
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 22, 2011

/s/ WILLIAM P. NOGLOWS

William P. Noglows
Chief Executive Officer

Exhibit 31.2
CERTIFICATION

I, William S. Johnson, certify that:

1. I have reviewed this Annual Report on Form 10-K of Cabot Microelectronics Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors:
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 22, 2011

/s/ WILLIAM S. JOHNSON

William S. Johnson
Chief Financial Officer

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Cabot Microelectronics Corporation (the "Company") on Form 10-K for the fiscal year ended September 30, 2011, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 22, 2011

/s/ WILLIAM P. NOGLOWS

William P. Noglows
Chief Executive Officer

Date: November 22, 2011

/s/ WILLIAM S. JOHNSON

William S. Johnson
Chief Financial Officer

STOCKHOLDERS' INFORMATION

OFFICERS

William P. Noglows

*Chairman, President and
Chief Executive Officer*

H. Carol Bernstein

*Vice President, Secretary
and General Counsel*

Yumiko Damashek

*Vice President,
Japan and Asia Operations*

William S. Johnson

*Vice President and
Chief Financial Officer*

David H. Li

Vice President, Asia Pacific Region

Ananth Naman

*Vice President,
Research and Development*

Daniel J. Pike

*Vice President,
Corporate Development*

Thomas S. Roman

Corporate Controller

Stephen R. Smith

Vice President, Marketing

Carmelina M. Stoklosa

Treasurer and Director, Finance

Adam F. Weisman

Vice President, Business Operations

Daniel S. Wobby

Vice President, Global Sales

BOARD OF DIRECTORS

William P. Noglows

*Chairman, President and
Chief Executive Officer,
Cabot Microelectronics
Corporation*

Robert J. Birgeneau

*Chancellor,
University of California,
Berkeley*

John P. Frazee, Jr.

*Former Chairman and
Chief Executive Officer,
Centel Corporation*

H. Laurance Fuller

*Former Co-Chairman,
BP Amoco PLC*

Barbara A. Klein

*Former Chief Financial Officer,
CDW Computer Centers, Inc.*

Edward J. Mooney

*Former Chairman and
Chief Executive Officer,
Nalco Chemical Company*

Steven V. Wilkinson

*Former Partner,
Arthur Andersen LLP*

Bailing Xia

*Chairman and
Chief Executive Officer,
Summer Leaf, Inc.*

CORPORATE INFORMATION

HEADQUARTERS

Cabot Microelectronics Corporation
870 N. Commons Drive
Aurora, IL 60504
630.375.6631 phone
800.811.2756 toll free
630.499.2666 fax
www.cabotcmp.com

INVESTOR INFORMATION

Contact our offices by mail at
the address above, by telephone
at 630.499.2600 or at
www.cabotcmp.com.

STOCK INFORMATION

Cabot Microelectronics is traded on
the NASDAQ Global Select Market
under the symbol CCMP.

STOCK TRANSFER AGENT AND REGISTRAR

Computershare Trust Company, N.A.
P.O. Box 43078
Providence, RI 02940-3078
781.575.3400
www.computershare.com

INDEPENDENT AUDITORS

PricewaterhouseCoopers LLP
Chicago, IL

STOCKHOLDERS' MEETING

The Annual Meeting of Stockholders
will be held at 8 a.m. Central
Time on March 6, 2012, at
Cabot Microelectronics Corporation
870 N. Commons Drive
Aurora, IL

FORM 10-K

A copy of the Cabot Microelectronics
Annual Report on Form 10-K for the fiscal
year ended September 30, 2011, filed with
the Securities and Exchange Commission,
is enclosed and also available without
charge at www.cabotcmp.com.



Cabot Microelectronics Corporation
870 N. Commons Drive
Aurora, IL 60504

www.cabotcmp.com

Cabot Microelectronics is committed to conducting its business operations in a manner that preserves the environment, which includes limiting waste, conserving energy and preventing pollution. Our commitment goes beyond regulatory compliance and ISO certifications. Since initiating our environmental program in fiscal 2008, we have successfully lessened our impact on the environment in the following ways:



We continue to partner with our customers to help them achieve their environmental goals. As we look to the future, we plan to further reduce the environmental impact of doing business by strongly encouraging our suppliers to share our commitment to the environment, and we plan to measure the progress of these preferred suppliers. Through our own environmental initiatives, as well as through joint programs with our customers and suppliers, we strive to continue to be a trusted business partner and model corporate citizen with respect to environmental issues.