Where is the market heading over the next five years?

Broadband technology, a part of the IT revolution, will become increasingly pervasive. It will enable extremely high-speed delivery of images and sound that will be more realistic than anything to date. Various applications will develop around broadband, including digital consumer appliances. This in turn will create an urgent need for intelligent semiconductors and LCD panels. These industries, and in turn the production equipment they require, will post double-digit growth over the mid- to long-term, despite inevitable short-term downturns. It’s a market with a very bright future.

Given this outlook, what are Tokyo Electron’s strengths and approaches to achieving growth?

Tokyo Electron supplies the equipment for producing advanced semiconductors and LCDs. Through our Computer Network and Electronic Components divisions, we are also a leading distributor, using our technological expertise to market superior semiconductor chips and systems from around the world for mobile and Internet-related applications. In other words, all of Tokyo Electron’s operations are involved in fundamental segments of the IT revolution. We intend to grow by maintaining a leading market share in many of these segments and acquiring leadership in others.

The key to success as a supplier of semiconductor production equipment is process integration capabilities. This entails supplying comprehensive solutions for multiple adjoining processes using a number of our products, or even incorporating those of other companies. Few competitors can match our process integration capabilities because of the breadth of our product lineup.

Advanced Process Control technology adds value to process integration. Customers have always managed yield. Process control capability incorporated in equipment and between equipment will support stable and higher yields. The ability to deliver integrated process control capability will be a key factor differentiating suppliers of semiconductor production equipment. Few companies in the world can do this. We intend to expand sales by devoting even more effort to this area.
Do the organizational innovations implemented in April 2001 reflect the direction Tokyo Electron is taking in its business?

Formerly, the Semiconductor Production Equipment division was organized into product-specific business units. Under the current reorganization, with the exception of LCD production equipment, the division has been broadly divided into three groups: the Litho-Cell Group, the Test & Integrated Process Control Group and the Thin Film & Cleaning Group. This reorganization is significant in two major ways. First, it clarifies our core competencies in semiconductor production equipment. Second, it defines a matrix for implementation of key process integration that provides substantial value to the market, which we believe to be strategically important.

A megatrend in the semiconductor industry is the shift to 300mm wafers, which has started at several chip manufacturers. What is the status of Tokyo Electron’s 300mm equipment?

Currently, the 200mm equipment market is contracting, influenced by the global slowdown in capital investment. Bookings for Tokyo Electron’s 300mm equipment, however, are firm. We have already readied our lineup of 300mm equipment, with the result that 300mm orders now account for nearly 20 percent of total SPE orders. We expect that number to further increase during the current fiscal year.

A key strength in winning orders is that our outstanding support system assists customers in making the shift to the 300mm platform. We have created the world’s largest application laboratory, our new Process Technology Center in Nirasaki, Japan, for 300mm equipment, an advanced facility where 300mm production concepts are in actual use. The Center enables us to work in close cooperation with customers to determine their particular needs for 300mm equipment. The shift toward 300mm provides a valuable opportunity to further increase the market share of Tokyo Electron’s products.
Will attaining leadership in additional market segments require external acquisition of technologies?

There are three ways to obtain new technology. We can develop it ourselves, but if it is a crucial technology related to our core business and we decide that acquisition is faster, we’ll take that route. The third way is strategic alliances, which we typically employ to complement our own core technologies. A good example is the partnership we formed last year with NuTool of the United States, which supplies innovative copper electroplating technology for interconnects.

How does Tokyo Electron handle the well-known upward and downward swings in the semiconductor production equipment market?

The cyclical nature of our main market is not going to disappear, and we must ensure we have a highly efficient and flexible organization to handle it. Right now, we are executing a three-year project that will cut the lead time from order to delivery in half. While this project will not insulate us against the current downswing, its completion will result in the creation of a structure that promotes highly efficient use of assets.

We have turned the difficult environment to our advantage so far. Companies that have successfully met the technological and management challenges posed by the cyclicality of the market have generated strong growth and, thus, the industry has developed. Tough times engender innovation; mainstream technology tends to become outdated, and new technologies come to the forefront. In such a period of change, we aggressively innovate our technology and approaches to management.

Without a doubt, 300mm equipment will come to the forefront. Also, demand will increase for equipment designed to be scalable and adaptable to changes in the volume and variety of products, such as System LSIs. We will continue improving our 300mm equipment while promoting new-concept production equipment that radically shortens production time. The latter includes Telius™, a 300mm etcher, and TELFORMULA™, which offers ultra-high-speed thermal processing for both mini and mega fabs. Tokyo Electron does not intend to scale back R&D investment during the current downswing.
What directions will the Computer Network and Electronic Components divisions take?

We will further focus on growth sectors. The Computer Network division is emphasizing core broadband technologies such as storage area networks and Internet technologies. The Electronic Components division is concentrating on high-value-added products such as communications-related devices and System LSIs. In these businesses, Tokyo Electron is not simply a distributor, but functions as a group with a technological specialty. Customers hold this characteristic in high regard. We will make the most of these unique businesses as we successfully strengthen our accumulated engineering and design capabilities.

What management tasks lie ahead?

While there are many things I would like to accomplish, I have recently started to think that we need to be truly globalized for further growth. Our globalization program over the past several years has been a key factor in increasing earnings. Up to this point, globalization for Tokyo Electron has meant expanding our network of operating bases outward from Japan. The process must become centripetal in order to incorporate the best global practices into management. In this light, for example, certain functions of headquarters could be diffused overseas. Now is the time for framing specific concepts toward our second phase of globalization. We will also strengthen technical support in Southeast Asian countries, including China, which is poised to become a large growth market.

Recently, Tokyo Electron has been receiving awards from best-of-class customers worldwide in recognition of our excellence as a supplier, indicating the broad acceptance we have received for the quality of our products and support. This kind of recognition both affirms our success at raising corporate value and striving toward global excellence, and inspires us to aim even higher.