2.4 TSMC Position, Differentiation and Strategy

Position

As the leader in the foundry segment of the semiconductor manufacturing industry, TSMC commanded a 45.5% share of this segment in 2010, with total consolidated revenue of US$13.3 billion. In terms of geographic distribution of net sales, 67% came from companies headquartered in North America, 15% from the Asia-Pacific region, excluding China and Japan, 11% from Europe, 3% from China and 4% from Japan. In terms of end product application, 27% of TSMC’s wafer revenue came from the computer sector, 43% from communications, 13% from consumer products, and 17% from other categories, such as industrial products.

Differentiation

TSMC’s leadership position is based on a trinity of key differentiating strengths: technology leadership, manufacturing excellence, and customer partnership. As a technology leader, TSMC has consistently been the first pure-play foundry to develop the next generation of leading-edge technologies. As a manufacturing leader, TSMC is renowned for its yield management, and offers best-in-class support services to expedite time-to-market and time-to-volume. And, in customer partnership, TSMC works closely with its customers on end-to-end collaboration to optimize design and manufacturing efficiencies. Going forward, TSMC will continue building on this trinity of strengths to provide the best overall value to its customers.

Strategy

TSMC is confident its differentiating strengths will enable it to leverage the attractive growth opportunities in the foundry sector going forward. TSMC works constantly to ensure that these strengths are maintained and improved. For example, TSMC is intensively working on leading-edge 28nm and 20nm processes to maintain its technology leadership position. Numerous efforts are also underway to ensure manufacturing excellence, such as continuing enhancement of Design-For-Manufacturing (DFM) support services to increase yield and efficiency. TSMC also expanded its Open Innovation Platform initiative, a set of ecosystem interfaces and collaborative components initiated and supported by TSMC that efficiently empowers innovation throughout the supply chain to enhance timely innovation. Finally, as it does every year, TSMC conducted throughout 2010 customer reviews and surveys to better understand customer needs and wants, and accordingly may adjust its offerings in response, thereby strengthening its partnership with customers.

To address the challenges of falling wafer prices and fiercer competition from other semiconductor manufacturing companies, TSMC continually strengthens its core competitiveness, and properly deploys its short-term and long-term technology and business development plans in order to enhance Return on Investment and growth.

- **Short-term semiconductor business development plan.**
  1. Substantially ramp up the business and sustain market segment share of advanced technologies with further investment on capacity.
  2. Maintain market segment share of mainstream technology by expanding business into new customers and market segments with off-the-shelf technologies.
  3. Grow business with IDMs by deepening the partnership on technology development and business model arrangement.

- **Long-term semiconductor business development plan.**
  1. Continue developing the leading edge technologies consistent with Moore’s law.
  2. Broaden “More-than-Moore” business contribution by further developing derivative technologies.
  3. Further expand TSMC’s business and service infrastructure into emerging and developing markets.

New Businesses

In May 6, 2009, TSMC established the New Businesses organization to explore non-foundry related business opportunities. During 2010 and early 2011, the New Businesses organization consisted of two business divisions responsible for: (1) solid state lighting business activities, such as developing efficient Light Emitting Diode (LED) technologies that can be used in various lighting applications; and (2) solar business activities, such as producing and marketing photovoltaic modules.

In March 2010, construction began on phase one of our new LED production facility in the Hsinchu Science Park, which was made ready for tool move-in by September 2010. A pilot line had been installed at the end of 2010, to be initially used for development activities and subsequently extended to full production set-up in the future.

In June 2010, TSMC, through its investment fund, invested US$50 million to acquire a 21% stake in Stion Corporation, a manufacturer of thin-film photovoltaic modules in the U.S. In addition, TSMC entered into several agreements with Stion Corporation on CIGSS technology licensing, supply and joint development. In the second half of 2010, a team of our engineers worked with Stion Corporation to prepare the transfer of CIGSS technology to us in 2011. In
September 2010, construction began on phase one of our solar business production site in Taichung’s Central Taiwan Science Park, with tool move-in expected to start in the second quarter of 2011. In February 2010, we also acquired a 20% equity interest in Motech, a Taiwan solar cell manufacturer.

2.5 Awards Received in the Reporting Period

- Chosen for membership in the Dow Jones Sustainability World Index for a tenth consecutive year, and named as the semiconductor sector leader with the highest overall score among all semiconductor companies
- Awarded “Corporate Social Responsibility Role Model Award” in the Large Cap category by Globalviews Magazine
- Ranked in top 10 of Business Next Magazine “Taiwan’s Top 100 Technology Companies”, and awarded “Outstanding Achievement Award” as well as “Double Play Award” for placing in both Taiwan and Global top 100
- Awarded “Most Admired Company in Taiwan” by CommonWealth Magazine
- Chairman Dr. Morris Chang awarded “The Entrepreneur Most Admired by Taiwan Entrepreneurs” by CommonWealth Magazine
- Awarded “Most Admired Company in Taiwan” in the Wall Street Journal reader’s survey of Top 200 companies in Asia for a ninth consecutive year
- Recognized by the Taiwan Institute of Sustainable Energy with the “Gold Award for Taiwan Corporate Sustainability Reports” for two consecutive years
- Recognized by the Atomic Energy Council for “Excellence in Radiation Protection”
- Fab 12 was recognized by the Environmental Protection Administration with the “The Annual Enterprise Environmental Protection Award”
- Fab 12 Phase 4 was recognized by the Ministry of Economic Affairs with the “Water Saving Award”
- Fab 12 Phase 4 was recognized by the Hsinchu Science Park Administration with the “Low Carbon Enterprise Award”
- Fab 12 Phase 4 was recognized by the Hsinchu Science Park Administration with the “Water Saving Award”
- Fab 14 was recognized by the Southern Taiwan Science Park Administration with the “Water Saving Award”
- Fab 3 was recognized by the Ministry of Economic Affairs with the “Energy Conservation Award”
- Fab 12 and Fab 3 were recognized by the Hsinchu Science Park Administration with the “Excellence in Labor Safety and Hygiene Award”

2.6 International Corporate Sustainability Performance Appraisal

TSMC has been invited to participate in the corporate sustainability performance appraisal of the “Dow Jones Sustainability Indexes (DJSI)” since 2001, and in its third year of participation was the first Taiwan company selected as a component of the sustainability indexes. In 2010, TSMC was the only Taiwan company selected as a component in the DJSI World Index for ten consecutive years, and also one of just three semiconductor companies in the world to receive this honor.

We were recognized as DJSI’s worldwide leader in the semiconductor sector in 2010, and received the best score in the Environmental dimension.

The DJSI was launched by Dow Jones, STOXX Ltd. and SAM Group of Zurich, Switzerland in 1999 and is an index for socially responsible investment. The DJSI evaluates companies along economic, environmental, and social dimensions. In 2010, DJSI selected the top 10% of 2,500 major global companies based on economic, environmental, and social criteria.

TSMC’s outstanding overall performance in all three dimensions has been once again affirmed by the DJSI for the company’s achievements and commitment to sustainable development. The contents and results of DJSI evaluation provide TSMC with an opportunity for self-review and to understand stakeholder concerns so as to continue improvement, giving back to the society and pursuing sustainable development.

2.7 Membership in Industry Associations

As a semiconductor industry leader, TSMC actively participates in trade and industry associations. TSMC executives have been nominated to and hold senior positions in associations including the Taiwan Semiconductor Industry Association, the Association of Industries in Science Parks, the Chinese National Association of Industry and Commerce, the Taiwan Electrical and Electronic Manufacturers’ Association, the Mount Jade Science and Technology Association of Taiwan, the Taiwan Business Council for Sustainable Development, and the Taiwan SOC Consortium, holding positions such as Chairman or Executive Board Director. In addition, many TSMC employees also contribute to the semiconductor industry by serving in industry associations as committee chairman or vice chairman in professional committees.