

Complete Industry Clusters

World's Leading Optoelectronics Industry

A complete vertically integrated TFT-LCD industry cluster from upstream producers of key components, midstream producers of panel, and downstream producers of LCD-TV is seen in the STSP. By 2005, 48 optoelectronics enterprises were approved to enter the STSP with an annual turnover of US\$8.1 billion in 2005 contributing 73.8% to the total turnover of the STSP, an increase of 54.5% from the end of 2004 and generating 27,880 jobs.

CMO and HannStar Display have expanded next-generation TFT-LCD panel manufacturing factories in the STSP. Moreover, in 2005, the STSP successfully recruited leading Japanese enterprises such as Intelligent Research (Chisso), Daifuku, and ULVAC. With the entry and expansion of more leading international enterprises and domestic TFT-LCD manufacturers, the STSP will continue playing a crucial role in shaping Taiwan as the world leader in the flat panel display industry.

The construction of ULVAC Taiwan Manufacturing and Ultra Clean Precision Technology of ULVAC, Japan were commenced on December 29, 2005; Intelligent Research (Chisso) began its construction in the STSP on December 5, 2005. The factory building of Taiwan Daifuku is almost completed. According to the data from IEK, in 2004, US\$2.9 billion was needed to invest in Taiwan's TFT panel processing equipment and among the production value of domestic LCD equipment of US\$0.4 billion, self-manufacture only accounted for 13.4%. TFT panel manufacturing requires diversified key components and the acquisition of key components determines the production cost and risk of TFT panel manufacturers. Thus, with the entry of international leading equipment manufacturers such as Intelligent Research (Chisso), domestic manufacturers of processing equipment and precision machinery will have more opportunities to cooperate with international leading enterprises and to promote relevant industrial technologies and effectively control the source of key components to further reduce production costs and risks and to achieve the goal of reaching 50% self-manufacture in 2008 set by the government and the turnover of the optoelectronics industry, one of the "Two Trillion, Twin Star" industries, growing to US\$31 billion.

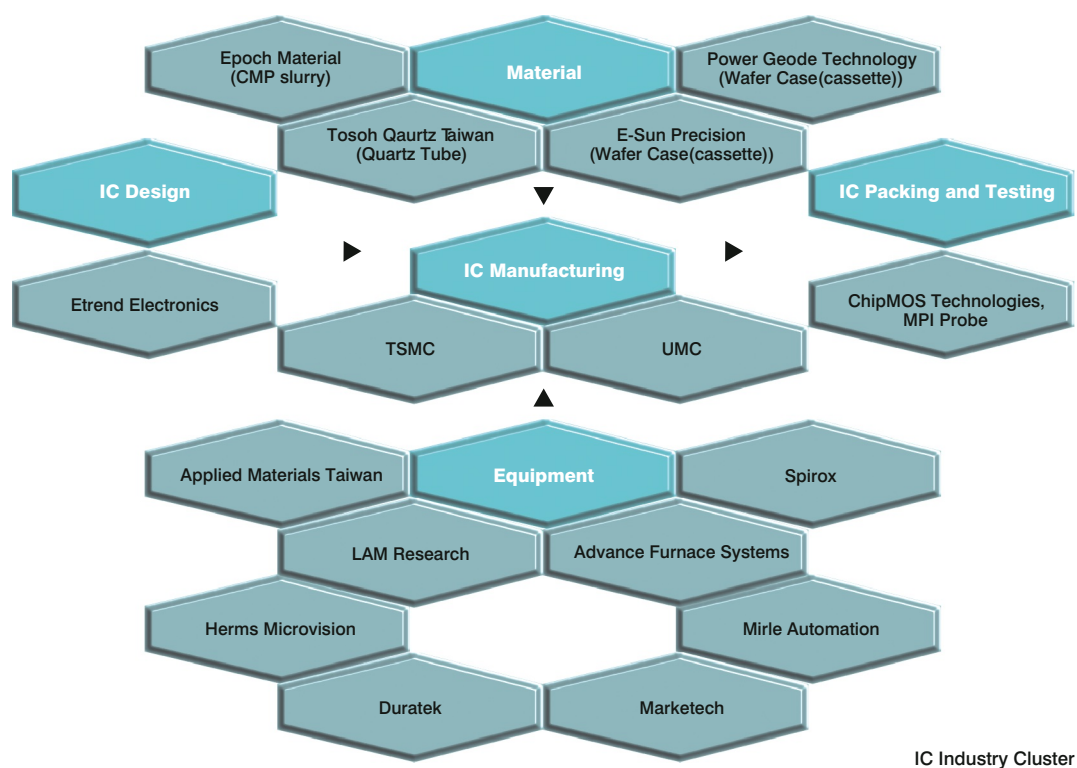
Stably Growing IC Industry

By the end of 2005, the number of approved IC enterprises in the STSP reached 23, including those from IC design, semiconductor foundry, packaging and testing, and semiconductor equipment thereby forming a complete supply chain. The IC industry generated an annual turnover of US\$2.6 billion contributing 23.6% to the total turnover of the STSP and created 8,745 jobs.

TSMC has built an 8-inch fabs with a monthly production capacity of 72,000 pieces and now builds two twin-star structured 12-inch fabs with a monthly capacity of 30,000 pieces. At present, the first 12-inch fab has produced 18,600 pieces per month; the main structure of the second one is near completion and is expected to start mass production in the third quarter of 2006.

UMC had the production capacity of the 12-inch fab in the Tainan Science Park exceeding 25,000 pieces in the first half of 2005 and now moved the divisions in charge of manufacturing technology R&D to the STSP.

Eternal, the largest resin factory in Taiwan, set up its subsidiary - Epoch Material in the Kaohsiung Science Park and started mass production in 2005. Chemicals for mechanical polishing (CMP) during the copper interconnect process manufactured by Epoch Material has been approved by major fabs around the world and has received orders worldwide.



The Complete Biotechnology Industry Cluster

To greet the era of biotechnology, the STSP combined the resources of the government, industry, academia, and research institutes to build a cGMP approved standard factory for biotechnology enterprises in the Tainan Science Park in October 2004, to establish Medical Device Special Zone in the Kaohsiung Science Park, and to plan the Kaohsiung Biotechnology Park. Until 2005, the accumulated number of approved biotechnology enterprises totaled 30 with an annual turnover of US\$47.8 million, an increase of 33.4% from the end of 2004.

The Medical Device Special Zone covers 34.6 acres and cooperates with the Metal Industrial Research and Development Centre and nearby large-scale medical colleges and universities (Kaohsiung Medical University and College of Medicine, National Cheng Kung University) and hospitals (Kaohsiung Chang Gung Memorial Hospital, Kaohsiung Veterans General Hospital, Tainan Chi Mei Hospital, and E-DA Hospital). On October 3, 2005, The Opening Ceremony of Promotion Committee of the Kaohsiung Science Park Medical Device Special Zone was held to build the biotechnology and medical equipment industry cluster.

The 21-acre Kaohsiung Biotechnology Park was approved by the Executive Yuan in principle on January 20, 2005 and the detailed preparation plan was sent to the National Science Council on December 30, 2005. The National Science Council submitted it for the approval of the Executive Yuan on January 27, 2006 to develop the Kaohsiung Biotechnology Park. An Innovative Technology Incubation Center and Public cGMP-approved Standard Factory for Pilot Run will be established to coordinate with the Park enterprises in R&D and pilot run.