HKUST Opens First Semiconductor Analysis Center in Hong Kong

A new semiconductor product analysis center that will sharpen the competitive edge of the local semiconductor industry was inaugurated today (12 December) at the Hong Kong University of Science and Technology (HKUST).

The opening of the Semiconductor Product Analysis and Design Enhancement (SPADE) Center was officiated by Francis S W Ho, Commissioner for Innovation & Technology, and Prof Otto Lin, HKUST’s Vice-President for Research and Development.

The first of its kind in Hong Kong, the SPADE Center is equipped with over HK$15 million worth of cutting-edge failure analysis and testing equipment. It was established with the generous support of HK$14.9 million by the Innovation and Technology Fund (ITF), and a matching sponsorship of HK$2.4 million by more than 20 local semiconductor companies.

Semiconductor companies in Hong Kong are mostly integrated circuit (IC) design and manufacturing houses, user companies or “fabless” design houses. With the establishment of the SPADE Center, small- and medium-sized semiconductor companies no longer have to go to Taiwan or Singapore for product analysis, design enhancement and failure analysis. Their IC samples will be analyzed, debugged, modified and optimized right in Hong Kong. This will shorten production time significantly while lowering manufacturing costs, resulting in the development of high value-added semiconductor products.

Since commencing operation in May, the SPADE Center has provided product analysis service for more than 30 local semiconductor companies, including ON Semiconductor and SOLOMON Systech Ltd, two of its major sponsors.

Nurturing local professionals is another key mission of the SPADE Center, which provides failure analysis and product development training for staff of these companies. The Center’s advanced laboratory infrastructure is also designed to attract more international semiconductor companies to open their IC design houses and development offices in Hong Kong.

"The world semiconductor market is expanding rapidly and the demand for design talents is huge. The Chinese Mainland is investing heavily in its semiconductor industry with the establishment of a number of fabrication lines recently. If Hong Kong is to grab the momentum and develop its own semiconductor design industry, substantial government support in the training of local talents is essential," said Prof Johnny Sin, Director of the SPADE Center and HKUST Professor of Electrical and Electronic Engineering.

"Taiwan, one of our close neighbors, is investing hundreds of millions of dollars to train thousands of circuit designers in the next few years. We must seize the opportunity or we'll be lagging far behind," he said.