

Siemens supplies comprehensive solutions package for new Infineon fab in Malaysia

# Pulling it all together

Construction on the new fab – which will employ some 1,700 individuals – got under way in spring 2005, with commissioning slated for 2006. “The construction timeline is relatively tight,” as Dr. Werner Reczek, COO Infineon Technologies Austria AG and project head of the Kulim fab, points out. “This is a fast track project, and the schedule is definitely tighter than other projects.”

Currently, construction is in its final stages and has already successfully met the ready for equipment deadline in March 2006. Designed for a maximum capacity of 100,000 wafers per month, the 200 millimeter wafers manufactured at the new plant are designated for Power IC and Power discretes production. With the first production plant solely dedicated to producing wafers for power applications, Infineon is well positioned to meet the rising demand of the automotive industry and industrial applications. “When we decided to build the new fab in Malaysia, we had the Asian market in mind, which is one of our main business areas,” Reczek adds. “Malaysia was our first choice

also because we already have one successful fab in operation at Malacca.”

### Quality systems for quality products

Power ICs are used in critical applications, which is why the plant must fulfill the most stringent criteria. “When you have a chip controlling a safety feature such as an anti-lock braking system, defects are simply unacceptable,” Reczek explains. To reduce project risks, Infineon once again chose to select a proven partner in M+W Zander as the general contractor, which had already built other plants for Infineon. With Infineon assuming responsibility for production equipment and, in cooperation with its partners, all layouts including the detail engineering, M+W Zander has contracted out power supply and distribution, automation, process control, and facility management systems. Infineon chose to award the installation of the fab facility and IT

infrastructure, including cabling, data and voice communication, network components, telephone systems as well as access controls, to an outside supplier – Siemens.

Thanks to its proven systems and solutions, Siemens managed to secure an order for several packages at the new fab, including the entire medium and low voltage distribution system, the building and process automation of all of the buildings and systems, as well as the technical construction systems and process supply. Siemens will also supply the turnkey IT infrastructure solution consisting of active and passive network components as well as the telecommunications system. Simatic controllers and the Simatic PCS 7 process control system will be used as a plant-wide automation system for all building and process automation tasks – from the cleanroom to utilities such as high-purity water, wastewater, chemicals supply, and technical gases.

The automation solution must ensure a high degree of availability as well as constant round-the-clock ambient conditions and media supply for heating, cooling, air conditioning and compressed air.

In addition, Siemens will supply the access control and public address systems, a walkie-talkie system, as well as a closed circuit TV system. Fire alarm and protection systems, building automation systems and heating, ventilation and air conditioning products from Siemens are also being considered.

### Systematic fast-track project support

Siemens coordinated its activities in Malaysia in late 2004 already to be able to optimally support Infineon. Project planning also involved a close cooperation with M+W Zander in Germany and Malaysia to enable Infineon to fully leverage Siemens entire semiconductor specific expertise from its local Malaysia office.

As a result, Infineon was not only able to benefit from Siemens comprehensive solutions portfolio, but also from its extensive local know-how. Both of the project heads of M+W Zander and Infineon stress the importance of an integrated approach for the project. Having just one point of contact for various packages such as power supply, automation and facility management systems facilitates a fast and trouble-free project execution. To date, the project has gone exceptionally well, and Werner Reczek as well as the entire project team at Infineon are very satisfied. With the Kulim fab, Siemens has not only proven that it can provide key support for large-scale global semiconductor projects with its knowledge and expertise, but has also left a very good impression in the growing Asian semiconductor market, where several similar projects are expected in the coming years.



## Infineon in Malaysia

The Kulim site is Infineon's second plant in Malaysia. A fab in Malacca, set up some 30 years ago, now produces more than eight billion components for various semiconductor solutions in four high-technology product groups.

While seeking another Power IC production site, the company once again selected Malaysia because of the country's skilled labor force, attractive cost position and good infrastructure. Certainly, the positive experiences made at Malacca also played a role.

The site of the new fab, the Kulim High Tech Park in the Kedah province of Malaysia, is already home to production facilities of Intel, Fuji, Entegris, and AIC Semiconductors. Infineon's presence is expected to attract further multinationals, especially from Europe.

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