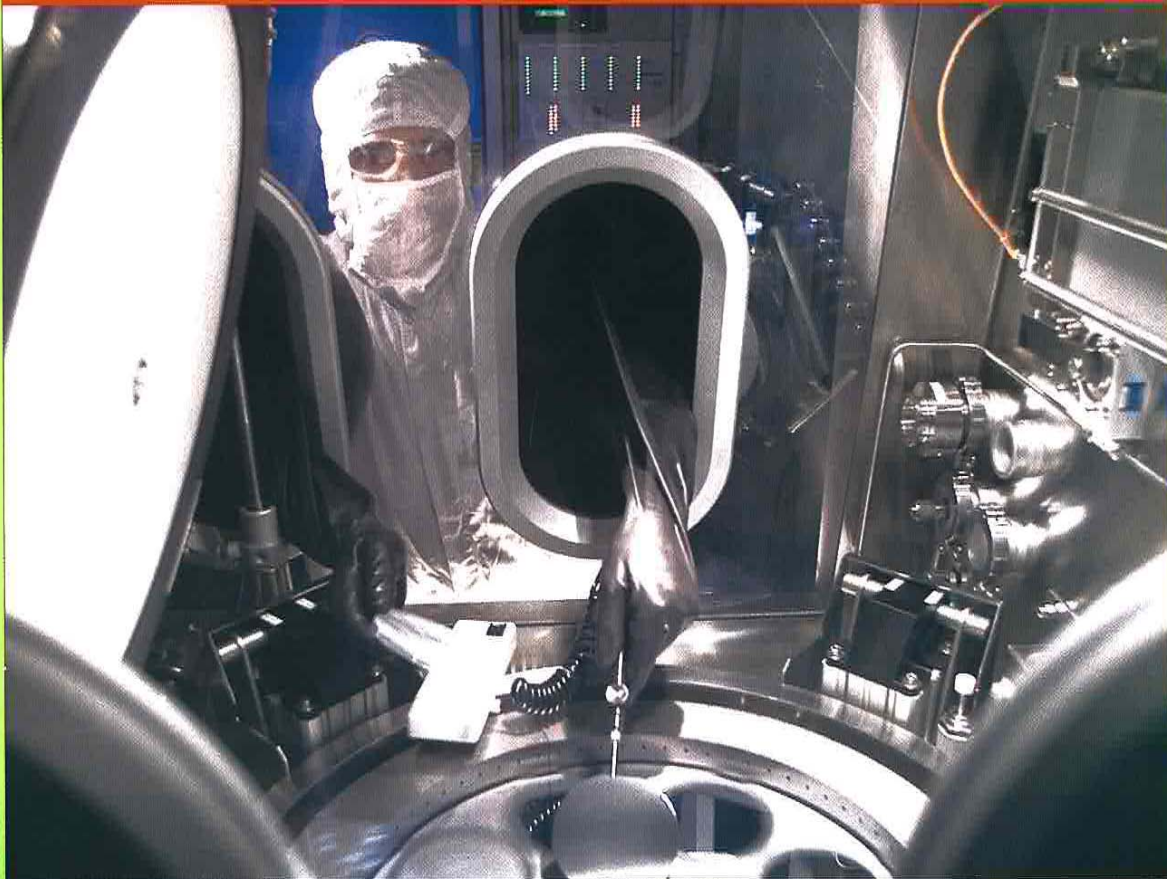


COMPOUND SEMICONDUCTOR

Three-Fives and Silicon Heterostructures

April 2005 Volume 11 Number 3



WAFER CHARACTERIZATION
Automated techniques
deliver precision profiles

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deep-UV LEDs**

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On the cover: Automated techniques to measure epiwafer doping concentration and to characterize different types of defects promise to aid the development of GaN-based devices (image courtesy of Kopin Corporation/Beaupre & Co).

Kopin achieves wafer milestone

Kopin Corporation has reached a milestone with the shipment of half a million of its GaAs HBT wafers.

"Because our vertical-transistor technology was so new in 1996, no-one could have imagined that we would ship 500,000 HBT wafers, generate several hundred million dollars of revenue for Kopin and help create billions of dollars of revenue for our power-amplifier customers," said Kopin CEO John Fan.

The Taunton, MA, firm ships thousands of 4 and 6 inch wafers each week, and is developing the technology for emerging application markets such as 3G phones and wireless connectivity protocols such as WiMAX.

When it released its fiscal year 2004 results recently, Kopin said that revenue from its HBT wafers soared 33% year on year. Sales were \$36 million for the year ended December 25, 2004. Fan says that the strong showing was due to the success of a long-term contract with its largest HBT customer. "The agreement has allowed both parties to work together to reduce costs and improve efficiencies," he said.



Half a million and counting: Kopin estimates that it has an 80% share of the merchant market for GaAs HBT wafers.

Having disposed of its LED-manufacturing wing through establishing an Asian joint-venture company, Kopin will be able to devote more time and resources to its HBT-wafer product line. The company is busy developing the next generation of wafers, which are based on the quaternary GaAsInN material.

Mimix acquires final assets of Celeritek

Houston-based GaAs MMIC supplier Mimix Broadband is to acquire the remaining assets of Celeritek for \$2.8 million in cash.

Celeritek's GaAs-component operation in Santa Clara, CA, includes a portfolio of products such as low-noise amplifiers, gain blocks and power-amplifier (PA) modules for both commercial and defense applications.

Under the agreement, Mimix will also take on liabilities of \$6 million. The deal does not include Celeritek's remaining cash, cash equivalents or certain other non-operating assets.

Celeritek exited the cell-phone handset PA business and decided to concentrate on defense markets in September 2003. That decision came after Motorola stopped second-sourcing its handset PAs from the company.

Shortly afterwards, Anadigics acquired the Tavanza handset PA design business from Celeritek, while the sale of its defense electronics business to Teledyne Technologies netted shareholders \$31.4 million, or \$3 per share.