TSMC Offers Volume Production Of SiGe BiCMOS Technology

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Taiwan Semiconductor Manufacturing Co. Ltd. (TSMC) today claimed to be the first pure-play foundry to offer silicon germanium (SiGe) BiCMOS technology for volume production.

Hsinchu, Taiwan-based TSMC (nyse: TSM) said its 0.35-micron SiGe BiCMOS process performs at higher speeds and uses less power than standard CMOS and is less expensive than gallium arsenide (GaAs) alternatives. The technology is well suited for cell phone, wireless LAN and optical networking applications, the company said.

TSMC said it intends to stay ahead of its competition by introducing its next-generation, 0.18-micron SiGe BiCMOS technology in early 2003.

"The communications market is on the verge of exploding with new applications, a good number of which will rely on SiGe for critical functions," said Genda Hu, vice president of corporate marketing for TSMC, in a statement. "In certain application spaces, designs that use SiGe will perform faster and use significantly less power than those using all-CMOS, and cost less than those employing exotic alternatives. This is an important technology for designers at the cutting edge of wireless and wired communications capabilities."

The SiGe BiCMOS technology is also available on prototyping multi-project wafers, in TSMC’s CyberShuttle services. A process design kit from Cadence Design Systems Inc. is also available.