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NAND vendors upbeat despite slowdown

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SAN JOSE, Calif. — One of the fastest-growing chip sectors in the semiconductor industry may be slowing down.

Citing a weak pricing environment and a lackluster iPod introduction from Apple Computer Inc., Gartner Inc. last week slashed its 2006 NAND flash memory growth forecast by a whopping \$1.5 billion, and predicted a sluggish market for 2007.

The NAND flash market, which has been in the "oversupply" mode since the beginning of this year, is fast becoming a mere commodity. "I would call it a classical commodity storm for NAND," said Gartner analyst Joseph Unsworth. "There is too much capacity coming online, and we've hit a soft patch in demand."

NAND flash vendors, not surprisingly, were upbeat about the current climate. "I don't think we're in an oversupply [mode]," said Bill Lauer, director of marketing at Micron Technology Inc. (Boise, Ida.). "If [NAND] prices fall, then demand will pick up."

The demand picture remains bright, he said. "The iPod phenomena has slowed somewhat, but there are still a ton of untapped applications for NAND," Lauer said. Besides the MP3 market, hybrid drives, solid-state drives and other products are expected to drive NAND growth, he said.

Last month, Micron missed Wall Street's estimates in the quarter, due in part to falling margins. At the time, the company said its capital spending will hit \$4 billion in fiscal 2007, up from \$1.6 billion from the previous year. Much of the spending is targeted for IM Flash Technologies LLC, a joint NAND manufacturing venture between Micron and Intel Corp. (Santa Clara, Calif.)

Others are also pouring billions of dollars into new fabs, including the joint NAND venture between Toshiba Corp. (Tokyo) and SanDisk Corp. (Milpitas, Calif.). In August, the companies broke ground on its Fab 4 plant, a 300-mm wafer fab in Yokkaichi, Japan. Investment in Fab 4 is expected to reach about 300 billion yen (\$2.6 billion).

"The fundamentals of the market remain strong," said Scott Nelson, director of memory marketing for Toshiba America Electronic Components Inc. (Irvine, Calif.). "The most significant factor contributing to the decline in the overall market is ASP erosion."

Last week, Toshiba increased its forecast for the first half of its fiscal year despite a slight decline in its NAND business. Toshiba reported a 26 percent rise in first-half profit, due to strong earnings in its nuclear power business.

Samsung Electronics Co. Ltd. (Seoul), the world's largest NAND flash supplier, last week posted strong results in the third quarter despite a lull in NAND. "The NAND market is stabilizing with slower price declines," according to Samsung officials in a conference call.

Just as the market appears to have stabilized, STMicroelectronics Inc. (Geneva) and Hynix Semiconductor Inc. (Seoul) recently opened their joint 300-mm memory fab in Wuxi, China. The fab will manufacture NAND flash and DRAMs.

The real wild card in NAND is Chinese silicon foundry provider Semiconductor Manufacturing International Corp. (SMIC). SMIC is sampling a 2-Gbit NAND device, but the foundry specialist has not elaborated on its strategy in the arena.

SMIC may sell NAND parts under its own brand name. "They still want to be a pure-play foundry," said Joanne Itow, an analyst with Semico. "They are trying to figure what to do about the flash business."