Samsung plant sets the stage for Austin's chip rebound

One of largest wafer fabrication factories in nation will use latest equipment to produce most advanced semiconductors.

By Kirk Ladendorf
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Like the company that is building it, the structure rising out of the ground in Northeast Austin is a giant.

Samsung Electronics Co.'s new Austin chip plant sprawls over an area bigger than nine football fields. At nearly 1.6 million square feet of space over three stories, it could hold all of Barton Creek Square mall plus a Wal-Mart Supercenter.

With a cost exceeding $3.5 billion, it will be one of the largest semiconductor factories in North America and the biggest private investment ever in Central Texas.

The wafer fabrication plant also secures Austin's future as a chip manufacturing center for the next decade or longer, a future that had been in doubt just a few years ago.

"The size and scope of this new fab says a lot about Samsung and about Austin," said Applied Materials Inc. CEO Michael Splinter, whose company is building much of the sophisticated equipment that will be used in the plant. "It certainly represents a strong commitment by Samsung to both Austin and Texas, and it signifies that Austin will be where some of the most advanced chips in the world will be manufactured for years to come."

It also will play a role in Samsung's bold ambitions to overtake Intel Corp., turning out flash memory chips — the type used in fast-selling MP3 players and other consumer electronics devices — for key customers such as Apple Inc.

Underscoring Austin's importance to those plans, two top Samsung executives from South Korea, Samsung Group Vice Chairman Jong-Yong Yun and Samsung Semiconductor CEO Chang-Gyu Hwang, are coming for the dedication.

A VIP dinner Wednesday night at the Four Seasons, with guests including Gov. Rick Perry, will be followed by a formal event for more than 1,000 people Thursday at the plant.

By the end of the year, Austin 2, as Samsung calls it, will start making chips, starting the next stage of the region's chip industry history.

Manufacturing innovator

Samsung's facility will be among a handful of the most advanced chip factories built in this country over the next several years.

It will be the city's first plant to make chips from silicon wafers 300 millimeters in diameter, a technology that is far more efficient than the one used in its smaller 10-year-old factory next door.

Having a cutting-edge chip plant is crucial to Austin, where other chip makers closed plants and cut thousands of jobs earlier in this decade, leaving city leaders to wonder whether Austin's long run as a chip-making center might be ending.

The new plant starts the next chapter.

It will have about 900 workers, including 200 from suppliers — slightly fewer than the first plant — but the economic ripples will spread far beyond the estimated $56 million annual payroll.

An economic impact study commissioned by the Greater Austin Chamber of Commerce estimated that the new factory could spur the creation of about 2,800 secondary and support jobs in the area.

Applied Materials, for example, made much of the equipment for the new plant at its Austin operations, where it employs 2,500 people.

Dozens of other local companies also will be big beneficiaries. Samsung estimates it spent $50 million with more than 300 local companies in 2004.

Though the region coughed up a record of $233 million in tax and other incentives to win the plant, Samsung will pay millions of dollars in taxes to the city, the Manor school district and other entities over the life of the plant. Austin 2 will become the city's biggest customer for water and electricity.

Austin lawyer and economic development strategist Pike Powers expects Samsung to become an important ally of two of Austin's chip research powerhouses: the Sematech consortium and the University of Texas.

Samsung joined Sematech as a full member in 2005, and UT officials have made a concerted effort to work more closely with the company on potential research projects and creating jobs for UT engineering graduates.

Samsung already had invested heavily in Central Texas with its original $1.3 billion plant and a $500 million expansion in 2003.

With the new plant, "Samsung becomes an even more important piece in Austin's high-tech puzzle," Powers said. "They have made a major investment here, and we have a major investment in them. It has paid short-term and long-term dividends."

Chip industry steamroller

Samsung is pressing ahead with the plant despite a weak market and falling prices for memory chips. That is consistent with its strategy: In good years and bad, Samsung invests billions of dollars in memory chip factories, betting that its markets will keep expanding and that it can outfight and out-innovate its competitors.

Samsung has pledged to spend $33 billion on new factories and equipment by 2012 in pursuit of growth.

That far exceeds the ambitions of any other semiconductor maker, say industry analysts who marvel at Samsung's ambition and its ability to roll over competitors.

"Samsung is the slow-moving steamroller," Jim Handy of Objective Analysis said. "It is perfectly clear where they are going, but your only chance is to get out of the way."

"Samsung is utterly relentless," said Dan Hutcheson of VLSI Research Inc. "Once they commit to doing something, they are relentless in making it work."

The company dominates the two largest segments of the massive memory market.

It produces about one-third of the world's DRAM, or dynamic random access memory, chips, which are the main kind used in computers. It makes about 44 percent of the NAND flash memory, which is used in consumer electronics, including digital cameras, digital camcorders and portable media players.

Flash memory is important for consumer devices because it can store information for years even when the electric power is turned off.

The growth of those consumer markets is a key to Samsung's goal to overtake Intel.

"Intel was the pacesetter in the PC world, but in the mobile and digital consumer era, we'll lead the way," Hwang told Business Week.

Samsung appears to be betting on its close ties to Apple, which is leading the way on portable high-end devices that can play both music and video.

iSuppli Corp., a market research firm, estimates that fewer than 6 million video-capable players were sold last year, but it expects sales to zoom to 150 million units in 2011.

Music and video players will account for about 35 percent of the world's estimated $12.5 billion in NAND flash memory sales this year, iSuppli forecasts.

Flash chip prices took a pounding last year but have firmed up this year partly because of expected stronger demand for products such as MP3 players and Apple's forthcoming multifunction iPhone.

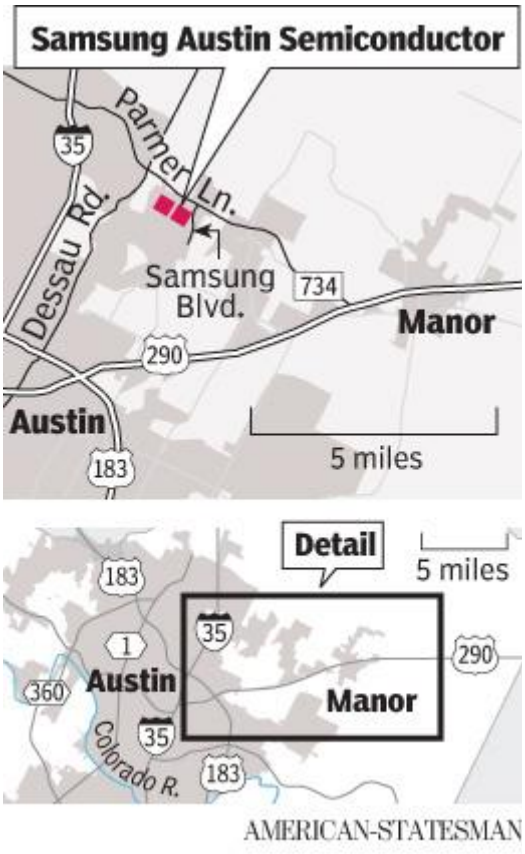
As Samsung reaches for a bigger piece of that and other markets, its new cutting-edge Austin factory will play an important role.

While they aren't saying so publicly yet, some Austin leaders hope that the new plant won't be the end of Samsung's investment in Central Texas. The company owns 300 acres in Northeast Austin, and the city remains the only place outside of South Korea where Samsung has built chip plants.

The answer could be years away.

For now, Austin business and civic leaders are celebrating another milestone in the city's economic growth.

Having an advanced chip plant "solidifies Austin's position as a semiconductor hub for the next 20 years," said Dave Porter, senior vice president for economic development at the Greater Austin Chamber of Commerce, which led the recruiting effort to win the plant. "The project was an important win for Austin's future in semiconductors."



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