

# Linear Technology stays the course

Maier remains committed to long-term, highly profitable strategy.

By Barbara Jorgensen

In the ever-shifting landscape of the semiconductor market, a little stability goes a long way. Linear Technology is one of a few chip companies that can boast it hasn't gone through a series of wrenching reinventions during its 25-year history. "Frankly, one of my biggest challenges is to *not* take the company in a different direction," says Lothar Maier, who became chief executive officer in January 2005.

Maier has little reason to diverge from the path set by former Chief Executive Officer Bob Swanson in 1981. Historically, the company has maintained the highest profit margins in the chip industry: gross margins approaching 80% and net margins of approximately 40%. Even during the downturn, Linear managed to turn in net margins of 38%. "To achieve these types of margins you have to do a lot of things really well," says Maier.

At the core of Linear's strategy is an almost fanatical focus on high-performance analog. "From the beginning," says iSuppli analyst Gary Grandbois, "the company has assembled some of the best engineering talent in [Silicon] Valley. It has consistently had an edge in product performance."

Analog technology, which translates real-world elements, such as temperature, pressure, and sound into digital data, was not a priority at National Semiconductor in 1981 when Swanson and three co-workers left to establish Linear Technology. Launching an analog-only company

went against conventional wisdom in those days of the Digital Revolution, but analog's importance grew as the computer, consumer and wireless markets took off. Analog has since become a differentiating technology, and Linear has made Swanson an industry icon.

Linear's enviable profit margins are derived from its market niche—high-performance analog—and the fact that more than 90% of its products are proprietary. Both character-

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istics command a price premium in the market. The company maintains its technology edge by investing in its design and engineering resources. Linear has opened three design centers in the past two years. The company also keeps its manufacturing in-house. "The company has done a very good job at quality control and making a very good product," says Grandbois.

Some industry participants compare the development of analog chips to a black art requiring highly specialized engineering and production capabilities. "Many of the processes in our manufacturing are tailored only to analog products," Maier says. "These aren't available if

you outsource." Linear also performs test and assembly in-house, helping maintain high levels of quality.

Diversity in both its product lines and customer base has helped Linear offset much of the cyclic nature typical of the semiconductor market. Although high performance is a requirement in most of the larger analog market, Linear cuts a wide swath—manufacturing some 7500 product lines—targeting the industrial, communication, computer, and consumer markets. The same is true of Linear's customer base: None of Linear's 1500 customers accounts for more than a small fraction of its overall business, which reached \$1.093 billion in sales in fiscal year 2006. "We don't have a lot of mega-customers: we sell to niche-type customers who value our products," Maier says.

Revenue between 2005 and 2006 grew 4%, compared with 30% between 2004 and 2005. To grow the top line of the business, the company continues to pursue new applications for analog products.

"One challenge is deciding where the market will evolve, and that [decision] involves visiting with customers, hearing about what their current needs are, and taking this input and integrating it into new products—end products the customer hasn't even thought about," says Maier.



**Lothar Maier**  
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