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Pricing opportunity

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05/01/2007 9:00 AM EST
URL: http://www.my-esm.com/showArticle?articleID=199200171

Thanks to the rapid growth in sales of PCs and mobile phones in recent years, the semiconductor industry is experiencing a sharp expansion. Consequently, semiconductor companies have feverishly increased their supply, spending capital in the last two quarters of 2006 to support what was, until recently, a robust forecast for 2007 demand.

Although the semiconductor market is expected to continue growing in the long term, data suggests the sales forecasts made at the beginning of 2006 were not fully realized. New capacity in the semiconductor manufacturing industry has started to come online, which may lead to a temporary oversupply condition until demand catches up. Thus, electronics companies have an opportunity to lock in favorable rates, if they act quickly and align their spending practices efficiently.

The worldwide semiconductor market, valued at $248 billion in 2006, is seeing production growth due to rising forecasts in end-consumer markets until the end of 2009. Some indicators follow:

• The Semiconductor Industry Association predicts that annual chip sales will increase 9 to 10 percent per year through 2008.

• PC and mobile-phone products make up more than 40 percent of the total semiconductor market. In 2006, overall growth in cell phone sales was about 20 percent, with production exceeding 1 billion units.

• Capital expenditures in the semiconductor industry are ex- pected to rise 20 percent in 2007, exceeding the 12.5 percent January 2006 forecasts. With investments now in place, the historically high capacity utilization rates are declining.

Despite some accelerated growth expectations in the market, there is considerable evidence that the industry is heading toward a temporary slowdown in 2007:

• With three consecutive months of decline in the Inflection Point Indicator, Semico Research Corp. (Phoenix) continues to forecast nominal growth of only 3 to 4 percent for the semiconductor industry next year.

• The PC market has shown some signs of slowing in 2007, prompting researcher iSuppli Corp. (El Segundo, Calif.) to trim its growth forecast for the year, compared with its previous prediction of a 9.3 percent increase.

• The cell phone market is expected to grow by only 7.1 percent in 2007, half the growth rate seen in 2005 through 2006. Cell phone unit shipments are forecast to fall 0.6 percent from the last quarter of 2006 to the first quarter of 2007.

• Desktop computers are expected to show a slowdown in growth from 2006 to 2007. The desktop market is maturing, and unit growth rates will be in the single digits.

In volatile markets such as semiconductors, the response time between supply and demand has a significant impact on prices. Semiconductor manufacturers have overshot their supply production, and although demand will eventually catch up, it will lag briefly. As a result of lower utilization rates in the short term, expect to see a price reduction of roughly 7 percent in semiconductor components by the second quarter.

Opportunity knocks
There is no silver bullet for companies looking to profit from the short-term price drop. Effective procurement strategies take into account numerous factors, including the size and fragmentation of purchases, a company's position within the industry and its place within the semiconductor life cycle. Nevertheless, there are a few actions that companies can take to maximize the opportunity.

From MP3 players to hybrid vehicles, electronics manufacturers have significant opportunities to gain competitive advantage and market share. Advanced purchasing strategies are a highly effective way to do this.

Electronic-circuit design starts with the choice of strategic components, such as a microprocessor or memory. The manufacturer tends to be specified by engineering in functional specifications. The way a company manages its strategic position and price agreements at the beginning of a design cycle has a big impact on production spending during the product life.

Organizations where both purchasing and engineering manage the sourcing process and vendor relationships must ensure that contracts are negotiated in a way that allows for alternatives, if necessary, without requiring extensive product redesign and validation costs. To drive such contracts and ensure year-over-year savings, companies must:

• Engage cross-functional teams to evaluate the cost of alternatives early in concept design work, and analyze pros and cons;

• Create competition among suppliers and other partners before awarding the business--identify and validate alternatives as part of new-product development;

• Solicit buy-in among strategic-component manufacturers by agreeing to medium- to long-term contracts; and

• Make an introduction plan with a primary design partner in ramp-up phase, and leverage dual/multiple sourcing once production is stabilized.

Leverage procurement spending
Companies also must consolidate their purchasing power. Having a robust procurement system in place is not always enough. As a result of global mergers and acquisitions in the industry over the past 15 years, many companies are still working through transition periods to consolidate functions and activities among acquired assets. As a rule, individual decision makers tend to follow microstrategies used prior to acquisition. The individual segments often don't work together to demonstrate larger demand that would enable bulk discounts.

With the semiconductor slowdown on the horizon, companies must engage stakeholders to define their collective needs and identify key areas where consolidated purchasing power can be leveraged against sellers. This principle is especially true when a supply base is limited for a group of products such as DRAMs or ICs.

Consolidating purchases by supplier can mean even more savings in periods of oversupply. It's best to partner with key manufacturers, and secure prices and supplies via contracts with security clauses rather than blanket purchase orders.

Two subgroups that may offer savings in the second quarter are discrete semiconductors and flash memory. When procurement is very fragmented with a large number of parts, and there are adequate suppliers to create competition, apply a Pareto rule of 80/20 to target manufacturers directly and invite them to participate in competitive bidding events for high-volume/low-mix business. A buyer's market is the best time to lock in prices for medium- to long-term contract needs, and online bidding tools provide positive results when the market is competitive.

Diversify the risk
Develop relationships with key semiconductor resellers and brokers for high-mix/low-volume purchases. Complexity may still remain even after leveraging high-value/low-mix procurement and competitive bidding events. If there are too many parts from different suppliers, or a main partner supplier is not responding strongly enough to a request for a package deal, it may be best to diversify the risk with a different approach rather than giving away the potential savings on 80 percent of

the purchases.

Instead of using component resellers exclusively on allocation periods, working strategically with resellers on high/low-volume-mix parts will pay off in overall savings on semiconductors, especially if there are multiple approved manufacturers. To understand where the break-even point is, analyze the past two years' figures for savings vs. spot buys.

Since spot buys are considered nonstandard conditions, the selection of spot-buy suppliers is rarely emphasized enough. If a company decides to place a portion of security business with component resellers, the leverage of competitive bidding events should not be underestimated.

Such events can enable companies to secure one price for parts from various alternative manufacturers and diversify the risk of component availability.

The window of opportunity to take advantage of the projected price drop in semiconductors is short. But the timing has never been better for companies to evaluate their purchasing strategies and adjust them as needed to drive considerable cost advantages and mitigate supply risk.

With the right combination of preparation and stakeholder commitment, electronics companies can seize the current opportunity and become nimble enough to exploit the next one.

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