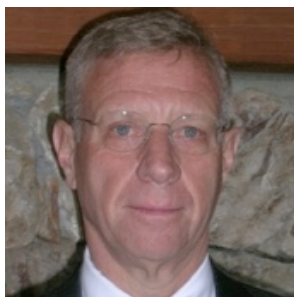


Intelligent Investing

Back To The Good Old Days For Semiconductors

Rick Whittington, 04.07.10, 02:00 PM EDT

The breadth of chipmaker health is the widest it's been in nearly two decades. This is good for NetLogic, Broadcom and Altera.



Not since the early 1990s has the electronics industry seen so many signposts suggesting continued share outperformance by stocks in the group.

Big stars have been NetLogic Microsystems, Broadcom, Altera, Xilinx, Analog Devices, Linear Technology as well as the up-and-coming optical duo, Finisar and Oclaro. This is but a subset of a long list of winners in the chip boom that began a year back and that promises a further two- to three-year run.

Born of the ashes of a financial panic that exacerbated a normal cyclical correction tied to increased globalization and dependence upon Asian consumers for this country's technologically sophisticated wares, the semiconductor cycle is now one year old. The orders and backlog collapse that commenced in summer 2007 sharply reversed last March and April, leading to three successive up quarters in revenues and profits for nearly all semiconductor producers.

Latest industry figures show year-to-year global revenue comparisons now over 50% and a stronger upturn than that of the two years following the 2000 industry collapse. Restoration of trade flows is raising economic activity beyond the 2007 global growth peak, with more consumers this cycle and significantly greater disposable income.

Then there is the clear productivity benefit of high tech displayed in surging corporate profits way beyond levels virtually anyone had forecast six months ago, much less a year or two when present capital spending plans were initially formulated. Sights are being elevated so quickly now that well-above-expected investments in fixed plant and equipment will usher forth the remainder of this year and next.

As long as monetary authorities refrain from premature tightening and wait until anticipated inflation actually germinates, the capital goods boom now unfolding could run several years at least. The capital markets and housing excesses of last cycle are a distant memory and unlikely to be repeated in the period directly ahead, so the eventual overages are likely to come in overinvestment in plant and equipment.

Getting from the last three years' underinvestment phase to inevitable overbuilding of factories and infrastructure will be a process mellifluous to high tech, industrial and capital goods suppliers, which encompasses semiconductor equipment providers such as ASML, Lam Research, KLA-Tencor, Novellus, Applied Materials, Teradyne and Kulicke & Soffa. Because the new capacity side of the electronics food chain downsized as much or more than their components customers in the two years (till last summer), the eventual catch-up of chip supply to rising demand could be forestalled to 2012, not 2011 as generally presumed in Wall Street circles. This means that chip pricing could remain benign not just the remainder of this year but next as well, replicating the early-and-again, late 1990s three-year upturns that saw shares double, double, double, double and double.

Yes, there was a midcourse slowdown in the 1990s, that of fall 1995 though late fall/early winter 1996, and it was rather severe for those unfortunate enough to try to ride the rollers once chip supply caught up with demand in August and September 1995. This 15-month downturn was severe for stocks, with many down 50% or greater from their high-water mark and new orders for chip equipment shifting from exuberance to nonexistence in just three to four months. We recall the CFO of Applied Materials calling up to vent displeasure and express the view everything was just fine. In typical lagging fashion, the world's largest supplier of chipmaking equipment had just seen its order backlog rise through the roof and thought this would continue. Our research inputs, however, told us Intel and other large customers were already deferring and canceling orders. The word just hadn't trickled up to Applied's front office.

Back then it was PCs, both desktop and the first usable notebooks from Compaq and Dell, along with Motorola StarTac and other clamshell cell phones, as well as the first Cisco product cycle and initial Internet build that was driving demand. DRAM pricing had held stable at high levels for three straight years, this following half a decade of dreadful price attrition, with cost-leader but still tiny Micron Technology able to focus output on specialized variants that commanded a \$3-\$4 premium over the \$13 received by the Japanese, TI and fledgling Samsung. Micron, for those who might not recall, saw its shares rise from \$2 at the 1992 trough to \$95 at the 1995 crest, earning nearly \$20 per share on its 1992 share basis, on which the shares split five times along the way. Thus the semi cap-equipment managements were positively giddy by the time the dam burst.

Another disbeliever that the euphoria had ended was Cypress CEO T.J. Rogers. He was so enraged that his and other chip stocks had been downgraded and sent into a tailspin that he spoke on a handful of impromptu conference calls arranged by various investment banks to refute the bear theme. On these calls with investors Mr. Rogers went so far as to personally single out this writer as purveying a poorly researched and incorrect investment conclusion, spending considerable time in conveying his own investment rubric, a variation of which is still found on the Cypress Web site and the source of periodic op-eds. A most gracious apology followed in 1999.

On the other hand, leading investment bankers called my then employer, SoundView Financial Group, to let them know this industry downgrade was responsible for

cancellation of a number of public offerings and that as long as I was employed there, the firm's participation in such deals would suffer. Those deals were going to be scotched anyway given the newly perverse market conditions, but this is just another indication of banker hubris in the 1990s.

Today's atmospherics are quite different. It was just a quarter ago that nearly all chip industry executives were still couching forecasts with language about the uncertain global economy and U.S. consumer. So unable were they to take marching orders from the succession of upward new orders, particularly on the export front, in the 2009 ISM reports and the very low business inventories reported by the Commerce Department, that caution reined throughout industry circles. Some just followed the CNBC chatter while others gnashed teeth over Washington moves on health care, the environment and business regulation.

But the end was the same, highly conservative spending patterns and unwillingness to push capital investments beyond technology upgrades. Spending for new capacity to service expansive international markets, and accommodate new product cycles and Asian consumers' propensity to spend way more than those in the West was nonexistent.

Already a full year into this chip upturn, industry mavens have yet to come anywhere close to the 1995 exuberance, again repeated in 2000 -- and from what we're hearing, they haven't even begun to put in place the excesses that will determine the timing of the next cycle top. In fact, the recent past was sufficiently dismal that most will hesitate for another year to really turn up the volume. For example, in the chip upturns that commenced fall 2002 and in 2005, the industry focus was on high-volume consumer applications, not the far more profitable enterprise communications and computing emphasis that characterized most of the 1990s and that is again driving demand today.

The consumer thrust particularly hurt chip pricing and margins so that after the typical two years burst off the bottom, earnings seriously lagged expectation. Companies registered slower revenue growth and lower margins well prior to the 2007 recession, and the market reclassified semis to pure cyclicals, with reduced valuations.

However, now that spending on fixed plant is rebounding and runaway bestsellers such as iPhone and netbooks, now possibly the iPad, have eaten up network bandwidth, the race is on by telecom carriers to modernize and expand. Unlike consumers, who quickly flock to the latest hot gizmo, communications providers are slow to move, but once they do, they pour it on for a handful of years. Reports that they were about to up capital investments in 2008 but forestalled these due to the capital markets implosion means a significant reservoir of pent-up demand is about to be unleashed. Along with heightened security concerns, stemming both inherently from faster, more used data networks and also from malevolent foreign states and pirates, cybersecurity will elevate spending through the communications domain to new heights, eclipsing those of the Internet boom 1990s.

Dormant optical chipmakers such as Finisar, Oclaro, perhaps even JDS-Uniphase once again, are on runways again that look as steep as 1996 and 1997, with gross margin expansion. Optical component pricing stopped cratering some time back and has entered what might prove to be a lengthy stability as demand vastly outstrips available supplies. Once the initial Internet infrastructure build commenced in the mid-1990s, these companies doubled revenues every two years right into the early 2000 communications infrastructure blow-off. Back then, however, Internet commerce was more a dream than the acute reality it has evolved into the past half dozen years and the foundation of today's renewed global economic boom. Economics are immediate and real today, with adoption of reliable high-speed connectivity the sine qua non of the modern world.

Leading communications chip providers NetLogic, Altera, Xilinx and Broadcom are directly involved in this burgeoning growth, with the former three focused on infrastructure projects carrying the highest margins and the latter dual-rolling there as well as with multimedia and broadcast chips for mobile handsets. NetLogic is already making all-time highs as investors realize the company's several acquisitions of the past year consolidated competitors and firmed their position with key customers such as Cisco.

Altera and Xilinx retained high profit margins even during the past half dozen years of consumer thrust and are set for possibly record rates as long-track, four- to five-year communications projects roll out. Broadcom has continued to expand its footprint in smart phones and other new wave mobile Internet devices such as iPad. These stocks will move significantly higher as the longevity and magnitude of the communications build becomes more widely appreciated.

Some analysts have recently downgraded analog and other chip stocks thinking the past year's moves have captured the cycle. Were today's upturn similar to the last, such could be the case, but the raw earnings power of companies running their own factories, seeing increased prices and higher manufacturing utilization such as Micron Technology speak to a different conclusion. Coming off a \$0.39 per share February 2010 second fiscal quarter, Micron is again raising contract pricing for DRAM and is set to earn at least \$0.50 in the current (May) third fiscal period.

After price hikes last quarter, which is the slowest time of the year in memory chips following the holiday production surge, Micron upped prices, held prices steady in March and is raising them in April. Leading edge DDR3 for PCs and notebooks is up 5%-8% for the first half of April from the second half of March, while commodity DDR2 is up 8%-10% and consumer-oriented NAND is flat versus an expected decline. Server-oriented DDR3 and DDR2 are both up 3%-5%. Specialty memories for smart phones and other mobile Internet devices are rebounding from the typically soft calendar first quarter.

The company guided DRAM output flattish this quarter (May), as its Taiwan joint venture partners close down their output and shift to Micron's far more productive manufacturing process -- not unlike Henry Ford's fast time versus slow-paced

competitors a hundred years ago. This means Micron's May quarter revenue gains will come largely from the price hikes now being implemented, which also bolsters profit margins, especially if recent spot price increases continue to translate into the far larger volumes of contract pricing in second-half April and the month of May.

Besides the prospect of the firm raising DRAM pricing this quarter, which leads to our higher-than-consensus earnings estimate, Wall Street is also missing the combination of this higher pricing extending right through the coming seasonal build encompassing both the August and November quarters when they'll have the benefit of far higher output as those Taiwan fabs fully convert.

The higher prices at which Micron is selling its DRAMs today, which we believe are almost certain to hold through the next six or seven months, is only part of what people are missing today in assessing its earnings power both later this year and next. Its manufacturing costs will continue to decline on its internally produced DRAMs, today accounting for two-thirds of revenues, and at the same time that mix is shifting to even higher priced server- and communications-oriented DRAMs.

Even more appealing, however, is the advent of large royalty payments from the Taiwan partners now moving to Micron's production process, tied to market prices that are rising and amplifying the unit output surge about to take place. That royalty stream could last well into 2011 and won't peak until pricing begins to decline, offsetting the unit rise. DRAM prices held firm from mid-1992 through mid-1995, the last comparable period to today. Recall the Micron CEO/chairman's repeated remarks that he cannot recall a period in his twenty-five years with Micron when there are absolutely no new DRAM factories being built anywhere in the world. This stock is also far from finished.