Impressive 3Q09 Guidance Boosts Chip Sector Shares

But Valuations Assume 4Q Follow-Through

Summary: 3Q guidance during 2Q earnings season has been much better than expected: it has rallied share prices across the semiconductor sector and caused me to temper the decline in my industry sales forecast for this year. Nevertheless, I think it remains a stock-pickers market for short-term traders amid a valuation mine-field that could easily correct if 4Q turns out to be something less than the currently expected seasonal strength.

Solid Stats: Semiconductor industry statistics for June were released earlier this week, and worldwide sales grew by +3.7% sequentially on a three-month rolling average basis. This is down from the prior month's original +5.4%, but still quite respectable compared to the average for June since 1990 of +0.3% with a high of +5.3%, a low of -9.2%, and nine of the last 19 years posting negative growth. The Japanese lead the way once again with growth of +8.2%, followed by the Americas with +4.8% and Asia-Pacific at +2.8%. Europe continues to trail, albeit with growth this time of +0.7%. We have clearly bounced off the bottom of this current downturn, per the adjacent table.

Semiconductor Industry Worldwide Revenues
SIA/WSTS Three-Month Rolling Average Sequential Growth

Year	Month	Sequential Growth	perspective since 1990
2008	Aug	2.4%	above-average Aug *(avg = 1.7%)*
	Sep	1.1%	worst Sep ever *(since 1990)*
	Oct	-2.0%	worst Oct ever, first time negative for Oct
	Nov	-7.2%	worst Nov ever, second time negative, third worst of any month at the time
	Dec	-16.6%	worst ever of any month *(compared to -9.2% in Jun 2001)*
2009	Jan	-11.9%	second worst ever after the prior month
	Feb	-7.3%	worst Feb ever, third worst ever before this downturn
	Mar	3.3%	above-average Mar *(avg = 2.5%)*
	Apr	6.4%	best Apr ever, fourth best of any month
	May	5.4%	best May ever
	Jun	3.7%	above-average Jun *(avg = 0.3%)*

Early reports for July and 3Q continue strong, and I would fully expect better-than-average growth next month compared to the average of +1.2%, a high of +3.3%, a low of -6.3%, and negative growth only three times in the last 19 years.

2Q Strength: The bulk of reported 2Q growth was expected, although incremental upside appeared. According to industry statistics, 2Q sequential growth of +17% was the best ever reported since 1990, topping the previous record of +16.0% posted 4Q99. 2Q has averaged +3.0% with a high of +15.2% and a low of -19.9%. Revised guidance across the Tokeneke Universe after 20 preannouncements (15 of those positive) called for weighted growth of +8.3% to +12.8%, and I expected the high-end of that range could be breeched—although the +18.1% from the bulk of firms across my Universe as of this writing is at least a couple hundred basis points to the upside.

Impressive 3Q Guidance: The big surprise during 2Q earnings announcements, in my opinion, has been the magnitude of expected 3Q growth—especially amid what appears to be persistent conservatism by management given booking and backlog strength going into the period. As of this writing, my Universe is guiding for weighted growth of +3.4% to +11.0%, easily putting it on track to exceed the 3Q statistical average of +6.0%, and even potentially the high of +13.8% (the low was -11.7%). I have definitely grown more bullish after three weeks of earnings announcements confirming—and enhancing—the strength reported by Intel at the onset. Indeed, I am tempering the bearishness of my annual industry revenue forecast, raising it to -15% to -17% from -20% to -25% and aligning myself more closely with the center of forecasted expectations. My revised range depends on 4Q sales growth ranging from -5% to +5%.

Chip Industry Revenue Growth Forecasts

Source	2009	Prior Fcst
Tokeneke	-15-17%	-20-25%
SIA/WSTS	-21.3%	-5.6%
Databeans	-17%	
Gartner	-22.4%	-24.1%
IC Insights	-17%	same
Semico	-12-13%	
VLSI	-13%	-17%

The Philadelphia Semiconductor Index option (SOX) rallied by 14.7% during July, triggered by Intel's pacing announcement that was then supported over the next couple of weeks by most companies across the sector. The tables below indicate winners and losers so far this year through the end of July.

July			
Winners *(95/112)*		Losers	
LOGC	57.8%	INFN	-25.8%
TSEM	55.3%	IXYS	-23.8%
STEC	47.0%	EZCH	-21.8%
ENTR	40.0%	ENTN	-14.7%
RFMD	38.3%	TUNE	-12.0%
average stock +11.9%		*SOX +14.7%*	

YTD			
Winners *(95/112)*		Losers	
STEC	700.2%	SIMG	-41.7%
RFMD	566.7%	RMTR	-35.3%
ENTR	530.0%	INFN	-24.4%
TSEM	321.4%	MOSY	-22.9%
MTLK	280.0%	ADPT	-19.4%
average stock +79.0%		*SOX +42.2%*	

Indices	*Jul*	*YTD*
SOX	14.7%	42.2%
SMH	16.3%	41.7%
NAS	7.8%	25.5%
S&P500	7.4%	9.3%
DOW	8.6%	4.5%

Valuation Gymnastics: The recent rally has turned the chip sector into a mine field for investors, in my opinion. At first blush there appears to be abundant opportunity across the space: a solid 80% of the equities in my Universe are trading below their historical average trailing price-sales ratio, and this only varies by minus 400 basis points when calculated against current fiscal year sales and plus 400 basis point against next fiscal year sales. However, this is clearly a broad-brush-stroke view: I use published consensus estimates for those revenues; some of those issues don't have published estimates; and those estimates are currently in turmoil amid the earnings season frenzy. If anything, I would guess my 80% number could push 90% if the newly raised estimates based on robust 3Q guidance trickled through and were compared against the next fiscal year for valuation purposes.

On the other hand, I am unusually burdened in the current environment with the four models I am currently running. In a normal business environment I take my best shot at constructing an earnings model at least six quarters into the future, and then apply historical and/or comparable fundamental valuation metrics against that model to generate a 12-month price target and recommendation. I will tweak the numbers high or low depending on my confidence, but I try to make a point of letting the numbers lead me to a conclusion. Unfortunately, the current business environment lends itself more appropriately to a scenario analysis of multiple earnings models given macroeconomic uncertainty. Therefore, I am generating an earnings model based on perceived optimism or pessimism, and then I am balancing that bias against lean or more traditional valuation criteria in order to boost my confidence for the output of the whole exercise. In the limit, I am currently much more comfortable dealing with trading range recommendations than simple Buy, Holds, or Sells with price targets.

Take TXN for example: I have a very conservative revenue model due to distrust of the current economy (I am on the low-side of the Street), but my earnings are on the higher side due to my confidence that management will accomplish targeted cost savings. The potential for revenue upside increases my confidence (read, bullishness). I have a trading range recommendation between technical support of $14 and fundamental valuation in the 12-month timeframe of $26 based on 2010 estimates, resulting in a luke-warm Buy recommendation with the shares at $24.60.

On the other hand, I followed management's lead after INTC announced 2Q earnings and my financial model optimistically assumes an immediate return to historical seasonal quarterly trends. In this case I have a rich model and tempered valuation (as well as a lack of bullishness). My trading range recommendation between technical support around $12 and fundamental valuation of $21 results in a solid Hold recommendation with the shares at $19.32—despite potential incremental valuation upside due to discomfort with my earnings model.

Finally, in NSM's case I have a trading range recommendation between technical support around $9.50 and fundamental valuation of $15. I consider my earnings model achievable, but valuation is stretched thin: my Hold recommendation is pretty darn weak and bordering on a Sell with the shares at $15.21.

This is a really long way of saying that I think we are currently in a stock-pickers market for short-term traders.

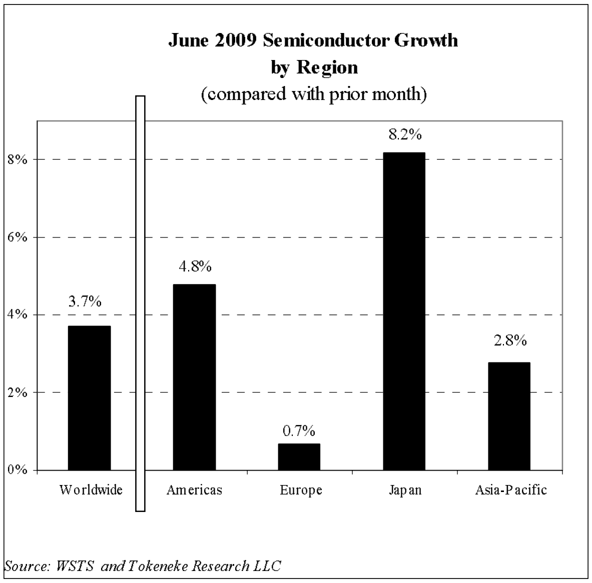
4Q, Unhinged: All eyes are now focused on the profile of a recovery—and the 4Q outlook will be the primary fundamental factor driving share prices across the sector over the next couple of months, in my opinion. So, what's going to happen during 4Q? The honest answer is, 'I don't know—and neither does anybody else.' We'll all find out soon enough in the coming weeks.

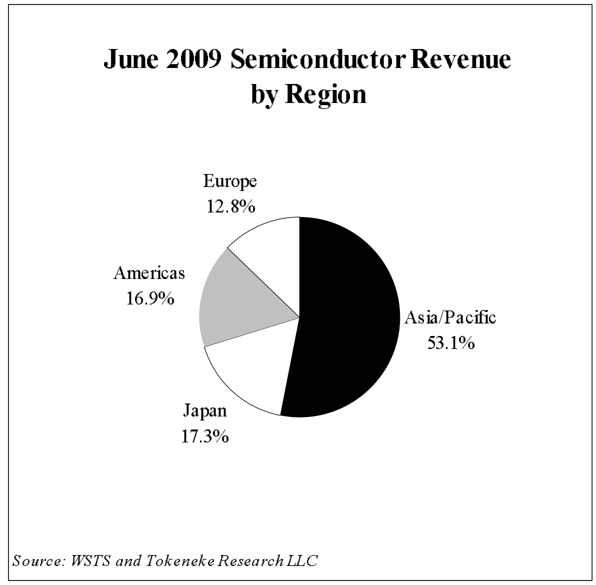
I think 4Q could be a bust: the economy is weak and channel inventories are being restocked and filled for a seasonal 4Q up-tick. If 4Q guidance during 3Q earnings season in October doesn't reflect growth of +3% to +5% (the statistical average is +3.7% since 1990 if we exclude last year's record -24.2%), then base financial models will be revised downward and shares will correct—probably not to the lows of early-March, but certainly a meaningful retreat in that direction.

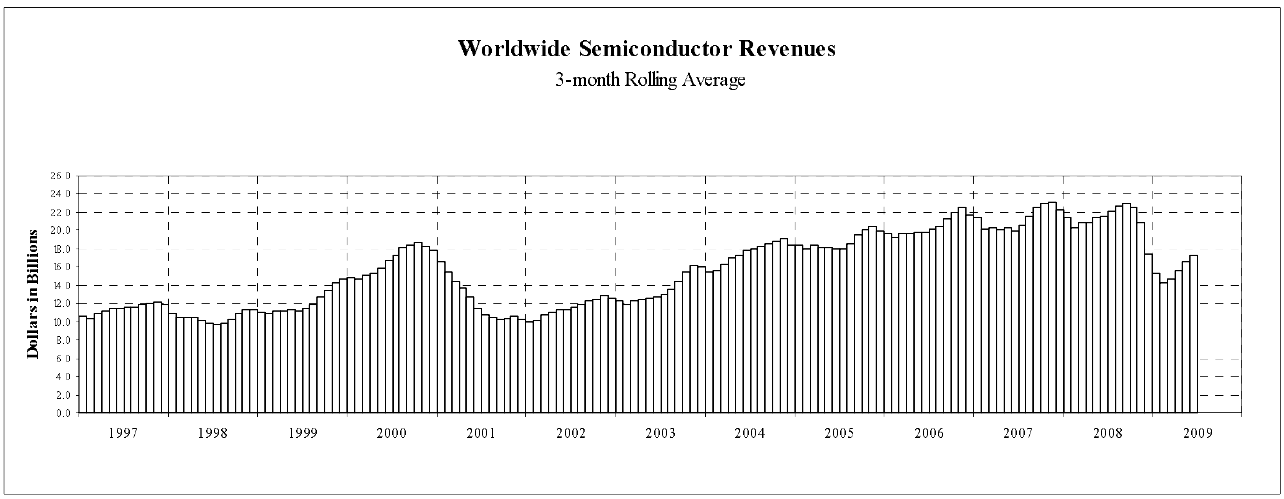
How could I be wrong? Two ways: First, if a true macroeconomic recovery conveniently commences during favorable seasonality (unlikely, in my opinion); and second, the tyranny of small numbers renders outsized seasonal percentage growth off a low base of business activity amid economic stabilization (not unlikely, in my opinion). However, if I am wrong due to the second reason, then I get another chance to be right 1Q as slack seasonality aggravates an embryonic recovery.

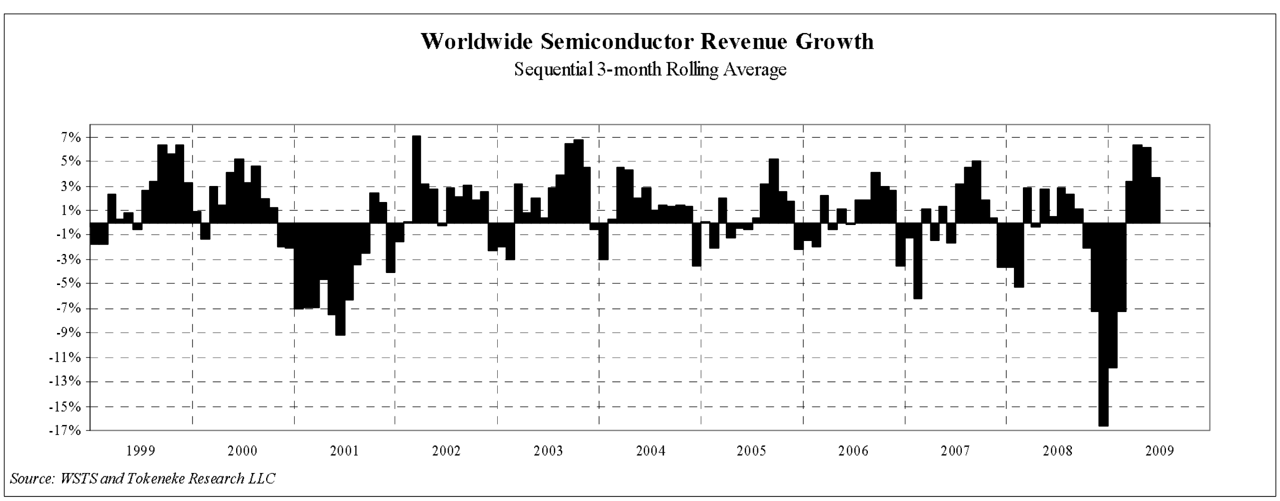
3Q guidance has clearly made me more bullish, but my bearishness persists amid valuations and the economy.

—Dan K. Scovel
Semiconductor Analyst


June 2009 Semiconductor Growth
by Region
(compared with prior month)
8%
6%
4%
2%
0%
3.7%
4.8%
0.7%
8.2%
2.8%
Worldwide
Americas
Europe
Japan
Asia-Pacific
Source: WSTS and Tokeneke Research LLC


June 2009 Semiconductor Revenue
by Region
Europe
12.8%
Americas
16.9%
Asia/Pacific
53.1%
Japan
17.3%
Source: WSTS and Tokeneke Research LLC

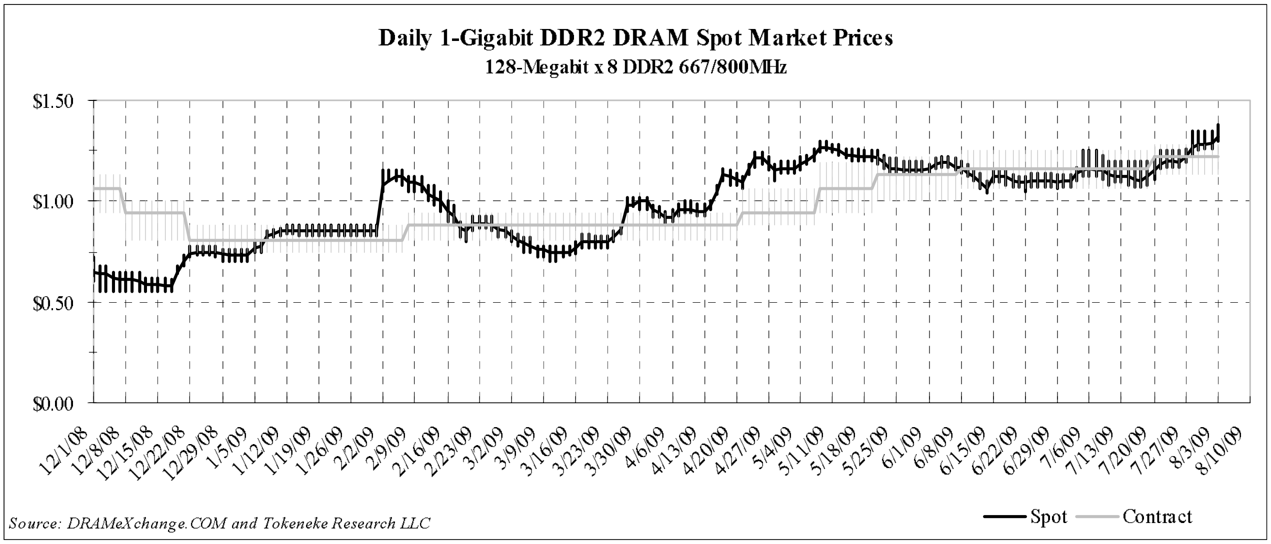

Worldwide Semiconductor Revenues
3-month Rolling Average
Dollars in Billions
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009

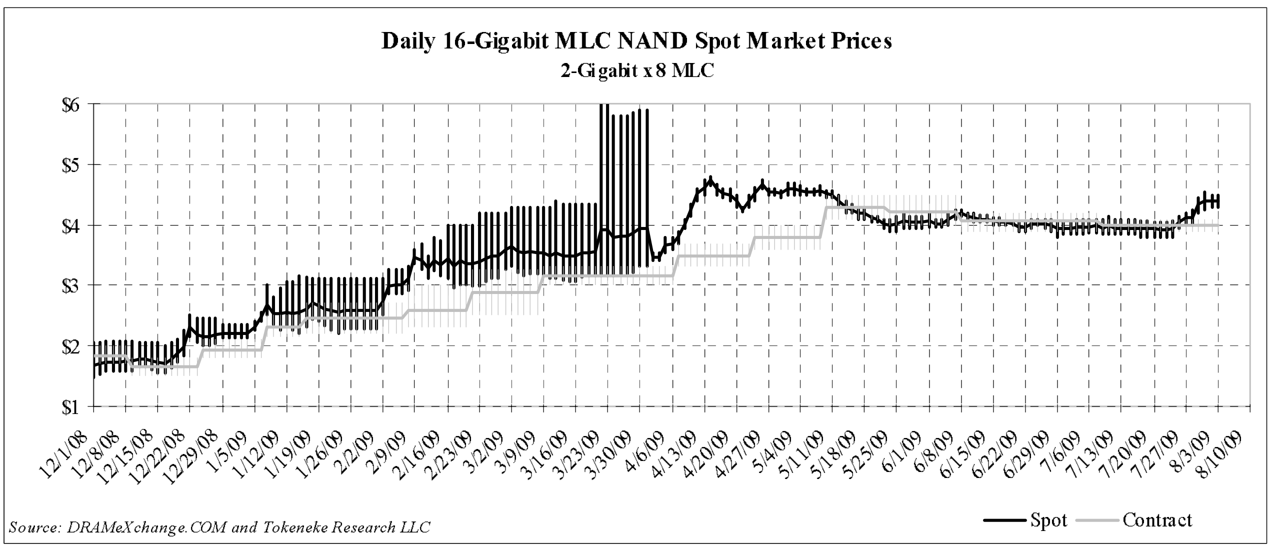

Worldwide Semiconductor Revenue Growth
Sequential 3-month Rolling Average
7%
5%
3%
1%
-1%
-3%
-5%
-7%
-9%
-11%
-13%
-15%
-17%
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Source: WSTS and Tokeneke Research LLC

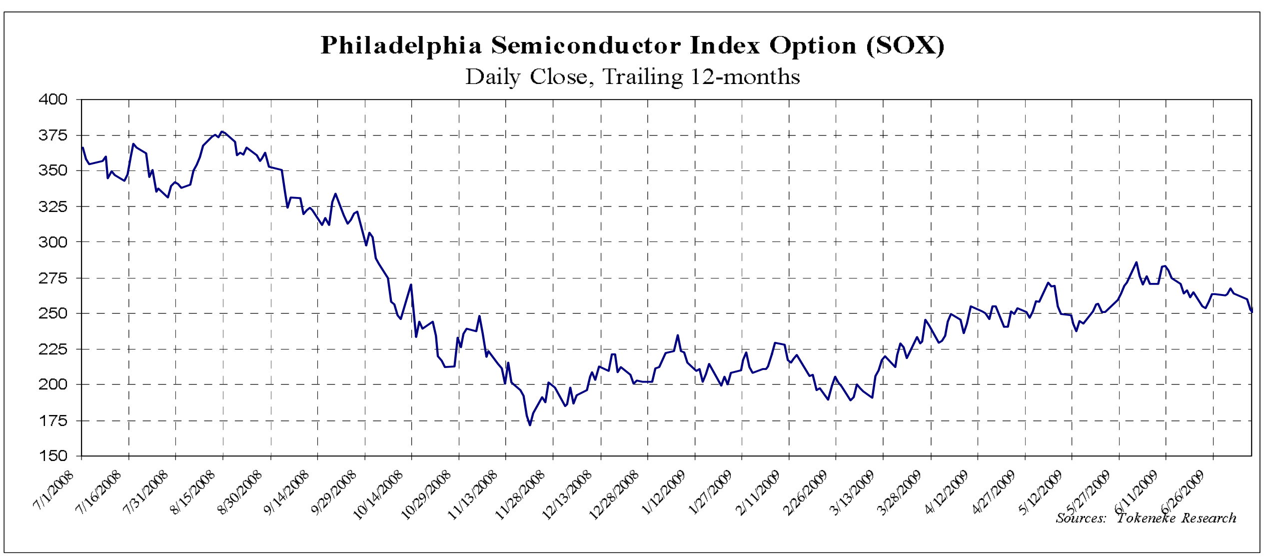
Weekly Philadelphia Semiconductor Index Option (SOX) vs. S&P 500

Sources: Tokeneke Research LLC

**S&P 500 normalized to the SOX*


Daily 1-Gigabit DDR2 DRAM Spot Market Prices
128-Megabit x 8 DDR2 667/800MHz
$1.50
$1.00
$0.50
$0.00
12/1/08
12/8/08
12/15/08
12/22/08
12/29/08
1/5/09
1/12/09
1/19/09
1/26/09
2/2/09
2/9/09
2/16/09
2/23/09
3/2/09
3/9/09
3/16/09
3/23/09
3/30/09
4/6/09
4/13/09
4/20/09
4/27/09
5/4/09
5/11/09
5/18/09
5/25/09
6/1/09
6/8/09
6/15/09
6/22/09
6/29/09
7/6/09
7/13/09
7/20/09
7/27/09
8/3/09
8/10/09
Spot
Contract
Source: DRAMeXchange.COM and Tokeneke Research LLC


Daily 16-Gigabit MLC NAND Spot Market Prices
2-Gigabit x 8 MLC
$6
$5
$4
$3
$2
$1
12/1/08
12/8/08
12/15/08
12/22/08
12/29/08
1/5/09
1/12/09
1/19/09
1/26/09
2/2/09
2/9/09
2/16/09
2/23/09
3/2/09
3/9/09
3/16/09
3/23/09
3/30/09
4/6/09
4/13/09
4/20/09
4/27/09
5/4/09
5/11/09
5/18/09
5/25/09
6/1/09
6/8/09
6/15/09
6/22/09
6/29/09
7/6/09
7/13/09
7/20/09
7/27/09
8/3/09
8/10/09
Spot
Contract
Source: DRAMeXchange.COM and Tokeneke Research LLC


Philadelphia Semiconductor Index Option (SOX)
Daily Close, Trailing 12-months
400
375
350
325
300
275
250
225
200
175
150
7/1/2008
7/16/2008
7/31/2008
8/15/2008
8/30/2008
9/14/2008
9/29/2008
10/14/2008
10/29/2008
11/13/2008
11/28/2008
12/13/2008
12/28/2008
1/12/2009
1/27/2009
2/11/2009
2/26/2009
3/13/2009
3/28/2009
4/12/2009
4/27/2009
5/12/2009
5/27/2009
6/11/2009
6/26/2009
Sources: Tokeneke Research

The Company

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My Background

I have an electrical engineering background, nearly 12 years of semiconductor industry experience, and was on Wall Street for nearly eight years where I was selected as the Best On The Street semiconductor analyst for 2002 by The Wall Street Journal, and third-rated Best of the Best across all sectors.

I obtained my undergraduate BS degree in electrical engineering from the University of Washington, and my MBA from Santa Clara University. My industry experience consists of nearly 12 years in various technical sales and marketing roles at four different semiconductor firms located in Silicon Valley beginning with Advanced Micro Devices in 1984, followed by two small start-up companies, and ending at Cirrus Logic where I supported the firm's Japanese market development. I joined Fahnestock & Co. as a senior semiconductor analyst in 1996 and was recruited by Needham & Co. in April 2000.

My formal coverage list as a sell-side analyst included the following equities: AMD, ALSC, ALTR, ARTI, ATML, CUBE, CY, ESST, GNSS, INTC, ISSI, LSI, MOSY, MU, OIIM, OVTI, RMTR, SIII, SMSC, STEC, SVTG, TDFX, TSRA, TXN, and ZRAN.

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