

## Mission Impossible

### One Trough Down, More to Come. Still Waiting for a Recovery.

Semiconductor industry business conditions will remain in a seasonal trough for another month or two before we get some visibility to the profile of a recovery. While I missed calling a bottom in share prices at the end of January, I think I will get more than a couple chances to get it right as equity market volatility persists throughout the year. As I see it, investors have two choices: try and catch as many cycles as possible, or stand aside and let them all pass. Any sort of middle ground will yield only frustration and failure, in my opinion. So. How do you like your risk?

**January's Softer Decline:** Worldwide semiconductor industry revenue declined by a better-than-average -1.4% sequentially during January, according to statistics released by the Semiconductor Industry Association (SIA) earlier this week. This compares to an average loss of -2.5% with a high of +1.0%, a low of -12.2%, and gains only three times in the last 23 years—including one out of the last eight. Europe lead the pack by staying flat, while Asia-Pacific declined the least at -0.6%. Japan followed with a fall of -2.3% and The Americas brought up the rear at -3.5%.

Next month's release of February data is usually just as bad as January: it has averaged a loss of -2.3% with a high of +1.9%, a low of -7.7%, and declines 19-times in the last 24 years—including nine of the last 10. In fact, this year it is likely to underperform relative to January, given that Chinese New Year began on January 31 and most of the holiday period occurred during the month of February. As noted in the adjacent table, the Lunar New Year holiday tends to make its month underperform due to the closure of manufacturing facilities.

Year	Chinese New Year	3-mo rolling avg		Annual Rev % APAC	Correlate?
		JAN	FEB		
1991	15-Feb	-3.19%	-0.62%	15.0%	no
1992	4-Feb	-0.56%	-1.28%	17.7%	yes
1993	23-Jan	-2.42%	0.60%	18.3%	yes
1994	10-Feb	-0.03%	0.35%	18.8%	no
1995	31-Jan	-0.17%	1.91%	20.5%	not really
1996	19-Feb	-2.91%	-3.75%	20.9%	yes
1997	7-Feb	-2.96%	-2.17%	22.0%	not really
1998	28-Jan	-7.30%	-3.93%	24.9%	sort of
1999	16-Feb	-1.81%	-1.79%	24.9%	not really
2000	5-Feb	0.91%	-1.31%	21.7%	yes
2001	24-Jan	-7.02%	-6.90%	28.7%	sort of
2002	12-Feb	-1.58%	0.10%	36.4%	no
2003	1-Feb	-1.97%	-2.98%	37.8%	yes
2004	22-Jan	-2.98%	0.23%	41.7%	yes
2005	9-Feb	0.07%	-2.13%	45.4%	yes
2006	29-Jan	-1.49%	-1.94%	47.0%	yes
2007	18-Feb	-1.22%	-6.23%	48.3%	yes
2008	7-Feb	-3.64%	-5.24%	49.9%	yes
2009	26-Jan	-12.19%	-7.67%	52.9%	yes
2010	14-Feb	-0.16%	-0.92%	53.6%	yes
2011	3-Feb	1.02%	-2.89%	54.7%	yes
2012	23-Jan	-2.82%	-1.01%	55.9%	yes
2013	10-Feb	-2.37%	-3.81%	57.1%	yes
2014	31-Jan	-1.38%			
Average:		-2.42%	-2.32%		

**1Q Weakness:** The 4Q earnings season is largely complete as of this writing, with 90 companies in my Universe of 97 having reported 4Q earnings and offering 1Q guidance—which at -5.5% is significantly below seasonal norms. The specific range of weighted sales for 1Q from the 4Q earnings season is calling for a decline centered at -5.6% ranging from -8.1% to -3.1%. The semiconductor industry has averaged a 1Q sequential decline of -2.1% with a high of +8.8% and a low of -19.4%, but has been negative 14-times in the last 23 years—including 7 of the last 9.

**Chip Stocks Rally and Outperform:** Semiconductor sector stocks rallied nicely during February, more than making up lost ground from January's declined and significantly outperforming broader equity markets so far this year. That second week of February was quite impressive, when all the upside occurred. The Philadelphia Semiconductor Index Option (SOX) gained +6.5% last month and the average stock in the Tokeneke Universe grew by +5.5% with 70 out of 97 issues advancing. This was even better than broader equity market gains from the NASDAQ, S&P500 and DOW of +5.0%, +4.3%, and +4.0%, respectively. The relative outperformance of the chip sector is even more pronounced year-to-date, with the SOX up by +5.4% and 62 out of 97 Tokeneke stocks up by an average of +7.6% compared to those same three indices at +3.1%, +0.6% and -1.5%, respectively.

February				YTD				Indices			
Winners (70/97)		Losers		Winners (62/97)		Losers		Feb		YTD	
TQNT	47.5%	MONT	-28.4%	NLST	158.8%	MX	-24.4%	SOX	6.5%		5.4%
RFMD	32.8%	SMI	-13.6%	VIMC	52.6%	IKAN	-23.3%	SMH	6.0%		2.9%
LSCC	31.0%	IXYS	-13.2%	TQNT	46.8%	MOSY	-19.9%	NASDAQ	5.0%		3.1%
FSL	25.5%	MOSY	-12.0%	SQNS	44.5%	ACTS	-16.8%	S&P500	4.3%		0.6%
TSEM	24.7%	MXL	-8.9%	FSL	41.7%	IXYS	-15.0%	DOW	4.0%		-1.5%
average stock +5.5%				average stock +7.6%							
SOX +6.5%				SOX +5.4%							

**2014 Lumps Along:** I'm sticking with my forecast for 2014 since the beginning of the year: Semiconductor industry business conditions will continue to grow at the slow pace and pattern established over the last couple of years with annual growth in the mid-single digit percent range.

Several years ago semiconductor industry seasonality largely tracked PC market supply characteristics, with a weaker first half of the year including a trough during 2Q, followed by a stronger second half with a 4Q peak. But the world changed after the financial crises in 2008: anemic worldwide macroeconomic conditions have accentuated the relative impact of seasonal business fluctuations; and the rise of the smartphone—and triumph over the PC in terms of total chip sales—has shifted industry seasonality to be more consistent with the traditional consumer market pattern of a 1Q trough, 2Q recovery, 3Q peak and then 4Q decline. While this is very much a gross over-simplification of a \$300B+ industry with many moving parts across a variety of products, geographies and markets, I also don't consider it necessarily inaccurate.

The general pattern of 'consumer market' seasonality has largely played out across the semiconductor industry over the last couple of years, and given persistently lackluster macroeconomic conditions I don't foresee much of a change to that pattern this year.

**Multiple Bottoms:** Okay, so I missed calling a bottom in share prices at the end of January. That's the bad news. The good news is that I think I will get more than a couple chances to try and get it right again as the year unfolds. Semiconductor industry business conditions remain mired in a seasonal trough, and will likely remain there for another month or two. But then we should start to get some visibility to the profile of the 2Q seasonal recovery.

As a fundamental analyst, industry business conditions now seem to change at a glacial pace compared to equity markets—and I think equity market volatility will persist this year. Why? Let me count the ways: Fed tapering; federal regulatory overreach and uncertainty; governmental fiscal and economic mismanagement and uncertainty; Ukraine; Russia; Syria; Iran; North Korea; Venezuela; Chinese saber rattling and economic tapering; and—oh yeah—midterm elections this year. The stock market is looking a lot like the weather in the mountains: if you don't like it, just wait 10 minutes and it will change.

**Mission Impossible:** 2014 can still be a year of opportunity for chip sector equities, but it seems to be getting more and more short-term/trading-oriented with increasing equity market volatility. We've already seen one trough, and now I am looking for a top. But even that will depend on the profile of the forthcoming seasonal business recovery.

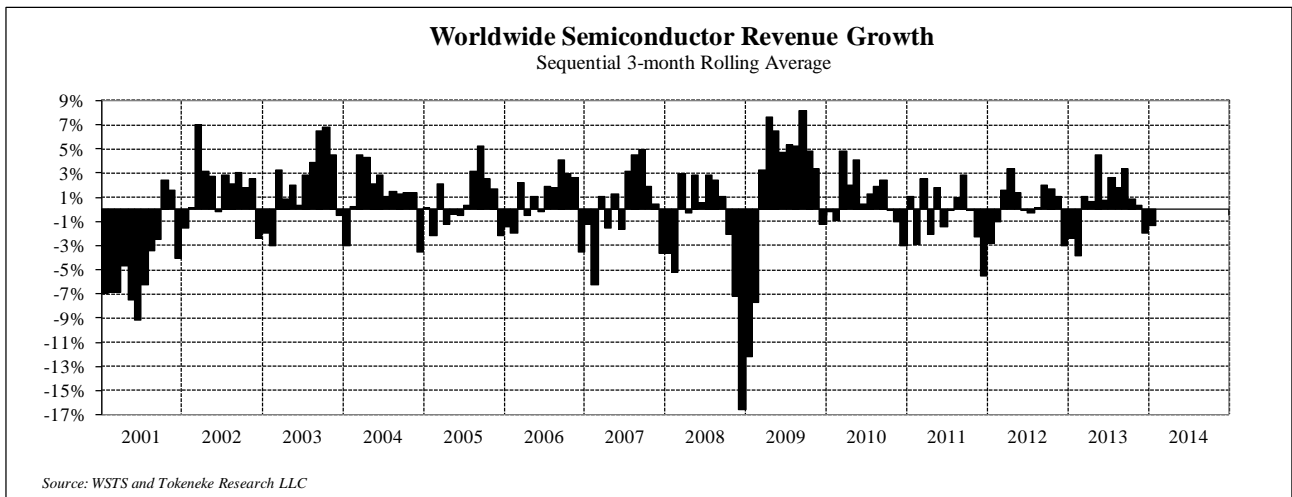
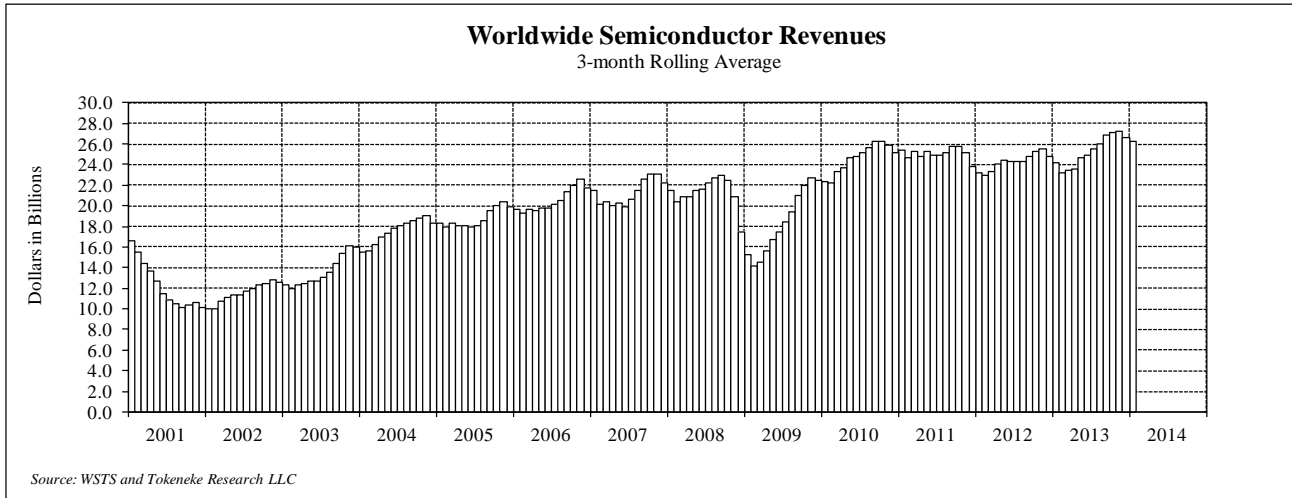
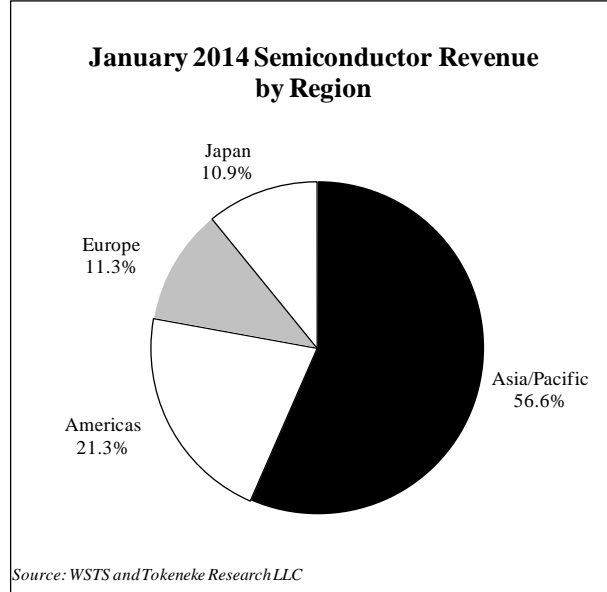
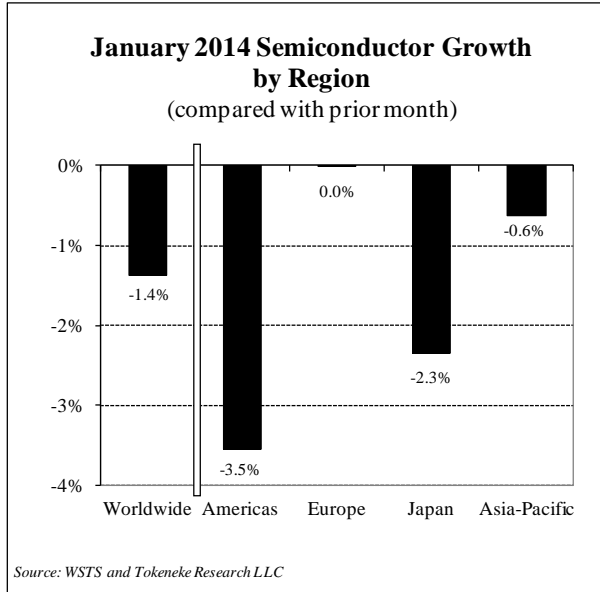
In the meantime I am noticing some interesting rotations within my Universe issues as market cap, growth and value alternately shift as thematic money flows. Specifically notice the increasing quantity of rating changes in my bi-weekly Semiconductor Investment Ideas publication where accentuated price movements seem to be triggering my convictions on a more frequent basis.

Most financial market prognosticators originally predicted 2014 to be a year of modest gains after last year's oversized rally. While those forecasts may prove not necessarily inaccurate by the time it draws to a close, I think the year will likely be more accurately characterized as a whirlwind of frustration for investors given the volatility we have already experienced in the first two months. Somehow I can't see the boredom of predictable stability manifesting any time soon.

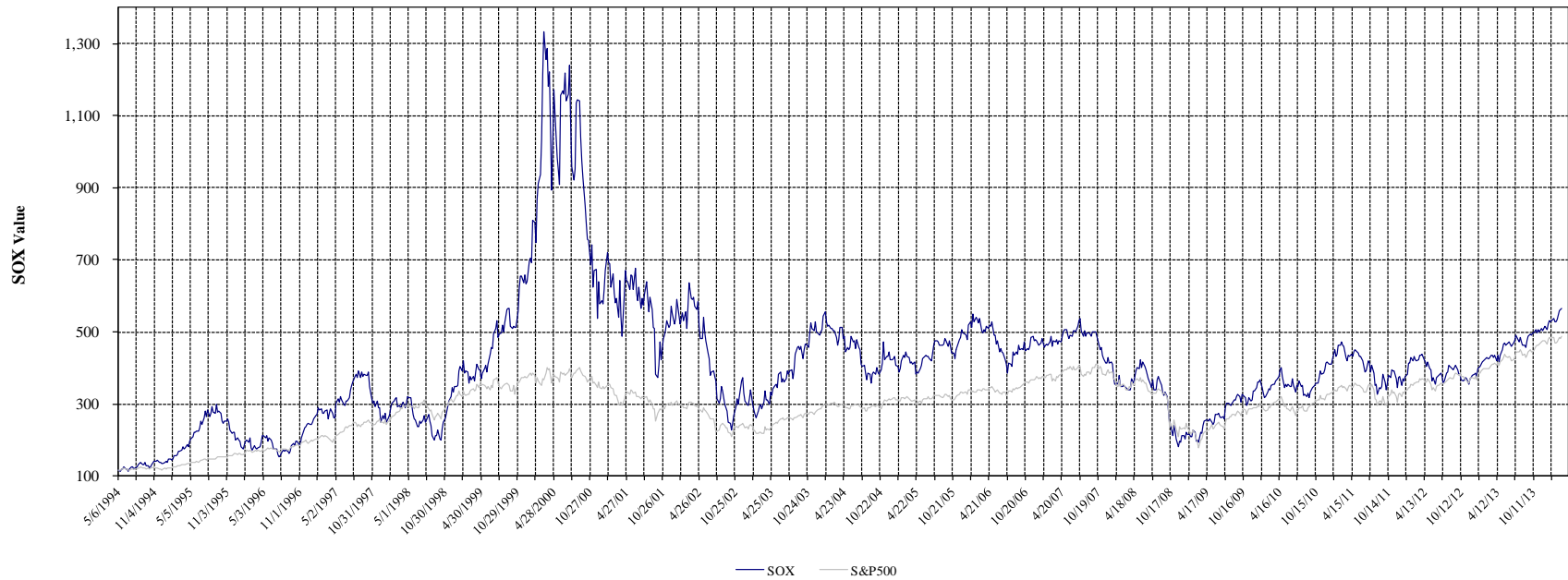
So. How should investors accommodate such a scenario? In this environment I think one needs to be all in, or stand aside. Either jump in and try to catch as many waves as you can, knowing full well that some will be missed. Or, stand aside and let this storm pass—either by withdrawing from the game altogether or just holding on throughout the oscillations. The worst option would be some kind of convoluted scheme to achieve partial engagement that would likely result in the greatest amount of frustration and failure, in my opinion. It all depends on your personal tolerance for risk and uncertainty.

This is your mission, should you choose to accept it. As usual, I disavow any knowledge or responsibility. This message will self-destruct in 10 seconds. Good luck.

—Dan K. Scovel  
Semiconductor Analyst

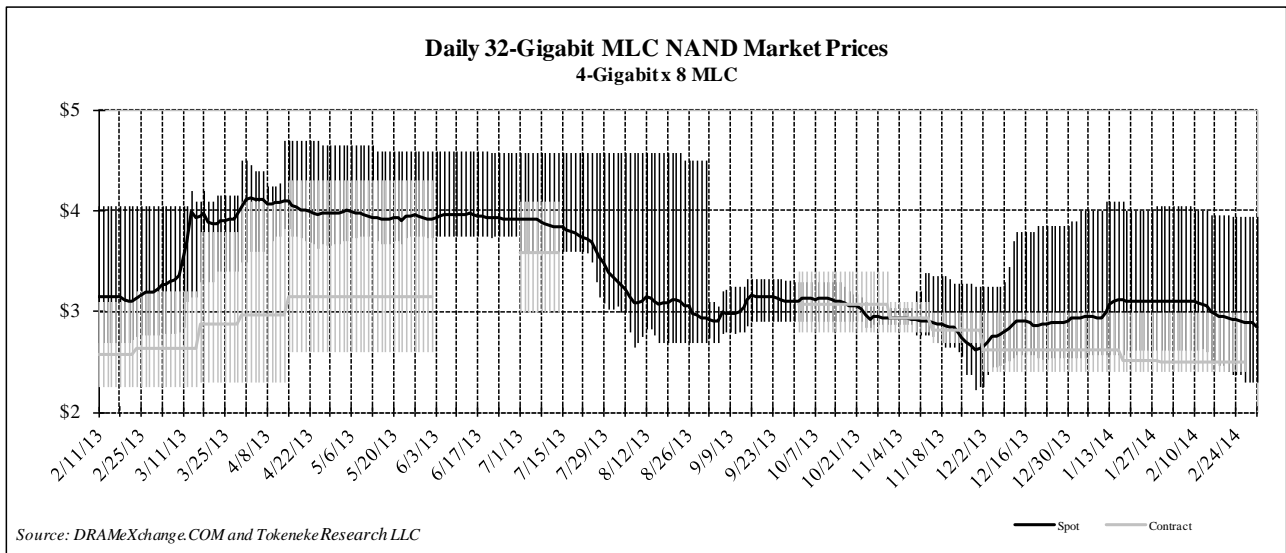
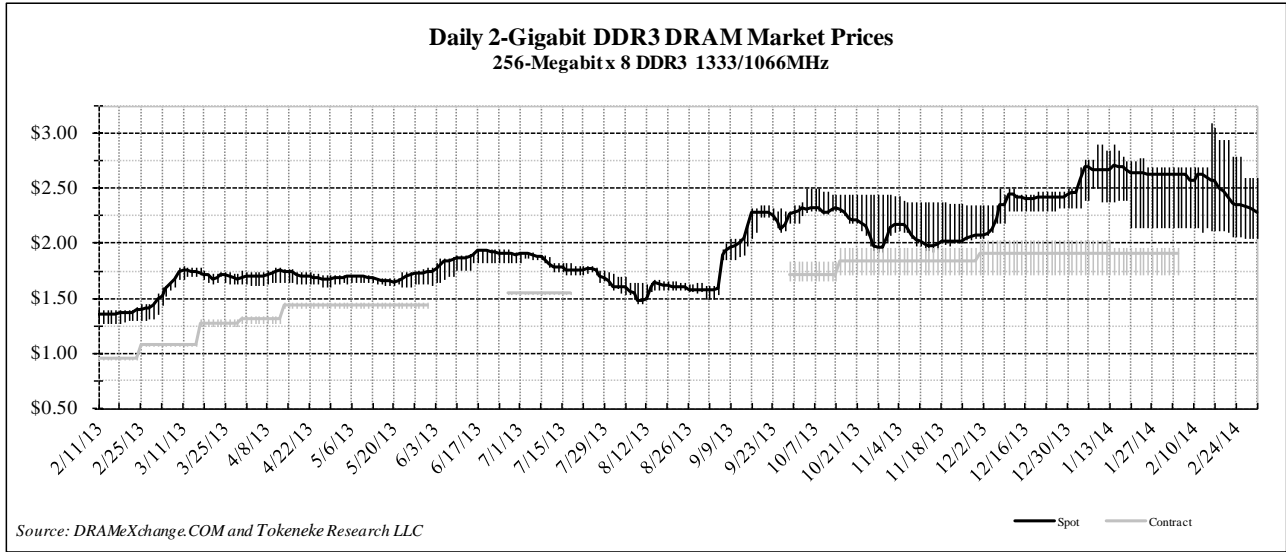


### Weekly Philadelphia Semiconductor Index Option (SOX) vs. S&P 500

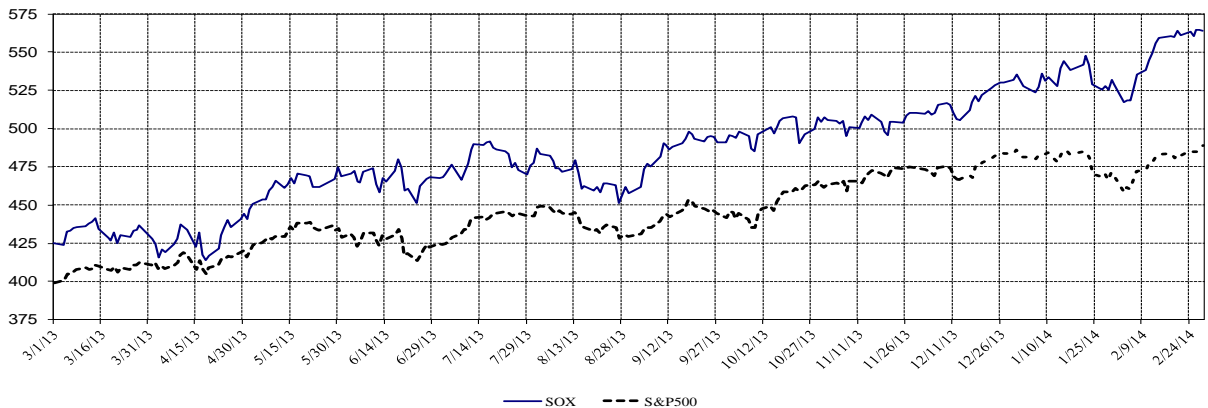


Source: Tokeneke Research LLC

\*S&P 500 normalized to the SOX



### Daily Philadelphia Semiconductor Index Option (SOX) vs. S&P500 Daily Close, Trailing 12-months



## **The Company**

Tokeneke Research is an independent research firm specializing in semiconductor industry business issues, providing fundamental research focused on US equities across all market capitalizations within the sector to investors. The company was founded in 2005 and is based in Connecticut.

## **The Offering**

- *Monthly Newsletter:* A summarized review of noteworthy industry business developments, sales statistics, and sector equity market performance, as well as a near-term and annual outlook for sector business fundamentals and share prices. This report typically includes two pages of text and a handful of recurring charts and tables. It is intended for relatively broad-based distribution.
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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 Fahnstock & 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.

**—Dan K. Scovel**  
*Semiconductor Analyst*

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