

## Great F3Q, But Weak Outlook

### 5Mp/8Mp to Smartphones Drive Growth, But Margin Pressure Persists. Reit Buy.

Diluted Shares(mil):	56.5	<u>Closing Price 2/28/13</u>	<u>FTE April</u>	<u>FY13</u>	<u>FY14</u>	<u>FY15</u>
Market Cap(\$mil):	\$870	\$15.41	Revenue(\$mil)	\$1,396.7	\$1,456.5	\$1,514.7
Avg Volume(,000):	1,053		EPS	\$1.32	\$1.72	\$2.15
Net Cash/Share:	\$3.35	<u>Recommendation/Target</u>	Price/Sales	0.6	0.6	0.6
Tangible Book/Share:	\$14.09	Buy/\$30	Price/EPS	11.7	9.0	7.2

*OmniVision is a fabless semiconductor company that is a leading supplier of CMOS image sensors.*

**Summary:** OVTI exceeded the high-end of F3Q expectations on the strength of higher-resolution 5Mp and 8Mp device shipments to smartphone applications despite persistent gross margin pressure. It also guided for a revenue decline of -29-22% this quarter on pronounced seasonal weakness after the last four quarters of growth, and I am lowering my EPS estimate for FY14. While gross margin remains a disappointment, I believe earnings will benefit disproportionately as margins improve over the next several quarters. I continue to recommend OVTI as a Buy with a 12-month target price of \$30 based on 1.2x FY14 sales, and am introducing a FY15 estimate with this report.

**F3Q Review:** Revenue grew by +8.6% sequentially to \$423.5M, just below the high-end of guidance but above the high-end of the range of expectations on shipment strength to smartphones of higher-resolution 5Mp and 8Mp devices. Gross margin at 17.1% improved by only 30 basis points due to continuing manufacturing challenges associated with the OmniBSI-2 technology of these higher-resolution devices as reflected in higher-cost inventory. Pro forma EPS of \$0.56 exceeded consensus by \$0.15, my estimate by \$0.13, and was 10-cents above the high-end of guidance as revenue strength and operating expense control more than offset margin weakness, while the reinstatement of the R&D tax credit accounted for a tax-related boost of 8-cents. Cash grew by \$81M to \$220M as receivables fell by \$77M to \$172M or 37 days, and inventory dropped by \$25M to a still-high \$373M or 95 days.

FYE April pro forma, millions	F3Q			Guidance	Consensus	Range
	Estimate	Actual	EPS Impact			
Revenue	\$410.0	\$423.5	\$0.05	\$390-425	\$411.4	405.7-422.4
Revenue Growth	5.1%	8.6%		+0.0+8.9%	5.5%	+4.0+8.3%
Gross Margin	17.8%	17.1%	(\$0.06)			
Op Expense	\$43.7	\$41.0	\$0.05			
Interest/Other Inc	(\$0.5)	\$0.2	\$0.01			
Taxes	\$4.4	\$0.1	\$0.08	\$4.0-5.0		
Shares	56.18	56.45				
Diluted EPS	\$0.43	\$0.56	\$0.13	\$0.33-\$0.46	\$0.41	\$0.38-\$0.45

Unit shipments grew to a record 252M from 249M the prior quarter, ASPs grew to \$1.68 from \$1.56 on 5Mp/8Mp strength, and OEMs remained at 85.2%. 2Mp+ sensors accounted for 39% of unit shipments up from 31%; 1.3Mp declined to 45% from 48%; and VGA declined to 16% from 21%. Mobile phones accounted for 61% of sales up from 59%, entertainment (tablets) fell to 26% from 29%, and notebook PCs/webcams edged up to 7% from 6%.

**High-Resolution Smartphone Strength:** The big story last quarter was the shipment of 5Mp and 8Mp devices manufactured in OmniBSI-2 (and -1) to smartphone applications which accounted for the increase in revenue, ASPs, 2Mp+ units, and cell phone sales. Unfortunately, it also accounted for punk gross margin as these devices were added to the OmniBSI-2 technology stable with the prior quarter's OV9760 1.3Mp device. OVTI sells a broad offering of 8/5/3/2/1.3Mp parts to handset makers in North America, China, Taiwan and Japan at various price/performance segments, and top Chinese smartphone OEMs are now exporting. Tablets continue to grow and OVTI's competitive position remains very strong with its low-profile offerings, and the company claimed several design wins at automotive OEMs in North America and Europe last quarter. Resolutions beyond 12Mp are coming.

**Gross Margin Opportunity:** OVTI's second-generation, back-side illumination pixel technology, OmniBSI-2, offers high-quality image capture in very thin form factors that are clearly appreciated by customers given the company's sales growth over the last four quarters. Longer-term, the technology offers less expensive and higher-volume manufacturing by avoiding the cost of SOI wafers and embracing 65nm process technology on 300mm wafers. Unfortunately, near-term it is a gross margin problem and some significant portion of current inventory of \$373M consists of higher-cost product that will need to be sold off before any benefits begin to accrue. While the

fix will likely take quarters to occur, I remain a 'glass half-full' kind of guy: OVTI continues to generate profits at the current gross margin level of 17%, and I expect significant earnings leverage in the future as margins expand.

**Management Guidance:** For F4Q: sales of \$300-330M due to seasonal weakness; R&D at F1Q's \$24.1M; SG&A to decrease slightly; tax expense of \$2.0-2.5M; GAAP EPS of \$0.00-\$0.15; and pro forma EPS of \$0.14-\$0.29.

**Lowering Estimates:** My F4Q estimate reflects the higher-end of management guidance, and my FY13 EPS estimate is up despite significantly lower F4Q guidance which is more than offset by last quarter's strength. My FY14 revenue is unchanged although I am lowering my EPS estimate primarily due to an even shallower gross margin recovery than I had previously modeled, which is only partially offset by lower operating expenses working off the platform established with F4Q13 guidance. I am introducing an FY15 estimate with this report that assumes modest but persistent revenue growth and gross margin improvement throughout the period.

FYE April pro forma, millions	F4Q		FY13		FY14		FY15
	Previous	Update	Previous	Update	Previous	Update	New
Revenue	\$348.5	\$325.0	\$1,406.7	\$1,396.7	\$1,456.4	\$1,456.5	\$1,514.7
Revenue Growth	-15.0%	-23.3%	56.7%	55.6%	3.5%	4.3%	4.0%
Gross Margin	19.0%	17.2%	18.1%	17.5%	23.3%	20.2%	23.5%
Op Expense	\$45.9	\$41.4	\$174.4	\$167.2	\$203.3	\$181.3	\$211.7
Interest/Other Inc	(\$0.5)	\$0.2	(\$1.0)	\$0.4	(\$2.0)	\$0.8	\$0.8
Taxes	\$4.4	\$2.3	\$11.1	\$4.6	\$17.8	\$14.8/13%	13.0%
Shares	56.45	56.70	56.00	56.14	57.13	57.38	58.48
Diluted EPS	\$0.27	\$0.22	\$1.25	\$1.32	\$2.04	\$1.72	\$2.15

**Very Attractive Valuation:** Valuation tables for OVTI are shown on Page 7 of this report. The bottom table, Historical Valuation, captures the weekly averages since its IPO of trailing 12-month price-earnings, price-sales, and price-book ratios. Unfortunately, these historical averages are unrealistically high given the nature of equity markets at this time. The top table, Relative Valuation, measures OVTI against a set of peers in the current equity market environment and is considerably more relevant, in my opinion.

My first preference would be to choose a set of fabless, ASSP (application-specific standard product) semiconductor companies with roughly comparable sales, margin, market cap, and historical average price-sales ratios that would look very much like the peer group I chose for SIMG that includes AMCC, ENTR, OVTI, POWI, SIMO and VLTR. This would support an argument to value OVTI at 2-times sales and price target of \$50. Unfortunately, I don't think most investors would buy such an argument primarily due to the depressed gross margin level at OVTI, but also due to the extreme magnitude of potential share price upside. Nevertheless, I reserve the right to introduce such a methodology in the future when OVTI's gross margin—and, quite possibly its share price—recover to higher levels.

Instead, I compiled a set of comparable peers whose current numerical magnitudes of sales, gross margin, market cap, and historical average price-sales ratios are more closely aligned. This was not a trivial exercise, and I could not come up with any peers that satisfied more than three out of those four criteria. The set of peers I generated as noted on Page 7 includes CODE, CY, DIOD, IRF, MX, RFMD and TQNT. I can justify this group on a quantitative basis at a very robust level. However, qualitatively I doubt I could dream up a more eclectic and motley crew in terms of product offerings, business models, corporate strategies, and corporate and product evolutionary lifecycles.

OVTI remains stupid cheap any way that I look at it: price-sales, price-earnings, and even price-book where it is currently trading at book value. It is trading amongst the three lowest price-earnings ratios of its peers across all four years identified in the table, and is either the lowest or tied for the lowest price-sales ratio in terms of trailing, current and future years. My 12-month target price of \$30 is based on 1.2-times FY14 sales which is consistent with the average for the current fiscal year of its peers. Upside potential significantly exceeds downside risk at current price levels, in my opinion, and I continue to recommend OVTI as a Buy.

pro forma EPS	F4Q	FY13	FY14	FY15	Revenue (12 est)	F4Q	FY13	FY14	FY15
Tokeneke-revised	\$0.22	\$1.32	\$1.72	\$2.15	Tokeneke-revised	\$325.0	\$1,396.7	\$1,456.5	\$1,514.7
Tokeneke-previous	\$0.27	\$1.25	\$2.04	na	Tokeneke-previous	\$348.5	\$1,151.6	\$1,456.4	na
Consensus-previous	\$0.32	\$1.28	\$1.75		Consensus-previous	\$371.4	\$1,430.0	\$1,610.0	
Highest Est-previous	\$0.43	\$1.42	\$2.45		Highest Est-previous	\$415.2	\$1,470.0	\$1,720.0	
Lowest Est-previous	\$0.23	\$1.16	\$1.13		Lowest Est-previous	\$337.0	\$1,390.0	\$1,420.0	

—Dan K. Scovel  
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Income Statement

dollars in thousands, except per share data  
fiscal year ends April

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	FY2012			FY2013 est				FY2014					FY2015					
	FY2010	FY2011	FY2012	Q1A	Q2A	Q3A	Q4	FY2013	Q1	Q2	Q3	Q4	FY2014	Q1	Q2	Q3	Q4	FY2015
Revenue	602,991	956,476	897,730	258,064	390,137	423,513	325,000	1,396,714	325,000	373,750	407,388	350,353	1,456,491	332,836	389,418	428,359	364,105	1,514,718
COGS	454,936	676,494	646,782	207,789	324,476	351,113	269,100	1,152,478	264,875	299,000	321,836	276,779	1,162,490	261,276	297,904	323,411	276,720	1,159,312
Gross Profit	148,055	279,982	250,948	50,275	65,661	72,400	55,900	244,236	60,125	74,750	85,551	73,574	294,001	71,560	91,513	104,948	87,385	355,406
R&D	67,078	78,964	97,368	24,096	26,248	23,712	24,186	98,242	25,396	26,665	27,999	29,399	109,458	30,868	32,412	34,032	35,734	133,047
SG&A	51,025	54,491	52,858	15,012	14,787	15,015	14,865	59,679	15,162	15,465	15,775	16,090	62,492	16,573	17,070	17,582	18,110	69,335
Stk Crg/Write-off	-	774	9,286	2,321	2,322	2,321	2,325	9,289	2,325	2,325	2,325	2,325	9,300	2,325	2,325	2,325	2,325	9,300
Operating Expenses	118,103	134,229	159,512	41,429	43,357	41,048	41,376	167,210	42,883	44,456	46,098	47,814	181,250	49,766	51,807	53,940	56,169	211,682
Operating Income	29,952	145,753	91,436	8,846	22,304	31,352	14,524	77,026	17,242	30,294	39,453	25,760	112,750	21,793	39,706	51,008	31,217	143,724
Interest/Other	3,801	2,768	(1,107)	(664)	686	203	200	425	200	200	200	200	800	200	200	200	200	800
Pre-tax Income	33,753	148,521	90,329	8,182	22,990	31,555	14,724	77,451	17,442	30,494	39,653	25,960	113,550	21,993	39,906	51,208	31,417	144,524
Taxes	2,789	151	4,464	(2,239)	4,439	97	2,300	4,597	2,267	3,964	5,155	3,375	14,762	2,859	5,188	6,657	4,084	18,788
Minority Interest	321	32	9,643	1,140	0	0	0	1,140	0	0	0	0	0	0	0	0	0	0
Net Income	31,285	148,402	95,508	11,561	18,551	31,458	12,424	73,994	15,175	26,530	34,498	22,586	98,789	19,134	34,718	44,551	27,332	125,736
EPS-basic	\$0.59	\$2.68	\$1.69	\$0.22	\$0.35	\$0.58	\$0.23	\$1.38	\$0.28	\$0.49	\$0.63	\$0.41	\$1.80	\$0.34	\$0.62	\$0.80	\$0.49	\$2.25
Shares-basic	52,856	55,324	56,667	52,830	53,514	53,830	54,099	53,568	54,370	54,641	54,915	55,189	54,779	55,465	55,743	56,021	56,301	55,883
EPS-diluted	\$0.59	\$2.49	\$1.60	\$0.21	\$0.33	\$0.56	\$0.22	\$1.32	\$0.27	\$0.46	\$0.60	\$0.39	\$1.72	\$0.33	\$0.60	\$0.76	\$0.46	\$2.15
Shares-diluted	52,765	59,664	59,510	55,186	56,211	56,453	56,699	56,137	56,970	57,241	57,515	57,789	57,379	58,065	58,343	58,621	58,901	58,483
GAAP EPS	\$0.13	\$2.11	\$1.13	\$0.04	\$0.19	\$0.40	\$0.08	\$0.71	\$0.13	\$0.31	\$0.44	\$0.24	\$1.13	\$0.18	\$0.42	\$0.57	\$0.29	\$1.47
<b>Margin Analysis</b>																		
Gross Margin	24.6%	29.3%	28.0%	19.5%	16.8%	17.1%	17.2%	17.5%	18.5%	20.0%	21.0%	21.0%	20.2%	21.5%	23.5%	24.5%	24.0%	23.5%
R&D	11.1%	8.3%	10.8%	9.3%	6.7%	5.6%	7.4%	7.0%	7.8%	7.1%	6.9%	8.4%	7.5%	9.3%	8.3%	7.9%	9.8%	8.8%
SG&A	8.5%	5.7%	5.9%	5.8%	3.8%	3.5%	4.6%	4.3%	4.7%	4.1%	3.9%	4.6%	4.3%	5.0%	4.4%	4.1%	5.0%	4.6%
Stk Chrg/Write-off	0.0%	0.1%	1.0%	0.9%	0.6%	0.5%	0.7%	0.7%	0.7%	0.6%	0.6%	0.7%	0.6%	0.7%	0.6%	0.5%	0.6%	0.6%
Operating Income	5.0%	15.2%	10.2%	3.4%	5.7%	7.4%	4.5%	5.5%	5.3%	8.1%	9.7%	7.4%	7.7%	6.5%	10.2%	11.9%	8.6%	9.5%
Pre-tax Income	5.6%	15.5%	10.1%	3.2%	5.9%	7.5%	4.5%	5.5%	5.4%	8.2%	9.7%	7.4%	7.8%	6.6%	10.2%	12.0%	8.6%	9.5%
Tax Rate	8.3%	0.1%	4.9%	-27.4%	19.3%	0.3%	15.6%	5.9%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%
Net Income	5.2%	15.5%	10.6%	4.5%	4.8%	7.4%	3.8%	5.3%	4.7%	7.1%	8.5%	6.4%	6.8%	5.7%	8.9%	10.4%	7.5%	8.3%
<b>Qtr-to-Qtr Growth</b>																		
Revenue				18.1%	51.2%	8.6%	-23.3%		0.0%	15.0%	9.0%	-14.0%		-5.0%	17.0%	10.0%	-15.0%	
Operating Expenses				7.3%	4.7%	-5.3%	0.8%		3.6%	3.7%	3.7%	-3.7%		4.1%	4.1%	4.1%	4.1%	
Operating Income				-22.6%	152.1%	40.6%	-53.7%		18.7%	75.7%	30.2%	-34.7%		-15.4%	82.2%	28.5%	-38.8%	
Pre-tax Income				-29.8%	181.0%	37.3%	-53.3%		18.5%	74.8%	30.0%	-34.5%		-15.3%	81.4%	28.3%	-38.6%	
Net Income				6.4%	60.5%	69.6%	-60.5%		22.1%	74.8%	30.0%	-34.5%		-15.3%	81.4%	28.3%	-38.6%	
EPS				5.6%	57.5%	68.8%	-60.7%		21.6%	74.0%	29.4%	-34.8%		-15.7%	80.6%	27.7%	-38.9%	
<b>Year-to-Year Growth</b>																		
Revenue	18.9%	58.6%	-6.1%	-6.5%	79.0%	128.7%	48.7%	55.6%	25.9%	-4.2%	-3.8%	7.8%	4.3%	2.4%	4.2%	5.1%	3.9%	4.0%
Operating Expenses	-4.9%	13.7%	18.8%	-1.2%	5.5%	8.4%	7.2%	4.8%	3.5%	2.5%	12.3%	15.6%	8.4%	16.1%	16.5%	17.0%	17.5%	16.8%
Operating Income	-1008.5%	386.6%	-37.3%	-80.7%	-15.2%	301.2%	27.2%	-15.8%	94.9%	35.8%	25.8%	77.4%	46.4%	26.4%	31.1%	29.3%	21.2%	27.5%
Pre-tax Income	-867.3%	340.0%	-39.2%	-82.0%	-11.0%	326.2%	26.3%	-14.3%	113.2%	32.6%	25.7%	76.3%	46.6%	26.1%	30.9%	29.1%	21.0%	27.3%
Net Income	-896.5%	374.4%	-35.6%	-75.5%	-38.3%	325.3%	14.3%	-22.5%	31.3%	43.0%	9.7%	81.8%	33.5%	26.1%	30.9%	29.1%	21.0%	27.3%
EPS	-862.6%	319.5%	-35.5%	-71.9%	-31.3%	340.0%	10.4%	-17.9%	27.1%	40.4%	7.6%	78.4%	30.6%	23.7%	28.4%	26.7%	18.7%	24.9%

## OmniVision Technologies

## Financial Summary

(dollars in thousands)

Fiscal year ends April

	FY09	FY10	FY11	FY12	3QF12	4QF12	1QF13	2QF13	3QF13
<b>Assets</b>									
Cash and equivalents	257,808	234,023	379,379	290,492	211,157	290,492	191,786	115,511	194,841
Short-term investments	16,973	99,555	87,505	40,515	25,312	40,515	44,779	24,096	25,460
Net accounts receivable	<u>43,978</u>	<u>74,261</u>	<u>142,606</u>	<u>107,793</u>	<u>132,749</u>	<u>107,793</u>	<u>142,687</u>	<u>249,283</u>	<u>171,926</u>
<b>Quick Assets</b>	318,759	407,839	609,490	438,800	369,218	438,800	379,252	388,890	392,227
Inventories	105,024	133,993	106,873	291,340	247,274	291,340	403,201	398,694	373,335
Other	<u>8,871</u>	<u>11,370</u>	<u>14,608</u>	<u>12,625</u>	<u>10,234</u>	<u>12,625</u>	<u>24,629</u>	<u>14,122</u>	<u>11,759</u>
<b>Current Assets</b>	432,654	553,202	730,971	742,765	626,726	742,765	807,082	801,706	777,321
Property, plant and eqt, net	119,071	121,547	115,446	144,792	142,616	144,792	151,905	154,045	162,182
Long-term investments	85,469	92,121	104,616	128,940	121,065	128,940	119,198	127,178	132,866
Goodwill and intangibles	7,396	5,330	71,014	79,255	82,460	79,255	76,050	73,527	70,264
Other assets	<u>22,341</u>	<u>25,493</u>	<u>12,111</u>	<u>7,205</u>	<u>7,225</u>	<u>7,205</u>	<u>19,138</u>	<u>16,951</u>	<u>21,901</u>
<b>Total Assets</b>	666,931	797,693	1,034,158	1,102,957	980,092	1,102,957	1,173,373	1,173,407	1,164,534
<b>Liabilities and Shareholders Equity</b>									
Current portion of long-term debt	3,555	4,286	4,323	3,146	3,888	3,146	2,383	2,141	3,739
Accounts payable	28,775	85,487	102,519	159,860	54,379	159,860	222,185	193,608	152,347
Deferred revenue	7,176	10,661	16,594	10,115	10,406	10,115	10,053	14,094	16,199
Other liabilities	<u>12,845</u>	<u>19,506</u>	<u>25,483</u>	<u>36,403</u>	<u>32,414</u>	<u>36,403</u>	<u>36,192</u>	<u>40,367</u>	<u>35,660</u>
<b>Current Liabilities</b>	52,351	119,940	148,919	209,524	101,087	209,524	270,813	250,210	207,945
Long-term debt	32,867	45,428	41,916	39,337	39,396	39,337	39,071	39,008	35,735
Deferred tax liability/other	<u>89,375</u>	<u>95,353</u>	<u>91,998</u>	<u>93,217</u>	<u>90,830</u>	<u>93,217</u>	<u>89,467</u>	<u>90,146</u>	<u>90,529</u>
<b>Total Liabilities</b>	174,593	260,721	282,833	342,078	231,313	342,078	399,351	379,364	334,209
Minority interest	3,497	3,390	0	0	0	0	0	0	0
Common stock	403,222	441,142	533,847	578,978	569,278	576,008	587,810	596,717	614,444
Retained earnings	263,529	270,253	394,735	460,584	457,903	460,584	462,911	473,256	494,564
Other/Treasury Stock	<u>(177,910)</u>	<u>(177,813)</u>	<u>(177,257)</u>	<u>(278,683)</u>	<u>(278,402)</u>	<u>(275,713)</u>	<u>(276,699)</u>	<u>(275,930)</u>	<u>(278,683)</u>
<b>Total Shareholders Equity</b>	488,841	533,582	751,325	760,879	748,779	760,879	774,022	794,043	830,325
<b>Total Liabilities and Equity</b>	666,931	797,693	1,034,158	1,102,957	980,092	1,102,957	1,173,373	1,173,407	1,164,534
<b>Sales and Income</b>									
Revenue	507,316	602,991	956,476	897,736	185,193	218,547	258,064	390,137	423,513
COGS	389,434	457,646	678,459	649,719	140,337	169,446	208,849	325,453	352,027
Net income	(37,323)	6,724	124,482	65,849	111	2,681	2,327	10,345	21,308
<b>Other</b>									
Capital Expenditures	32,227	13,516	10,313	24,186	7,112	5,703	11,446	8,265	
Depreciation and Amortization	19,053	6,403	20,564	29,771	7,742	7,856	8,524	8,771	
Shares (weighted average diluted)	50,523	53,002	59,664	58,233	58,411	54,751	55,186	56,211	53,930
Employees (units)	1,328	1,450	1,465	1,796					
Stock Repurchased						100			
<b>Ratios</b>									
<b>Liquidity</b>									
Quick Ratio	6.09	3.40	4.09	2.09	3.65	2.09	1.40	1.55	1.89
Current Ratio	8.26	4.61	4.91	3.55	6.20	3.55	2.98	3.20	3.74
<b>Leverage</b>									
Debt Ratio	0.26	0.33	0.27	0.31	0.24	0.31	0.34	0.32	0.29
Long-term Debt/Capital	0.18	0.18	0.13	0.12	0.13	0.12	0.11	0.11	0.11
<b>Asset Management</b>									
Fixed Asset Turnover	4.80	5.01	8.07	6.90	5.20	6.08	6.96	10.20	10.71
Total Asset Turnover	0.73	0.82	1.04	0.84	0.68	0.84	0.91	1.33	1.45
Receivables DSO	31	44	54	43	65	44	50	58	37
Inventory Days	97	105	57	161	159	155	174	110	95
Inventory Turnover	3.54	3.83	5.63	3.26	2.26	2.52	2.41	3.25	3.65
Revenue/Employee	316	434	656	551					
<b>Profitability</b>									
Gross Margin	23.2%	24.1%	29.1%	27.6%	24.2%	22.5%	19.1%	16.6%	16.9%
Net Margin	-7.4%	1.1%	13.0%	7.3%	0.1%	1.2%	0.9%	2.7%	5.0%
Return on Assets	-5.4%	0.9%	13.6%	6.2%	0.0%	1.0%	0.8%	3.5%	7.3%
Return on Equity	-7.5%	1.3%	19.4%	8.7%	0.1%	1.4%	1.2%	5.3%	10.5%
<b>Per Share Data</b>									
Book Value/Share	\$9.68	\$10.07	\$12.59	\$13.07	\$12.82	\$13.90	\$14.03	\$14.13	\$15.40
Tangible Book/Share	\$9.53	\$9.97	\$11.40	\$11.71	\$11.41	\$12.45	\$12.65	\$12.82	\$14.09
Cash/Share	\$5.44	\$6.29	\$7.83	\$5.68	\$6.12	\$8.40	\$6.45	\$4.75	\$6.55
Net Cash/Share	\$4.72	\$5.36	\$7.05	\$4.95	\$3.31	\$5.27	\$3.54	\$1.75	\$3.35
Earnings/Share	(\$0.74)	\$0.13	\$2.09	\$1.13	\$0.00	\$0.05	\$0.04	\$0.18	\$0.40

**OmniVision Technologies**

**Sales Analysis**

	FY08	FY09	FY10	FY11	FY12	FY2011				FY2012				FY2013		
						1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q
<b>Product Metrics</b>																
Units Shipped (mil)	425.0	327.0	475.0	682.0	614.0	134.0	185.0	194.0	169.0	171.0	153.0	143.0	147.0	166.0	249.0	252.0
Unit growth (calculated)	70.0%	-23.1%	45.3%	43.6%	-10.0%	7.2%	38.1%	4.9%	-12.9%	1.2%	-10.5%	-6.5%	2.8%	12.9%	50.0%	1.2%
ASP	\$1.88	\$1.55	\$1.27	\$1.40	\$1.46	\$1.44	\$1.29	\$1.37	\$1.53	\$1.61	\$1.42	\$1.29	\$1.48	\$1.55	\$1.56	\$1.68
ASP change		-17.5%	-18.2%	10.5%	4.3%	14.3%	-10.4%	6.2%	11.7%	5.2%	-11.8%	-9.2%	14.7%	4.7%	0.6%	7.7%
VGA and smaller		71.5%	66.6%	54.6%	52.6%	57%	60%	56%	45%	45%	53%	59%	55%	32%	21%	16%
1.3-megapixel		12.8%	9.9%	12.8%	18.5%	10%	12%	11%	18%	18%	23%	19%	14%	31%	48%	45%
2-megapixel and greater		17.8%	23.2%	32.6%	28.8%	33%	28%	33%	37%	37%	24%	22%	31%	37%	31%	39%
<b>By Market</b>																
Cell Phone				65.0%	56.0%	66%	66%	72%	65%	62%	60%	52%	52%	48%	59%	61%
Digital Camera																
Security/Surveillance																
Entertainment						6%	11%	10%	11%	14%	20%	28%	28%	27%	29%	26%
PC Camera/notebook						19%	15%	11%	15%	15%	9%	8%	11%	15%	6%	7%
PDA																
Automotive/other						9%										
<i>Total</i>						100%	92%	93%	91%	91%	89%	88%	91%	90%	94%	94%
<b>By Territory</b>																
Hong Kong																
Taiwan	55,924	41,154				4,582	8,391	11,035		6,348	4,719	2,984		6,218	7,474	
Japan	4,686	4,410	7,961	11,546	46,108					12,895				13,796	18,626	
China	666,344	383,875	504,940	614,891	520,452	127,452	166,421	166,706	154,312	159,276	137,387	112,079	111,710	175,106	265,433	
Korea	3,125	4,670	5,406	199,747	147,390	36,698	42,642	55,116	65,291	69,252	22,016	12,659	43,463	48,819	64,954	
Malaysia	55,015	36,358	21,890	66,827	50,887	19,175	14,927	19,793	12,932	13,940	15,106	12,895	8,946	7,858	27,839	
US	12,810	33,912	3,513	16,203	61,766	1,231	731	6,686	7,555		13,450	22,646	25,670			
ROW	1,634	2,937	59,283	47,262	71,127	3,933	6,348	6,341	18,178	14,360	25,241	21,930	28,758	6,267	5,811	
<i>Total (,000)</i>	799,538	507,316	602,993	956,476	897,730	193,071	239,460	265,677	258,268	276,071	217,919	185,193	218,547	258,064	390,137	0
<b>By Channel</b>																
OEM & VARs	66.8%	58.0%	51.5%	75.3%	78.1%	68.4%	73.9%	80.2%	76.9%	77.2%	79.0%	79.2%	77.4%	72.5%	85.2%	85.2%
Distributors	33.2%	42.0%	48.5%	24.7%	21.9%	31.6%	26.1%	19.8%	23.1%	22.8%	21.0%	20.8%	22.6%	27.5%	14.8%	14.8%
<b>By Customer</b>																
LG Innotec				17.6%	15.2%	15.1%	13.6%	17.6%		23.0%	11.9%	11.8%		17.2%	15.8%	
WPI (HK distributor)	19.9%	22.4%	27.0%	13.8%	13.5%	16.5%	14.5%	11.1%		14.0%		13.7%		16.0%		
unidentified OEM						12.9%					11.0%	10.7%			14.7%	
unidentified OEM												10.2%			12.6%	
unidentified Dist												11.6%				
Nam Tai (cell)																
Primax (Motorola cell)																
X-10 (security)																
Creative Labs (PC)																
Concord (DSC)																
Aiptek (DSC)																
Foundatec/Lite-On (cell)																
unidentified (cell)																
unidentified (cell)																
Foxconn	15.0%	10.4%	11.2%													
Sanshin (OEM)																
SiDa (distributor)																
Top 5		59.5%	60.0%	55.0%	52.0%									54.7%		



**OmniVision**

**Valuation**

**Relative Valuation**

Company	Ticker	Price 2/28/13	52-Week		CY EPS				CY P/E				Shares (mil)	CAP (\$ mil)	Price-Sales			FY Ends
			Low	High	2011	2012	2013	2014	2011	2012	2013	2014			TTM	Cur FY	Nxt FY	
OmniVision *	OVTI	15.41	11.82	21.12	2.03	1.30	1.55	2.08	7.6	11.9	9.9	7.4	57	871	0.7	0.6	0.6	Apr
Spansion	CODE	11.76	9.42	14.54	0.85	0.99	1.13	1.68	13.8	11.9	10.4	7.0	62	723	0.8	0.8	0.7	Dec
Cypress Semiconductor	CY	10.53	8.70	17.98	1.25	0.55	0.48	0.83	8.4	19.1	21.9	12.7	157	1,656	2.2	2.2	1.9	Dec
Diodes	DIOD	19.93	12.95	25.10	1.25	0.56	0.90	1.40	15.9	35.6	22.1	14.2	47	935	1.5	1.3	1.2	Dec
International Rectifier	IRF	21.02	14.32	23.55	1.24	-1.00	-1.35	-0.88	17.0	NM	NM	NM	69	1,452	1.5	1.5	1.4	Jun
MagnaChip	MX	15.75	8.38	18.25	1.68	2.23	2.50	2.98	9.4	7.1	6.3	5.3	37	584	0.7	0.7	0.6	Dec
RF Micro Devices	RFMD	4.61	3.45	5.43	0.29	0.10	0.18	0.28	15.9	46.1	25.6	16.5	283	1,306	1.5	1.4	1.2	Mar
TriQuint	TQNT	4.69	4.30	7.26	0.51	-0.01	-0.09	0.28	9.2	NM	NM	16.8	162	760	0.9	0.9	0.8	Dec
Average									12.8	24.0	17.3	12.1			1.3	1.2	1.1	

\* Tokeneke estimate  
Source: First Call as of 2/27/13

**Historical Valuation**

Company	Ticker	Price 2/28/13	Trailing 12-month					
			Price/Earnings		Price/Sales		Price/Book	
			Current	Historical*	Current	Historical*	Current	Historical*
OmniVision	OVTI	\$15.41	11.9		0.7		1.0	
			<b>Average</b>	62.0	<b>Average</b>	2.5	<b>Average</b>	2.6
			<b>High</b>	1129.0	<b>High</b>	8.2	<b>High</b>	12.2
			<b>Low</b>	4.6	<b>Low</b>	0.5	<b>Low</b>	0.5

\* weekly since 2000

### **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.

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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.

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