

F4Q Exceeds the High-End, Outlook Exceeds Expectations Seasonally Weak F4Q, Revenue and Margin Recovering. Raising Est, Reit Buy.

Diluted Shares(mil):	56.5	Closing Price 5/30/13	FTE April	FY13 act	FY14	FY15
Market Cap(\$mil):	\$876	\$15.49	Revenue(\$mil)	\$1,407.9	\$1,550.6	\$1,635.3
Avg Volume(,000):	1,011		EPS	\$1.41	\$2.04	\$2.37
Net Cash/Share:	\$3.20	Recommendation/Target	Price/Sales	0.6	0.6	0.5
Tangible Book/Share:	\$14.39	Buy/\$30	Price/EPS	11.0	7.6	6.5

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

Summary: OVTI F4Q sales declined by -21% on seasonal cell phone weakness to developed economies, although it exceeded the high-end of expectations on partially offsetting strength from emerging economies, incremental gross margin improvement, and operating expense control. It also guided for better-than-seasonal revenue growth this quarter of +6+16% and I am raising my estimates. Gross margin remains subdued but has begun to improve, and I believe earnings will disproportionately benefit from margin recovery over the next several quarters. I continue to recommend OVTI as a Buy with a 12-month target price of \$30 based on just under 1.2x FY14 sales.

F4Q Review: Revenue fell by -21% sequentially to \$336M on seasonal cell phone weakness to developed markets, but was above the high-end of guidance and expectations on strength from emerging markets. Gross margin at 17.7% improved by 60 basis points due to a richer mix of 8Mp devices but remained subdued due the shipment of higher-cost OmniBSI-2 technology-based device inventory. Pro forma EPS of \$0.31 exceeded the high-end of guidance and expectations due to revenue and margin strength, as well as operating expense control. Cash decreased by -\$8M to \$212M as inventory grew by \$57M to \$430M or 138 days to support expected forthcoming customer requirements, partially offset by growth in payables of \$37M and a decrease in receivables of -\$5.4M.

FYE April pro forma, millions	Estimate	Actual	EPS Impact	F4Q Guidance	Consensus	Range
Revenue	\$325.0	\$336.2	\$0.03	\$300-330	\$318.9	315-328
Revenue Growth	-23.3%	-20.6%		-29.2-22.1%	-24.7%	-25.6-22.6%
Gross Margin	17.2%	17.7%	\$0.03			
Op Expense	\$41.4	\$37.6	\$0.03	\$39.0		
Interest/Other Inc	\$0.2	\$0.1				
Taxes	\$2.3	\$2.3		\$2.0-2.5		
Shares	56.70	56.53				
Diluted EPS	\$0.22	\$0.31	\$0.09	\$0.14-\$0.29	\$0.21	\$0.20-\$0.24

Unit shipments fell to 188M from a record 252M the prior quarter, ASPs grew to \$1.79 from \$1.68 on 5Mp/8Mp strength, and OEM sales fell to 78.4% from 85.2%. 2Mp+ sensors accounted for 50% of units up from 39%; 1.3Mp declined to 33% from 45%; and VGA grew to 17% from 16%. Mobile phones accounted for 65% of sales up from 61%, entertainment (tablets) fell to 17% from 26%, and notebook PCs/webcams edged up to 8% from 7%.

Emerging Market Smartphone Strength: Revenue got hit last quarter on adverse cell phone market seasonality in developed economies, but OVTI benefited at the margin from its strength among Chinese cell phone makers and a richer mix of 8Mp devices and continuing strength of 5Mp parts. (5Mp parts were weak in tablets, but remained strong in smartphones.) The company is well positioned to benefit as smartphone shipments to developed markets recover, and its Chinese OEMs serve the world's largest cell phone market domestically with a lagging but growing mix of smartphones as well as exports to other emerging regions. 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 to Asia, Africa and Latin America. Tablets took a big hit last quarter but are expected to recover and OVTI's competitive position remains very strong with its low-profile offerings. It also claims several design wins at automotive OEMs in North America and Europe that it expects to ramp over the next few quarters, along with several security/surveillance applications. 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 is clearly appreciated by customers given the company's sales growth over the last year. 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 a significant portion of current inventory. This inventory will likely be flushed over this fiscal year, the company continues to generate profits at the current gross margin level of 17.7%, and I expect significant earnings leverage as margins expand with the depletion of this inventory.

Management Guidance: For F1Q: sales of \$355-390M; R&D up over 10% to F2Q13's \$26.2M; SG&A up by \$1M; GAAP tax mid-teens, pro forma low-teens; GAAP EPS of \$0.21-\$0.38; and pro forma EPS of \$0.35-\$0.52.

Raising Estimates: My F1Q estimate is slightly above the mid-point of management guidance, and higher revenue and gross margin trickle through my model over the next two years. I have tempered quarter seasonality for FY14 and enhanced it closer to historical norms compared to the profile of my previous FY15 model.

FYE April pro forma, millions	F1Q		FY14		FY15	
	Previous	Update	Previous	Update	Previous	Update
Revenue	\$325.0	\$375.0	\$1,456.5	\$1,550.6	\$1,514.7	\$1,635.3
Revenue Growth	0.0%	11.5%	4.3%	10.1%	4.0%	5.5%
Gross Margin	18.5%	19.5%	20.2%	20.4%	23.5%	22.7%
Op Expense	\$40.6	\$41.8	\$181.3	\$177.2	\$211.7	\$208.6
Interest/Other Inc	\$0.2	\$0.8	\$0.8	\$3.2	\$0.8	\$3.2
Taxes	13.0%	12.0%	13.0%	12.0%	13.0%	12.0%
Shares	56.97	56.81	57.38	57.22	58.48	58.32
Diluted EPS	\$0.27	\$0.46	\$1.72	\$2.04	\$2.15	\$2.37

Still 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 at the lowest or second lowest price-earnings ratios of its peers across all four years identified in the table, and has the lowest price-sales ratio of all its peers in terms of trailing, current and future years. My 12-month target price of \$30 is based on just under 1.2-times FY14 sales which is consistent with the average for the next 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	F1Q	FY14	FY15	Revenue (12 est)	F1Q	FY14	FY15
Tokeneke-revised	\$0.46	\$2.04	\$2.37	Tokeneke-revised	\$375.0	\$1,550.6	\$1,635.3
Tokeneke-previous	\$0.27	\$1.72	\$2.15	Tokeneke-previous	\$325.0	\$1,456.5	\$1,514.7
Consensus-previous	\$0.29	\$1.59		Consensus-previous	\$347.2	\$1,510.0	
Highest Est-previous	\$0.32	\$2.16		Highest Est-previous	\$376.1	\$1,650.0	
Lowest Est-previous	\$0.22	\$1.32		Lowest Est-previous	\$338.8	\$1,420.0	

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Income Statement

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

	FY2012			FY2013 act					FY2014 est					FY2015				
	FY2010	FY2011	FY2012	Q1	Q2	Q3	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	336,215	1,407,929	375,000	412,500	412,500	350,625	1,550,625	333,094	416,367	478,822	406,999	1,635,282
COGS	454,936	676,494	646,782	207,789	324,476	351,113	276,615	1,159,993	301,875	330,000	325,875	276,994	1,234,744	261,479	322,685	366,299	313,389	1,263,851
Gross Profit	148,055	279,982	250,948	50,275	65,661	72,400	59,600	247,936	73,125	82,500	86,625	73,631	315,881	71,615	93,683	112,523	93,610	371,431
R&D	67,078	78,964	97,368	24,096	26,248	23,712	22,945	97,001	26,157	27,465	28,838	30,280	112,741	31,794	33,384	35,053	36,806	137,038
SG&A	51,025	54,491	52,858	15,012	14,787	15,015	14,648	59,462	15,648	15,961	16,280	16,606	64,495	17,104	17,617	18,146	18,690	71,557
Stk Crg/Write-off	-	774	9,286	2,321	2,322	2,321	2,322	9,286	2,322	2,322	2,322	2,322	9,288	2,322	2,322	2,322	2,322	9,288
Operating Expenses	118,103	134,229	159,512	41,429	43,357	41,048	39,915	165,749	44,127	45,748	47,441	49,208	186,524	51,220	53,323	55,521	57,818	217,882
Operating Income	29,952	145,753	91,436	8,846	22,304	31,352	19,685	82,187	28,998	36,752	39,184	24,423	129,357	20,395	40,359	57,002	35,792	153,549
Interest/Other	3,801	2,768	(1,107)	(664)	686	203	123	348	800	800	800	800	3,200	800	800	800	800	3,200
Pre-tax Income	33,753	148,521	90,329	8,182	22,990	31,555	19,808	82,535	29,798	37,552	39,984	25,223	132,557	21,195	41,159	57,802	36,592	156,749
Taxes	2,789	151	4,464	(2,239)	4,439	97	2,348	4,645	3,576	4,506	4,798	3,027	15,907	2,543	4,939	6,936	4,391	18,810
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	17,460	79,030	26,222	33,046	35,186	22,196	116,650	18,651	36,220	50,866	32,201	137,939
EPS-basic	\$0.59	\$2.68	\$1.69	\$0.22	\$0.35	\$0.58	\$0.32	\$1.48	\$0.48	\$0.61	\$0.64	\$0.40	\$2.14	\$0.34	\$0.65	\$0.91	\$0.57	\$2.48
Shares-basic	52,856	55,324	56,667	52,830	53,514	53,830	53,943	53,529	54,213	54,484	54,756	55,030	54,621	55,305	55,582	55,860	56,139	55,721
EPS-diluted	\$0.59	\$2.49	\$1.60	\$0.21	\$0.33	\$0.56	\$0.31	\$1.41	\$0.46	\$0.58	\$0.61	\$0.39	\$2.04	\$0.32	\$0.62	\$0.87	\$0.55	\$2.37
Shares-diluted	52,765	59,664	59,510	55,186	56,211	56,453	56,525	56,094	56,813	57,084	57,356	57,630	57,221	57,905	58,182	58,460	58,739	58,321
GAAP EPS	\$0.13	\$2.11	\$1.13	\$0.04	\$0.19	\$0.40	\$0.17	\$0.71	\$0.31	\$0.41	\$0.44	\$0.22	\$1.39	\$0.16	\$0.44	\$0.67	\$0.36	\$1.63
Margin Analysis																		
Gross Margin	24.6%	29.3%	28.0%	19.5%	16.8%	17.1%	17.7%	17.6%	19.5%	20.0%	21.0%	21.0%	20.4%	21.5%	22.5%	23.5%	23.0%	22.7%
R&D	11.1%	8.3%	10.8%	9.3%	6.7%	5.6%	6.8%	6.9%	7.0%	6.7%	7.0%	8.6%	7.3%	9.5%	8.0%	7.3%	9.0%	8.4%
SG&A	8.5%	5.7%	5.9%	5.8%	3.8%	3.5%	4.4%	4.2%	4.2%	3.9%	3.9%	4.7%	4.2%	5.1%	4.2%	3.8%	4.6%	4.4%
Stk Chrg/Write-off	0.0%	0.1%	1.0%	0.9%	0.6%	0.5%	0.7%	0.7%	0.6%	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%	5.9%	5.8%	7.7%	8.9%	9.5%	7.0%	8.3%	6.1%	9.7%	11.9%	8.8%	9.4%
Pre-tax Income	5.6%	15.5%	10.1%	3.2%	5.9%	7.5%	5.9%	5.9%	7.9%	9.1%	9.7%	7.2%	8.5%	6.4%	9.9%	12.1%	9.0%	9.6%
Tax Rate	8.3%	0.1%	4.9%	-27.4%	19.3%	0.3%	11.9%	5.6%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
Net Income	5.2%	15.5%	10.6%	4.5%	4.8%	7.4%	5.2%	5.6%	7.0%	8.0%	8.5%	6.3%	7.5%	5.6%	8.7%	10.6%	7.9%	8.4%
Qtr-to-Qtr Growth																		
Revenue				18.1%	51.2%	8.6%	-20.6%		11.5%	10.0%	0.0%	-15.0%		-5.0%	25.0%	15.0%	-15.0%	
Operating Expenses				7.3%	4.7%	-5.3%	-2.8%		10.6%	3.7%	3.7%	3.7%		4.1%	4.1%	4.1%	4.1%	
Operating Income				-22.6%	152%	40.6%	-37.2%		47.3%	26.7%	6.6%	-37.7%		-16.5%	97.9%	41.2%	-37.2%	
Pre-tax Income				-29.8%	181%	37.3%	-37.2%		50.4%	26.0%	6.5%	-36.9%		-16.0%	94.2%	40.4%	-36.7%	
Net Income				6.4%	60.5%	69.6%	-44.5%		50.2%	26.0%	6.5%	-36.9%		-16.0%	94.2%	40.4%	-36.7%	
EPS				5.6%	57.5%	68.8%	-44.6%		49.4%	25.4%	6.0%	-37.2%		-16.4%	93.3%	39.8%	-37.0%	
Year-to-Year Growth																		
Revenue	18.9%	58.6%	-6.1%	-6.5%	79.0%	128.7%	53.8%	56.8%	45.3%	5.7%	-2.6%	4.3%	10.1%	-11.2%	0.9%	16.1%	16.1%	5.5%
Operating Expenses	-4.9%	13.7%	18.8%	-1.2%	5.5%	8.4%	3.4%	3.9%	6.5%	5.5%	15.6%	23.3%	12.5%	16.1%	16.6%	17.0%	17.5%	16.8%
Operating Income	-1008%	387%	-37.3%	-80.7%	-15.2%	301%	72.3%	-10.1%	228%	64.8%	25.0%	24.1%	57.4%	-29.7%	9.8%	45.5%	46.5%	18.7%
Pre-tax Income	-867%	340%	-39.2%	-82.0%	-11.0%	326%	69.9%	-8.6%	264%	63.3%	26.7%	27.3%	60.6%	-28.9%	9.6%	44.6%	45.1%	18.2%
Net Income	-896%	374%	-35.6%	-75.5%	-38.3%	325%	60.7%	-17.3%	127%	78.1%	11.9%	27.1%	47.6%	-28.9%	9.6%	44.6%	45.1%	18.2%
EPS	-863%	320%	-35.5%	-71.9%	-31.3%	340%	55.6%	-12.2%	120%	75.4%	10.1%	24.7%	44.7%	-30.2%	7.5%	41.8%	42.3%	16.0%

OmniVision Technologies

Financial Summary

(dollars in thousands)

Fiscal year ends April

	FY10	FY11	FY12	FY13	4QF12	1QF13	2QF13	3QF13	4QF13
Assets									
Cash and equivalents	234,023	379,379	290,492	190,171	290,492	191,786	115,511	194,841	190,171
Short-term investments	99,555	87,505	40,515	22,164	40,515	44,779	24,096	25,460	22,164
Net accounts receivable	<u>74,261</u>	<u>142,606</u>	<u>107,793</u>	<u>166,517</u>	<u>107,793</u>	<u>142,687</u>	<u>249,283</u>	<u>171,926</u>	<u>166,517</u>
Quick Assets	407,839	609,490	438,800	378,852	438,800	379,252	388,890	392,227	378,852
Inventories	133,993	106,873	291,340	430,315	291,340	403,201	398,694	373,335	430,315
Other	<u>11,370</u>	<u>14,608</u>	<u>12,625</u>	<u>16,010</u>	<u>12,625</u>	<u>24,629</u>	<u>14,122</u>	<u>11,759</u>	<u>16,010</u>
Current Assets	553,202	730,971	742,765	825,177	742,765	807,082	801,706	777,321	825,177
Property, plant and eqt, net	121,547	115,446	144,792	160,630	144,792	151,905	154,045	162,182	160,630
Long-term investments	92,121	104,616	128,940	139,746	128,940	119,198	127,178	132,866	139,746
Goodwill and intangibles	5,330	71,014	79,255	67,031	79,255	76,050	73,527	70,264	67,031
Other assets	<u>25,493</u>	<u>12,111</u>	<u>7,205</u>	<u>34,430</u>	<u>7,205</u>	<u>19,138</u>	<u>16,951</u>	<u>21,901</u>	<u>34,430</u>
Total Assets	797,693	1,034,158	1,102,957	1,227,014	1,102,957	1,173,373	1,173,407	1,164,534	1,227,014
Liabilities and Shareholders Equity									
Current portion of long-term debt	4,286	4,323	3,146	3,769	3,146	2,383	2,141	3,739	3,769
Accounts payable	85,487	102,519	159,860	188,261	159,860	222,185	193,608	152,347	188,261
Deferred revenue	10,661	16,594	10,115	15,493	10,115	10,053	14,094	16,199	15,493
Other liabilities	<u>19,506</u>	<u>25,483</u>	<u>36,403</u>	<u>43,178</u>	<u>36,403</u>	<u>36,192</u>	<u>40,367</u>	<u>35,660</u>	<u>43,178</u>
Current Liabilities	119,940	148,919	209,524	250,701	209,524	270,813	250,210	207,945	250,701
Long-term debt	45,428	41,916	39,337	35,709	39,337	39,071	39,008	35,735	35,709
Deferred tax liability/other	<u>95,353</u>	<u>91,998</u>	<u>93,217</u>	<u>95,395</u>	<u>93,217</u>	<u>89,467</u>	<u>90,146</u>	<u>90,529</u>	<u>95,395</u>
Total Liabilities	260,721	282,833	342,078	381,805	342,078	399,351	379,364	334,209	381,805
Minority interest	3,390	0	0	0	0	0	0	0	0
Common stock	441,142	533,847	578,978	620,406	576,008	587,810	596,717	614,444	620,406
Retained earnings	270,253	394,735	460,584	503,486	460,584	462,911	473,256	494,564	503,486
Other/Treasury Stock	<u>(177,813)</u>	<u>(177,257)</u>	<u>(278,683)</u>	<u>(278,683)</u>	<u>(275,713)</u>	<u>(276,699)</u>	<u>(275,930)</u>	<u>(278,683)</u>	<u>(278,683)</u>
Total Shareholders Equity	533,582	751,325	760,879	845,209	760,879	774,022	794,043	830,325	845,209
Total Liabilities and Equity	797,693	1,034,158	1,102,957	1,227,014	1,102,957	1,173,373	1,173,407	1,164,534	1,227,014
Sales and Income									
Revenue	602,991	956,476	897,736	1,407,929	218,547	258,064	390,137	423,513	336,215
COGS	457,646	678,459	649,719	1,163,815	169,446	208,849	325,453	352,027	277,486
Net income	6,724	124,482	65,849	42,902	2,681	2,327	10,345	21,308	8,922
Other									
Capital Expenditures	13,516	10,313	24,186		5,703	11,446	8,265	10,197	
Depreciation and Amortization	6,403	20,564	29,771		7,856	8,524	8,771	8,463	
Shares (weighted average diluted)	53,002	59,664	58,233	53,671	54,751	55,186	56,211	53,930	54,061
Employees (units)	1,450	1,465	1,796						
Stock Repurchased					100				
Ratios									
Liquidity									
Quick Ratio	3.40	4.09	2.09	1.51	2.09	1.40	1.55	1.89	1.51
Current Ratio	4.61	4.91	3.55	3.29	3.55	2.98	3.20	3.74	3.29
Leverage									
Debt Ratio	0.33	0.27	0.31	0.31	0.31	0.34	0.32	0.29	0.31
Long-term Debt/Capital	0.18	0.13	0.12	0.11	0.12	0.11	0.11	0.11	0.11
Asset Management									
Fixed Asset Turnover	5.01	8.07	6.90	9.22	6.08	6.96	10.20	10.71	8.33
Total Asset Turnover	0.82	1.04	0.84	1.21	0.84	0.91	1.33	1.45	1.12
Receivables DSO	44	54	43	43	44	50	58	37	45
Inventory Days	105	57	161	133	155	174	110	95	140
Inventory Turnover	3.83	5.63	3.26	3.23	2.52	2.41	3.25	3.65	2.76
Revenue/Employee	434	656	551	784					
Profitability									
Gross Margin	24.1%	29.1%	27.6%	17.3%	22.5%	19.1%	16.6%	16.9%	17.5%
Net Margin	1.1%	13.0%	7.3%	3.0%	1.2%	0.9%	2.7%	5.0%	2.7%
Return on Assets	0.9%	13.6%	6.2%	3.7%	1.0%	0.8%	3.5%	7.3%	3.0%
Return on Equity	1.3%	19.4%	8.7%	5.3%	1.4%	1.2%	5.3%	10.5%	4.3%
Per Share Data									
Book Value/Share	\$10.07	\$12.59	\$13.07	\$15.75	\$13.90	\$14.03	\$14.13	\$15.40	\$15.63
Tangible Book/Share	\$9.97	\$11.40	\$11.71	\$14.50	\$12.45	\$12.65	\$12.82	\$14.09	\$14.39
Cash/Share	\$6.29	\$7.83	\$5.68	\$3.96	\$8.40	\$6.45	\$4.75	\$6.55	\$6.51
Net Cash/Share	\$5.36	\$7.05	\$4.95	\$3.22	\$5.27	\$3.54	\$1.75	\$3.35	\$3.20
Earnings/Share	\$0.13	\$2.09	\$1.13	\$0.80	\$0.05	\$0.04	\$0.18	\$0.40	\$0.17

OmniVision Technologies

Sales Analysis

	FY08	FY09	FY10	FY11	FY12	FY13	FY2011				FY2012				FY2013			
							1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Product Metrics																		
Units Shipped (mil)	425.0	327.0	475.0	682.0	614.0	855.0	134.0	185.0	194.0	169.0	171.0	153.0	143.0	147.0	166.0	249.0	252.0	188.0
Unit growth (calculated)	70.0%	-23.1%	45.3%	43.6%	-10.0%	39.3%	7.2%	38.1%	4.9%	-12.9%	1.2%	-10.5%	-6.5%	2.8%	12.9%	50.0%	1.2%	-25.4%
ASP	\$1.88	\$1.55	\$1.27	\$1.40	\$1.46	\$1.65	\$1.44	\$1.29	\$1.37	\$1.53	\$1.61	\$1.42	\$1.29	\$1.48	\$1.55	\$1.56	\$1.68	\$1.79
ASP change		-17.5%	-18.2%	10.5%	4.3%	12.6%	14.3%	-10.4%	6.2%	11.7%	5.2%	-11.8%	-9.2%	14.7%	4.7%	0.6%	7.7%	6.5%
VGA and smaller		71.5%	66.6%	54.6%	52.6%	20.8%	57%	60%	56%	45%	45%	53%	59%	55%	32%	21%	16%	17%
1.3-megapixel		12.8%	9.9%	12.8%	18.5%	40.5%	10%	12%	11%	18%	18%	23%	19%	14%	31%	48%	45%	33%
2-megapixel and greater		17.8%	23.2%	32.6%	28.8%	38.7%	33%	28%	33%	37%	37%	24%	22%	31%	37%	31%	39%	50%
By Market																		
Cell Phone				65.0%	56.0%		66%	66%	72%	65%	62%	60%	52%	52%	48%	59%	61%	65%
Digital Camera																		
Security/Surveillance																		
Entertainment							6%	11%	10%	11%	14%	20%	28%	28%	27%	29%	26%	17%
PC Camera/notebook							19%	15%	11%	15%	15%	9%	8%	11%	15%	6%	7%	8%
PDA																		
Automotive/other							9%											
<i>Total</i>							100%	92%	93%	91%	91%	89%	88%	91%	90%	94%	94%	90%
By Territory																		
Hong Kong																		
Taiwan	55,924	41,154					4,582	8,391	11,035		6,348	4,719	2,984		6,218	7,474	6,210	
Japan	4,686	4,410	7,961	11,546	46,108					12,895					13,796	18,626	15,246	
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	278,923	
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	96,163	
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	15,364	
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	11,607	
<i>Total (,000)</i>	799,538	507,316	602,993	956,476	897,730	1,407,929	193,071	239,460	265,677	258,268	276,071	217,919	185,193	218,547	258,064	390,137	423,513	0
By Channel																		
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%	78.4%
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%	21.6%
By Customer																		
LG Innotec				17.6%	15.2%		15.1%	13.6%	17.6%		23.0%	11.9%	11.8%		17.2%	15.8%	21.8%	
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%	13.9%	
unidentified OEM													10.2%			12.6%	12.2%	
unidentified Disti													11.6%					
Nam Tai (cell)																		
Primax (Motorola cell)																		
X-10 (security)																		
Creative Labs (PC)																		
Concord (DSC)																		
Aiptek (DSC)																		
Foundate/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%										58.6%			

OmniVision Technologies

Company Summary

<u>Products</u>			<u>Technology</u>	<u>Markets</u>	<u>Suppliers</u>	<u>Competitors</u>
CMOS Image Sensors			<u>Pixel Generation</u>	<u>Market</u>	<u>Image Sensor Fabs</u>	<u>CMOS</u>
<u>Resolution</u> <i>(megapixels)</i>	<u>Optical Format</u> <i>(in inches)</i>	<u>Pixel Size</u> <i>(in microns)</i>	OmniBSI-2	PC/webcams	TSMC	Aptina
Native HD	1/13"	1.1	OmniBSI	Camera Phones	Powerchip	Samsung
High Res HD	1/10"	1.34	OmniPixel3-HS <i>(HS = high-sensitivity)</i>	Security		Sharp
16 Mp	1/9"	1.4	OmniPixel3	Automotive	Color Filter	Sony
14 Mp	1/7"	1.75	OmniPixel2	Medical	VisEra <i>(TSMC joint vent.)</i>	STMicro
12 Mp	1/6"	2.0	OmniPixel	<u>Entertainment*</u>		Toshiba
10 Mp	1/5"	2.2	CameraCubeChip	Total CMOS:	Wafer Probe	
9 Mp	1/4"	2.5			KYEC	<u>CCD</u>
8 Mp	1/3"	3.0		<u>Applications</u>	THEPI	Panasonic
5 Mp	1/2"	3.18	<u>Wafer Fab Line-Widths</u>	Cell Phone Handsets		Sharp
3 Mp		3.6	65 nm	Digital Still Cameras	Package Assembly	Sony
2 Mp <i>(1080)</i>		4.2	0.11-micron	Security Cameras	Lingsen	
1.3 Mp <i>(780)</i>		6.0	0.13-micron	Surveillance Cameras	Tong Hsing	
VGA			0.18-micron	PC Cameras	XnTec <i>(investment)</i>	
CIF			0.25-micron	Video Games*	OSC <i>(OVTI-owned)</i>	
analog				Toys*		
				Automobiles		
				Tablets*		
				Digital TVs		
				Portable Media Players*		
				Camcorders		
				Medical		
CameraCubeChip						
Companion Chips						
USB controllers						
Host Processors						
image processing/compression						

OmniVision

Valuation

Relative Valuation

Company	Ticker	Price 5/30/13	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	15.49	11.82	17.85	2.03	1.30	1.96	2.20	7.6	11.9	7.9	7.0	57	875	0.6	0.6	0.5	Apr	
Spansion	CODE	13.71	9.42	14.54	0.85	0.99	1.06	1.44	16.1	13.8	12.9	9.5	58	797	0.9	0.9	0.8	Dec	
Cypress Semiconductor	CY	11.55	8.70	14.20	1.25	0.55	0.43	0.77	9.2	21.0	26.9	15.0	158	1,828	2.4	2.4	2.2	Dec	
Diodes	DIOD	23.97	12.95	24.88	1.25	0.56	1.11	1.71	19.2	42.8	21.6	14.0	47	1,131	1.7	1.3	1.2	Dec	
International Rectifier	IRF	22.10	14.32	22.70	1.24	-0.98	-0.29	0.51	17.8	NM	NM	43.3	69	1,532	1.6	1.6	1.4	Jun	
MagnaChip	MX	18.79	8.38	19.07	1.68	2.23	2.51	2.88	11.2	8.4	7.5	6.5	37	697	0.8	0.8	0.7	Dec	
RF Micro Devices	RFMD	5.47	3.45	5.75	0.29	0.10	0.34	0.50	18.9	54.7	16.1	10.9	286	1,562	1.6	1.3	1.2	Mar	
TriQuint	TQNT	7.11	4.30	7.16	0.51	-0.01	-0.11	0.31	13.9	NM	NM	22.9	161	1,143	1.4	1.3	1.2	Dec	
Average									15.2	28.2	17.0	17.5				1.5	1.4	1.2	

* Tokeneke estimate
Source: First Call as of 5/30/13

Historical Valuation

Company	Ticker	Price 5/30/13	Trailing 12-month					
			Price/Earnings		Price/Sales		Price/Book	
			Current	Historical*	Current	Historical*	Current	Historical*
OmniVision	OVTI	\$15.49	11.0		0.6		1.0	
			Average	62.0	Average	2.5	Average	2.6
			High	1129.0	High	8.2	High	12.2
			Low	4.6	Low	0.5	Low	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.

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.

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