

## TI Raises 2Q Guidance Customer Inventory Burn Narrows, Upgrading to Buy from Hold

Diluted Shares(mil):	1,277	<u>Closing Price 6/8/09</u>	<u>fye Dec</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Market Cap(\$mil):	\$25,246	\$19.77	Revenue(\$mil)	\$12,501	\$9,361	\$9,742
Avg Volume(,000):	18,574		EPS	\$1.45	\$0.85	\$1.24
Net Cash/Share:	\$2.40	<u>Recommendation/Target</u>	Price/Sales	2.0	2.7	2.6
Quarter Dividend	\$0.11	Buy from Hold. To \$25 from \$20.	Price/EPS	13.6	23.3	15.9

*Texas Instruments is the worlds leading supplier of analog and DSP semiconductor products primarily to cell phone and computation markets. It also supplies microcontrollers, wireless, RISC, ASIC, DLP and standard logic semiconductor devices, as well as handheld calculators.*

**Summary:** TXN raised 2Q09 guidance during a previously scheduled mid-quarter update yesterday after the close. Revenue guidance was raised to \$2.3-\$2.5B from \$1.95-2.4B, and EPS guidance was raised to \$0.14-\$0.22 from \$0.01-\$0.15. I am raising my estimate for the quarter slightly above the mid-point of guidance; am raising my 12-month target price to \$25 from \$20 based on 3-times price-sales and 20-times price-earnings for next year; and am upgrading my recommendation to Buy from Hold.

**Narrowing Shipment-to-Consumption Gap:** Bookings continued strong during April and May and backlog coverage is improving, although order visibility remains limited. Management continues to believe that it is under-shipping to end-market consumption, albeit by a narrowing amount. Most of the upside this quarter is from connectivity and OMAP application processor strength at new SmartPhone programs as the company gains share with increasing content per phone, although baseband handset business is also slightly stronger than previously expected. China 3G wireless infrastructure remains strong. Asia remains the strongest region while the US and Europe continue to lag. Notebooks, PCs, communication infrastructure and handsets markets remain solid, although the broader industrial markets continue to languish. Most product areas are stronger with the most growth from analog products including power management, high-performance analog (HPA), and high-volume analog and logic (HVAL). Manufacturing utilization is probably increasing to support higher business levels, and it will take another year or so to convert the remaining 75% of distribution to a consignment inventory scheme.

**Long-Term Pluses and Minuses:** Recall that TXN has long-term business shifts that it hopes to outgrow over the next couple of years with strength from high-performance analog market leadership, as well as embedded products that include microcontrollers and DSPs to automotive and communications infrastructure markets, respectively. It is hoping to offset expected baseband losses at Nokia due to supplier diversification with application processor gains in the handset space, and has lost the Ericsson Mobile Platforms (EMP) infrastructure business to an in-house joint-venture supplier. Total baseband sales account for 75% of wireless revenue and will become extinct by 2012. Relatively mature markets in calculators, high-volume analog and standard logic, DLPs, RISC processors and ASICs are unlikely to offer significant growth.

**Management Guidance:** Revenue guidance was raised to \$2.3-\$2.5B from \$1.95-2.4B, and EPS guidance was raised to \$0.14-\$0.22 from \$0.01-\$0.15. Factory utilization and gross margin is expected to improve with revenue upside and a richer mix of higher-margin analog products, and EPS continues to include a \$100M restructuring charge accounting for \$0.05 per share. 2009 guidance remains unchanged with R&D at \$1.5B, cap ex at \$300M (primarily in the new assembly and test center in the Philippines), depreciation at \$900M (and falling long-term, with decreasing cap ex), and a tax rate of 24%. The long-term model continues to call for 55% gross margin (from an increasing percentage of analog and embedded product sales) and 30% operating margin after R&D at 15% of sales and SG&A at 10%.

A restructuring of the company's wireless broadband business was announced last October and more general cuts to accommodate current macroeconomic weakness were announced in January. These actions were to include a reduction in force of 4,050, charges of \$410M (of which \$254M were incurred 4Q08), and quarterly operating savings of \$175M split as 50% in R&D, 30% SG&A, and 20% COGS by 4Q09 (of which \$10M was realized 4Q08 and \$40M more was expected 1Q09). However, this schedule was accelerated 1Q with a \$105M charge and a

\$101M decline in operating expenses. In addition, the \$100M restructuring charge expected 2Q appears to overshoot the original plan.

**Raising Estimates:** My revised 2Q estimate is slightly above the mid-point of updated guidance and increasing estimates in subsequent periods is primarily due to the trickle-through of higher revenue: gross margin and operating expense assumptions beyond the current quarter remain unchanged. My year-end operating expense level remains consistent with previously communicated restructuring goals and I continue to undershoot targeted year-end gross margin levels. In other words, there is upside potential to my revenue and gross margin estimate, and accelerated restructuring could lead to slightly lower operating expenses.

<i>in millions</i>	2Q09		2009		2010	
	Previous	Update	Previous	Update	Previous	Update
Revenue	\$2,175	\$2,425	\$8,611	\$9,361	\$8,738	\$9,742
Revenue Growth	4.3%	16.3%	-31.1%	-25.1%	1.5%	4.1%
Gross Margin	42.0%	44.0%	43.2%	43.8%	49.4%	49.4%
Operating Expenses	\$679	\$679	\$2,699	\$2,699	\$2,640	\$2,640
Restruct/Impairment	\$100	\$100	\$205	\$205	\$0	\$0
Interest/Other	\$10	\$10	\$35	\$35	\$40	\$40
Tax Rate	24.0%	24.0%	23.3%	24.4%	28.0%	28.0%
EPS (GAAP)	\$0.09	\$0.18	\$0.51	\$0.74	\$0.96	\$1.24
EPS ( <i>pro forma</i> )	\$0.14	\$0.24	\$0.62	\$0.85	\$0.96	\$1.24

**Upgrading to Buy:** Relative valuation compared to peers and current fundamental valuation levels compared to historical averages are specified on page 7 of this report. I am raising my 12-month target price to \$25 from \$20 consistent with revised estimates and my previous valuation methodology of 20-times next year's earnings and 3-times next year's sales. My revised estimates are significant enough—and still conservative enough, in my opinion—to justify upgrading my recommendation back to Buy from Hold.

While I am not convinced that some kind of macroeconomic recovery is likely to support revenue growth during 2H09, I am comfortable with my (very) conservative revenue estimate as well as the potential for gross margin upside and operating expense downside specifically at TXN—even without upside revenue support. The gross margin upside could come from a richer mix of higher-margin analog product and/or accelerated restructuring activities, and the operating expense downside could (easily) occur from accelerated restructuring activities.

GAAP EPS	2Q09	2009	2010
<i>Tokeneke-revised</i>	\$0.18	\$0.74	\$1.24
Tokeneke-previous	\$0.09	\$0.51	\$0.96
Consensus-previous	\$0.10	\$0.50	\$0.92
Highest Est-previous	\$0.16	\$0.66	\$1.36
Lowest Est-previous	\$0.16	\$0.34	\$0.69
<i>Revenue</i>			
<i>Tokeneke-revised</i>	\$2,425	\$9,361	\$9,742
Tokeneke-previous	\$2,175	\$8,611	\$8,738
Consensus-previous	\$2,210	\$8,870	\$9,180
Highest Est-previous	\$2,300	\$9,320	\$10,160
Lowest Est-previous	\$2,100	\$8,290	\$8,450

—Dan K. Scovel  
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Texas Instruments

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Income Statement

www.ti.com

dollars in millions, except per share data  
fiscal year ends December

					2008 act					2009 est					2010				
	2004	2005	2006	2007	Q1	Q2	Q3	Q4	2008	Q1A	Q2	Q3	Q4	2009	Q1	Q2	Q3	Q4	2010
Total Revenue	11,552	12,335	14,255	13,834	3,272	3,351	3,387	2,491	12,501	2,086	2,425	2,425	2,425	9,361	2,231	2,343	2,624	2,545	9,742
COGS	6,295	6,319	6,996	6,498	1,516	1,602	1,744	1,394	6,256	1,280	1,358	1,334	1,285	5,257	1,205	1,218	1,259	1,247	4,929
Gross Profit	5,257	6,016	7,259	7,336	1,756	1,749	1,643	1,097	6,245	806	1,067	1,091	1,140	4,104	1,026	1,124	1,364	1,298	4,813
R&D	1,946	1,986	2,195	2,152	514	488	507	431	1,940	386	374	363	354	1,478	354	354	354	354	1,416
SG&A	1,351	1,471	1,697	1,680	435	428	390	361	1,614	305	305	305	306	1,221	306	306	306	306	1,224
Restructuring				6				254	254	105	100	-	-	205	-	-	-	-	-
Operating Expenses	3,297	3,457	3,892	3,838	949	916	897	1,046	3,808	796	779	668	660	2,904	660	660	660	660	2,640
Operating Income	1,960	2,559	3,367	3,498	807	833	746	51	2,437	10	288	423	480	1,200	366	464	704	638	2,173
Interest/Other	212	196	258	194	33	17	10	(15)	45	5	10	10	10	35	10	10	10	10	40
Pre-tax Income	2,172	2,755	3,625	3,692	840	850	756	36	2,482	15	298	433	490	1,235	376	474	714	648	2,213
Taxes	481	582	987	1,051	178	262	193	(71)	562	(2)	71	104	118	291	105	133	200	181	620
Net Income	1,691	2,173	2,638	2,641	662	588	563	107	1,920	17	226	329	372	944	271	342	514	467	1,593
EPS-basic	\$0.98	\$1.33	\$1.73	\$1.86	\$0.50	\$0.45	\$0.43	\$0.08	\$1.47	\$0.01	\$0.18	\$0.26	\$0.29	\$0.74	\$0.21	\$0.27	\$0.40	\$0.37	\$1.25
Shares-basic	1,730	1,640	1,528	1,417	1,327	1,320	1,304	1,283	1,308	1,275	1,275	1,275	1,275	1,275	1,275	1,275	1,275	1,275	1,275
EPS-diluted	\$0.96	\$1.30	\$1.69	\$1.83	\$0.49	\$0.44	\$0.43	\$0.08	\$1.45	\$0.01	\$0.18	\$0.26	\$0.29	\$0.74	\$0.21	\$0.27	\$0.40	\$0.36	\$1.24
Shares-diluted	1,768	1,671	1,560	1,446	1,347	1,341	1,318	1,289	1,324	1,277	1,285	1,285	1,285	1,283	1,285	1,285	1,285	1,285	1,285
EPS-pro forma								\$0.21	\$1.58	\$0.07	\$0.24			\$0.85					
<b>Margin Analysis</b>																			
Gross Margin	45.5%	48.8%	50.9%	53.0%	53.7%	52.2%	48.5%	44.0%	50.0%	38.6%	44.0%	45.0%	47.0%	43.8%	46.0%	48.0%	52.0%	51.0%	49.4%
R&D	16.8%	16.1%	15.4%	15.6%	15.7%	14.6%	15.0%	17.3%	15.5%	18.5%	15.4%	15.0%	14.6%	15.8%	15.9%	15.1%	13.5%	13.9%	14.5%
SG&A	11.7%	11.9%	11.9%	12.1%	13.3%	12.8%	11.5%	14.5%	12.9%	14.6%	12.6%	12.6%	12.6%	13.0%	13.7%	13.1%	11.7%	12.0%	12.6%
Operating Income	17.0%	20.7%	23.6%	25.3%	24.7%	24.9%	22.0%	2.0%	19.5%	0.5%	11.9%	17.4%	19.8%	12.8%	16.4%	19.8%	26.8%	25.1%	22.3%
Pre-tax Income	18.8%	22.3%	25.4%	26.7%	25.7%	25.4%	22.3%	1.4%	19.9%	0.7%	12.3%	17.9%	20.2%	13.2%	16.9%	20.3%	27.2%	25.5%	22.7%
Tax Rate	22.1%	21.1%	27.2%	28.5%	21.2%	30.8%	25.5%	-197.2%	22.6%	-13.3%	24.0%	24.0%	24.0%	23.5%	28.0%	28.0%	28.0%	28.0%	28.0%
Net Income	14.6%	17.6%	18.5%	19.1%	20.2%	17.5%	16.6%	4.3%	15.4%	0.8%	9.3%	13.6%	15.3%	10.1%	12.1%	14.6%	19.6%	18.3%	16.4%
<b>Qtr-to-Qtr Growth</b>																			
Revenue					-8.0%	2.4%	1.1%	-26.5%		-16.3%	16.3%	0.0%	0.0%		-8.0%	5.0%	12.0%	-3.0%	
Operating Expenses					1.5%	-3.5%	-2.1%	16.6%		-23.9%	-2.1%	-14.3%	-1.2%		0.0%	0.0%	0.0%	0.0%	
Operating Income					-19.0%	3.2%	-10.4%	-93.2%		-80.4%	2776%	47.1%	13.4%		-23.7%	26.8%	51.7%	-9.4%	
Pre-tax Income					-19.4%	1.2%	-11.1%	-95.2%		-58.3%	1884%	45.5%	13.1%		-23.2%	26.1%	50.6%	-9.3%	
Net Income					-12.1%	-11.2%	-4.3%	-81.0%		-84.1%	1230%	45.5%	13.1%		-27.2%	26.1%	50.6%	-9.3%	
EPS					-8.7%	-10.8%	-2.6%	-80.6%		-84.0%	1222%	45.5%	13.1%		-27.2%	26.1%	50.6%	-9.3%	
<b>Year-to-Year Growth</b>																			
Revenue		7%	15.6%	-3.0%	2.5%	-2.1%	-7.5%	-29.9%	-9.6%	-36.2%	-27.6%	-28.4%	-2.6%	-25.1%	7.0%	-3.4%	8.2%	4.9%	4.1%
Operating Expenses		4.9%	12.6%	-1.4%	-0.8%	-6.1%	-7.6%	11.9%	-0.8%	-16.1%	-14.9%	-25.5%	-36.9%	-23.7%	-17.1%	-15.3%	-1.2%	0.0%	-9.1%
Operating Income		31%	31.6%	3.9%	18.7%	3.0%	-26.4%	-94.9%	-30.3%	-98.8%	-65.5%	-43.3%	841%	-50.7%	3563%	61.5%	66.5%	33.0%	81.0%
Pre-tax Income		27%	31.6%	1.8%	16.8%	-1.7%	-29.1%	-96.5%	-32.8%	-98.2%	-65.0%	-42.7%	1260%	-50.2%	2408%	59.4%	64.9%	32.3%	79.1%
Net Income		29%	21.4%	0.1%	28.3%	-4.2%	-25.7%	-85.8%	-27.3%	-97.4%	-61.5%	-41.5%	247.9%	-50.8%	1494%	51.0%	56.3%	25.3%	68.7%
EPS		36%	30.0%	8.0%	40.0%	4.9%	-18.4%	-84.6%	-20.6%	-97.3%	-59.9%	-40.0%	248.9%	-49.2%	1484%	51.0%	56.3%	25.3%	68.4%

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Balance Sheet

dollars in millions

Fiscal year ends December

	2005	2006	2007	2008	1Q08	2Q08	3Q08	4Q08	1Q09
<b>Assets</b>									
Cash and equivalents	1,214	1,183	1,328	1,046	1,450	1,317	1,715	1,046	1,436
Short-term investments	4,116	2,534	1,596	1,494	426	331	278	1,494	990
Net accounts receivable	<u>1,648</u>	<u>1,774</u>	<u>1,742</u>	<u>913</u>	<u>1,669</u>	<u>1,811</u>	<u>1,774</u>	<u>913</u>	<u>1,125</u>
<b>Quick Assets</b>	6,978	5,491	4,666	3,453	3,545	3,459	3,767	3,453	3,551
Inventory	1,185	1,437	1,418	1,375	1,578	1,651	1,575	1,375	1,098
Other	<u>1,249</u>	<u>926</u>	<u>834</u>	<u>962</u>	<u>852</u>	<u>900</u>	<u>870</u>	<u>962</u>	<u>883</u>
<b>Current Assets</b>	9,412	7,854	6,918	5,790	5,975	6,010	6,212	5,790	5,532
Property, plant and eqt, net	3,730	3,950	3,609	3,304	3,585	3,604	3,517	3,304	3,115
Goodwill and intangibles	737	910	953	931	943	948	939	931	1,032
Long-term investments	236	287	267	653	791	766	717	653	645
Other	<u>948</u>	<u>929</u>	<u>920</u>	<u>1,245</u>	<u>1,044</u>	<u>1,054</u>	<u>1,081</u>	<u>1,245</u>	<u>1,196</u>
<b>Total Assets</b>	15,063	13,930	12,667	11,923	12,338	12,382	12,466	11,923	11,520
<b>Liabilities and Shareholders Equity</b>									
Current portion lt. debt	301	43	0	0	0	0	0	0	0
Accounts payable	702	560	657	324	680	677	601	324	326
Accrued comp and other	948	1,029	1,117	1,034	871	955	976	1,034	907
Income taxes payable	154	284	53	40	218	26	35	40	21
Underfunded retirement	<u>272</u>	<u>162</u>	<u>198</u>	<u>134</u>	<u>79</u>	<u>102</u>	<u>126</u>	<u>134</u>	<u>33</u>
<b>Current Liabilities</b>	2,377	2,078	2,025	1,532	1,848	1,760	1,738	1,532	1,287
Underfunded retirement	329	208	184	640	191	187	186	640	608
Other	<u>420</u>	<u>284</u>	<u>483</u>	<u>425</u>	<u>442</u>	<u>451</u>	<u>448</u>	<u>425</u>	<u>415</u>
<b>Total Liabilities</b>	3,126	2,570	2,692	2,597	2,481	2,398	2,372	2,597	2,310
Common stock	2,481	2,624	2,671	2,762	2,666	2,680	2,713	2,762	2,760
Retained earnings	13,394	17,529	19,788	21,168	20,318	20,773	21,204	21,168	21,043
Treasury stock	(3,856)	(8,430)	(12,160)	(13,814)	(12,776)	(13,138)	(13,481)	(13,814)	(13,852)
Other	<u>(82)</u>	<u>(363)</u>	<u>(324)</u>	<u>(790)</u>	<u>(351)</u>	<u>(331)</u>	<u>(342)</u>	<u>(790)</u>	<u>(741)</u>
<b>Total Shareholders Equity</b>	<u>11,937</u>	<u>11,360</u>	<u>9,975</u>	<u>9,326</u>	<u>9,857</u>	<u>9,984</u>	<u>10,094</u>	<u>9,326</u>	<u>9,210</u>
<b>Total Liabilities and Equity</b>	15,063	13,930	12,667	11,923	12,338	12,382	12,466	11,923	11,520
<b>Sales and Income</b>									
Revenue	12,335	14,255	13,835	12,501	3,272	3,351	3,387	2,491	2,086
COGS	6,319	6,996	6,466	6,256	1,516	1,602	1,744	1,394	1,280
Net income	2,173	2,638	7,369	1,920	662	588	563	107	17
<b>Other</b>									
Capital Expenditures	1,288	1,272	686	763	219	271	197	76	43
Depreciation and Amortization	1,401	1,111	1,070	1,059	251	255	261	291	240
Shares (weighted average diluted)	1,671	1,560	1,446	1,324	1,347	1,341	1,318	1,289	1,277
Employees (units)	30,068	27,976	30,175	29,537				29,537	
Dividends Paid	173	199	425	537	133	132	131	141	141
Dividend per Share	\$0.105	\$0.13	\$0.30	\$0.41	\$0.10	\$0.10	\$0.10	\$0.11	\$0.11
Stock Repurchased	4,151	5,302	4,886	2,128	874	433	429	386	101
Number of Shares Repurchased (mil)				80.2		14.1	17.1	20.3	6.6
Cash Flow from Operations	3,614	2,456	4,407	3,330	641	520	1,046	1,113	251
<b>Ratios</b>									
<b>Liquidity</b>									
Quick Ratio		2.64	2.30	2.25	1.92	1.97	2.17	2.25	2.76
Current Ratio		3.78	3.42	3.78	3.23	3.41	3.57	3.78	4.30
<b>Leverage</b>									
Debt Ratio		0.18	0.21	0.22	0.20	0.19	0.19	0.22	0.20
Long-term Debt/Capital		0.04	0.05	0.09	0.05	0.05	0.05	0.09	0.09
<b>Asset Management</b>									
Fixed Asset Turnover		3.6	3.7	3.6	3.65	3.73	3.81	2.92	2.60
Total Asset Turnover		1.0	1.0	1.0	1.06	1.08	1.09	0.82	0.71
Receivables DSO		45	45	26	46	49	47	33	49
Inventory Days		74	79	79	94	93	81	89	77
Inventory Turnover		4.9	4.5	4.5	3.84	3.97	4.32	3.78	4.14
Revenue/Employee		0.491	0.476	0.419					
<b>Profitability</b>									
Gross Margin		50.9%	53.3%	50.0%	53.7%	52.2%	48.5%	44.0%	38.6%
Net Margin		18.5%	53.3%	15.4%	20.2%	17.5%	16.6%	4.3%	0.8%
Return on Assets		18.9%	55.4%	15.6%	21.5%	19.0%	18.1%	3.5%	0.6%
Return on Equity		23.2%	69.1%	19.9%	26.9%	23.7%	22.4%	4.4%	0.7%
<b>Per Share Data</b>									
Book Value/Share		\$7.28	\$6.90	\$7.04	\$7.32	\$7.45	\$7.66	\$7.24	\$7.21
Tangible Book Value/Share		\$6.70	\$6.24	\$6.34	\$6.62	\$6.74	\$6.95	\$6.51	\$6.40
Cash/Share (gross)		\$2.57	\$2.21	\$2.41	\$1.98	\$1.80	\$2.06	\$2.48	\$2.40
Cash/Share (net)		\$2.54	\$2.21	\$2.41	\$1.98	\$1.80	\$2.06	\$2.48	\$2.40
Earnings/Share		\$1.69	\$5.10	\$1.45	\$0.49	\$0.44	\$0.43	\$0.08	\$0.01

Texas Instruments

Sales Analysis

dollars in millions, operating profit excludes restructuring charges  
Fiscal year ends December

	2004	2005	2006	2007				2007	2008				2008	2009 1 Q
				1 Q	2 Q	3 Q	4 Q		1 Q	2 Q	3 Q	4 Q		
<b>Revenue by Product</b>														
Analog			4,746	1,140	1,176	1,308	1,303	4,927	1,265	1,292	1,289	1,015	4,861	814
Power Mgmt												254	1,215	
HPA													1,458	
HVAL													2,187	
Embedded			1,554	378	389	390	431	1,588	425	436	427	340	1,628	316
DSP and MCU Catalog													814	
Automotive (MCU)			713					692					326	
Comm Infr (DSP)													488	
Wireless			4,308	954	1,024	1,094	1,123	4,195	921	903	915	646	3,385	551
Nokia			2,138					2,628					2,500	
Other			3,647	719	835	871	699	3,124	661	720	756	490	2,627	405
DLP														
RISC, ASIC														
Calculators	518	506	525		167	202		526	81	174	182		>424	
Royalties													500	
<b>Total</b>			14,255	3,191	3,424	3,663	3,556	13,834	3,272	3,351	3,387	2,491	12,501	2,086
<b>Growth</b>														
Analog														
Embedded					3.2%	11.2%	-0.4%	3.8%	-2.9%	2.1%	-0.2%	-21.3%	-1.3%	-19.8%
Wireless					2.9%	0.3%	10.5%	2.2%	-1.4%	2.6%	-2.1%	-20.4%	2.5%	-7.1%
Other					7.3%	6.8%	2.7%	-2.6%	-18.0%	-2.0%	1.3%	-29.4%	-19.3%	-14.7%
<b>Total</b>					16.1%	4.3%	-19.7%	-14.3%	-5.4%	8.9%	5.0%	-35.2%	-15.9%	-17.3%
<b>Revenue Percent</b>														
Analog			33.3%	35.7%	34.3%	35.7%	36.6%	35.6%	38.7%	38.6%	38.1%	40.7%	38.9%	39.0%
Embedded			10.9%	11.8%	11.4%	10.6%	12.1%	11.5%	13.0%	13.0%	12.6%	13.6%	13.0%	15.1%
Wireless			30.2%	29.9%	29.9%	29.9%	31.6%	30.3%	28.1%	26.9%	27.0%	25.9%	27.1%	26.4%
Other			25.6%	22.5%	24.4%	23.8%	19.7%	22.6%	20.2%	21.5%	22.3%	19.7%	21.0%	19.4%
<b>Total</b>			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Operating Profit</b>														
Analog			1,455	359	348	434	435	1,566	372	326	274	138	1,110	7
Embedded			253	57	61	73	104	294	96	101	73	22	292	21
Wireless			635	131	184	212	256	783	153	123	155	43	474	19
Other			1,024	147	243	309	207	906	186	280	244	102	812	68
<b>Total</b>			3,367	694	836	1,028	1,002	3,549	807	830	746	305	2,688	115
<b>Operating Margin</b>														
Analog			30.7%	31.5%	29.6%	33.2%	33.4%	31.8%	29.4%	25.2%	21.3%	13.6%	22.8%	0.9%
Embedded			16.3%	15.1%	15.7%	18.7%	24.1%	18.5%	22.6%	23.2%	17.1%	6.5%	17.9%	6.6%
Wireless			14.7%	13.7%	18.0%	19.4%	22.8%	18.7%	16.6%	13.6%	16.9%	6.7%	14.0%	3.4%
Other			28.1%	20.4%	29.1%	35.5%	29.6%	29.0%	28.1%	38.9%	32.3%	20.8%	30.9%	16.8%
<b>Total</b>			23.6%	21.7%	24.4%	28.1%	28.2%	25.7%	24.7%	24.8%	22.0%	12.2%	21.5%	5.5%
<b>Revenue by Region</b>														
US	1,601	1,679	1,868					1,758					1,551	
Asia	5,584	6,277	7,568					8,013					7,387	
Europe	1,991	2,060	2,286					2,258					1,875	
Japan	1,934	1,821	2,008					1,423					1,268	
ROW	442	498	525					383					420	
<b>Total</b>	11,552	12,335	14,255					13,835					12,501	
<b>Revenue Percent</b>														
US	13.9%	13.6%	13.1%					12.7%					12.4%	
Asia	48.3%	50.9%	53.1%					57.9%					59.1%	
Europe	17.2%	16.7%	16.0%					16.3%					15.0%	
Japan	16.7%	14.8%	14.1%					10.3%					10.1%	
ROW	3.8%	4.0%	3.7%					2.8%					3.4%	
<b>Total</b>	100.0%	100.0%	100.0%					100.0%					100.0%	
<b>Revenue by Market</b>														
Communications	48%	48%	48%					48%					48%	
Computation	29%	29%	24%					24%					22%	
Industrial	5%	5%	10%					10%					10%	
Consumer	10%	10%	10%					10%					10%	
Automotive	5%	5%	5%					5%					6%	
Education (Calc.)	4%	4%	4%					4%					4%	
<b>Total</b>	100%	100%	100%					100%					100%	
<b>Other</b>														
Orders				3,209			3,484		3,320	3,460	3,230	1,860		2,190
Backlog		1,880	1,640					1,500					860	mid-30%
Utilization											67%	48%		
Nokia (incl. CMs)	13%	16%	15%					19%					20%	

**Texas Instruments**

**Company Summary**

Products	Markets and Applications	Competitors	Locations	Acquisitions
<p><b>Analog</b>                      Power Management                      High-Performance Analog (HPA)  <i>amplifiers, data converters, RF, interface</i>                      High-Volume Analog (HVA)  <i>custom for comm, auto, computer, CE</i>                      Logic (MVAL includes HVA) standard logic</p> <p><b>Embedded (DSPs and microcontrollers)</b>                      Catalog DSP and MCU standard products                      Automotive market products (MCUs)                      Communications Infrastructure products (DSPs)</p> <p><b>Wireless (for handsets--no infrastructure)</b>                      Digital Basebands                      Application Processors (OMAP)                      Mobile Connectivity (Bluetooth, GPS, WiFi)</p> <p><b>Other</b>                      Digital Light Processors (DLP)                      Educational Products (calculator business)                      RISC processors                      ASICs                      Royalties</p>	<p><b>Communications</b>                      cell phone handsets (Nokia)                      cell phone infrastructure (Ericsson Mobile Platforms)                      mobile connectivity (WLAN, GPS, Bluetooth)                      broadband (WLAN, cable modems)                      high-frequency radio/telecom (hands-free, voice enhancement)                      navigation systems</p> <p><b>Computation</b>                      printers                      hard disk drives                      monitors                      projectors                      PCs (notebook and desktop)</p> <p><b>Industrial</b>                      digital power controls (switch-mode, uninterruptible)                      motor controls (HVAC, industrial, power tools, printers/copiers)                      security (biometric, sensing, surveillance)</p> <p><b>Consumer</b>                      medical (monitoring, digital hearing aids, imaging, portable)                      DSC, MP3, PMP, auto radio/CD, DVD/rec, HDTV, home theater</p> <p><b>Automotive</b>                      body, chassis, telemetrics, entertainment, powertrain, safety, security</p> <p><b>Education</b>                      hand-held graphing/scientific calculators, educational software</p>	<p><b>Analog</b>                      Analog Devices                      Freescale                      Infineon                      Intersil                      Linear Tech                      Maxim                      National Semi                      NXP                      STMicro</p> <p><b>Embedded</b>                      Freescale                      Infineon                      NEC                      Renesas</p> <p><b>Wireless</b>                      Broadcom                      Freescale                      Infineon                      Marvell                      Qualcomm                      STMicro</p>	<p>Texas (3)                      Japan (3)                      Philippines (2)                      Malaysia                      Germany                      Taiwan                      Arizona                      India                      France                      Mexico</p>	<p>Benchmark                      Burr-Brown                      Chipcon                      Unitrode</p>

Texas Instruments

Valuation

Relative Valuation

Company	Ticker	Price 6/8/2009	52-Week		CY EPS				CY P/E				Diluted shs (mil)	Cap (\$ mil)	Price-Sales			FY Ends	Qtr Div/sh	Div Yield
			Low	High	2007	2008	2009	2010	2007	2008	2009	2010			TTM	Cur FY	Nxt FY			
Texas Instruments *	TXN	19.77	13.38	32.47	1.80	1.51	0.85	1.24	11.0	13.1	23.3	15.9	1,277	25,246	2.2	2.7	2.6	Dec	\$0.11	2.2%
Analog Devices	ADI	24.43	15.29	36.08	1.51	1.55	0.88	1.09	16.2	15.8	27.8	22.4	292	7,143	3.1	3.7	3.5	Oct	\$0.20	3.3%
Intel *	INTC	15.92	12.05	24.75	1.16	0.92	0.57	0.73	13.7	17.3	27.9	21.8	5,634	89,693	2.6	3.0	2.8	Dec	\$0.14	3.5%
Linear Technology	LLTC	23.32	17.69	36.46	1.70	2.01	1.02	1.16	13.7	11.6	22.9	20.1	222	5,177	4.8	5.4	5.9	Jun	\$0.22	3.8%
Maxim Integrated Products	MXIM	16.07	10.72	23.76	0.86	0.48	0.17	0.54	18.7	33.5	94.5	29.8	304	4,892	2.8	3.1	3.1	Jun	\$0.20	5.0%
National Semiconductor *	NSM	13.95	9.02	24.75	1.13	1.12	-0.62	0.11	12.3	12.5	NM	NM	231	3,227	2.0	2.2	3.0	May	\$0.08	2.3%
STMicroelectronics	STM	7.40	3.73	13.74	0.44	0.44	-0.88	0.05	16.8	16.8	NM	NM	874	6,470	0.7	0.8	0.8	Dec-ADR	\$0.03	1.6%

Average

15.2 17.9 43.3 23.5

2.7 3.0 3.2

\* Tokeneke estimate  
Source: consensus as of 6/8/09

Historical Valuation

Company	Ticker	Price 6/8/2009	Trailing 12-month								
			Price/Earnings		Price/Sales		Price/Book				
			Current	Historical*	Current	Historical*	Current	Historical*			
Texas Instruments	TXN	\$19.77	17.2		2.2		2.7				
			Average	43.2	Average	3.2	Average	3.8			
			High	298.0	High	15.9	High	16.7			
			Low	8.1	Low	0.3	Low	1.0			

\* weekly since 1990

### 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.
- *Industry Reports:* A semi-annual publication offering insight and perspective to industry-wide, multi-year forecast updates; periodic sub-sector product type and/or end-market reviews; fundamental and valuation perspectives on sector equity relationships; and an industry introduction and overview. These are more detailed reports with varying shelf-lives, and are intended for narrow distribution to interested clients.
- *Company Reports:* Fundamental equity research including earnings estimates and customized valuation analysis.
- *Consulting:* Special projects of limited or extended duration, as well as periodic access of varying frequency.

Publications are distributed via email in .pdf format, unless otherwise requested. Client confidentiality and customized research exclusivity accommodated. Rates vary with the nature, duration, and terms of offerings.

### 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.

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

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