Micron Finally Brings Home the Bacon F1Q10

DRAM Strength Drives Upside and Profitability: Raising Est, Reit Buy

				fye August	FY09 act	FY10	FY11
Diluted Shares *(mil)*:	1,000.7	*Closing Price 12/22/09*		Revenue *($mil)*	$4,803	$7,695	$8,464
Market Cap *($mil)*:	$9,417	$9.41		EPS	($2.17)	$1.11	$1.20
Avg Volume *(,000)*:	25,803			Price/Sales	2.0	1.2	1.1
Net Cash/Share:	($1.20)	*Recommendation/Target*		Price/EPS	*NM*	8.5	7.8
Tangible Book/Share	$4.84	Buy, $15 from $12-$14.					

Micron Technology is a leading supplier of DRAM and NAND memory products. It has recently partnered with Nanya in Taiwan to manufacture DRAMs and divested 65% of Aptina, its CMOS image sensor business.

Summary: MU turned a profit for the first time in 12 quarters F1Q10 due to bit growth and ASP strength for both DRAM and NAND memory. I am raising my estimates and boosting my 12-month target price to $15 from $12-$14 based on two-times sales. I reiterate my Buy recommendation for investors with very high tolerance for risk, and continue to believe MU is well positioned to benefit from increasing market prices, cost reductions and production expansion from technology migration and significant future capacity enhancements.

Good Memories: Micron's memory business has turned profitable after 12 quarters of losses. Demand from key customers remains strong and Micron is not seeing any signs of the typical post-holiday seasonal slowdown in the current quarter. Inventory is very tight at less than 2-weeks across the board, some device types are being allocated, and business appears it will remain strong through the first half of 2010. In addition, no new memory fabs are under construction for the first time in at least three decades and only a portion of all DRAM capacity that was taken off-line earlier this year has been restored due to Qimonda's bankruptcy and facilities with lagging technology nodes. Lithography equipment delivery lead times are 10-12 months, but Micron believes its expected deliveries this year are secure—getting financing is the hard part now for strapped competitors

F1Q Review: MU's quarter exceeded expectations primarily due to DRAM market price strength and bit production upside. Sequential revenue growth of 16.8% to $1.74B almost met the highest published expectation, and EPS of $0.23 exceeded the highest published estimate. Operating expenses rose—especially SG&A—due to variable compensation programs associated with the return of profitability. Cash flow from operations was $326M, cash grew by $80M to $1.565B, cap ex totaled $111M, and total debt remains $2.761B. Receivables grew by $293M to $1,091M on a mix shift to longer-paying OEM customers, and inventory grew by $50M to $1,037M but decreased to 72 days from 78 on higher sales.

FYE August	FY1Q10				
Metric	Estimate	Actual	Guidance	Consensus	Range
DRAM Bits Shipped	20.0%	25.0%	mid-20%		
NAND Bits Shipped	18.0%	16.0%	mid-hi teen%		
DRAM ASP change	5.0%	21.0%	5.0%		
NAND ASP change	5.0%	5.0%	5.0%		
DRAM Cost/bit change *	-13.0%	-9.0%	lo-mid teen%		
NAND Cost/bit change *	-13.0%	-8.0%	lo-mid teen%		
Revenue *($ mil)*	1,521	1,740		1,600	1,480-1,750
Revenue Growth	16.8%	33.6%		22.9%	+14%+34%
Gross Margin *	17.3%	25.5%			
Opn Expenses *($ mil)**	215	242	210-220		
Taxes *($ mil)*	10	(7)			
Diluted Shares *(mil)*	844.3	1,000.7			
EPS *reported*	($0.01)	$0.23			
EPS *(excl. charges)**	($0.01)	$0.23		$0.07	($0.11)-$0.20

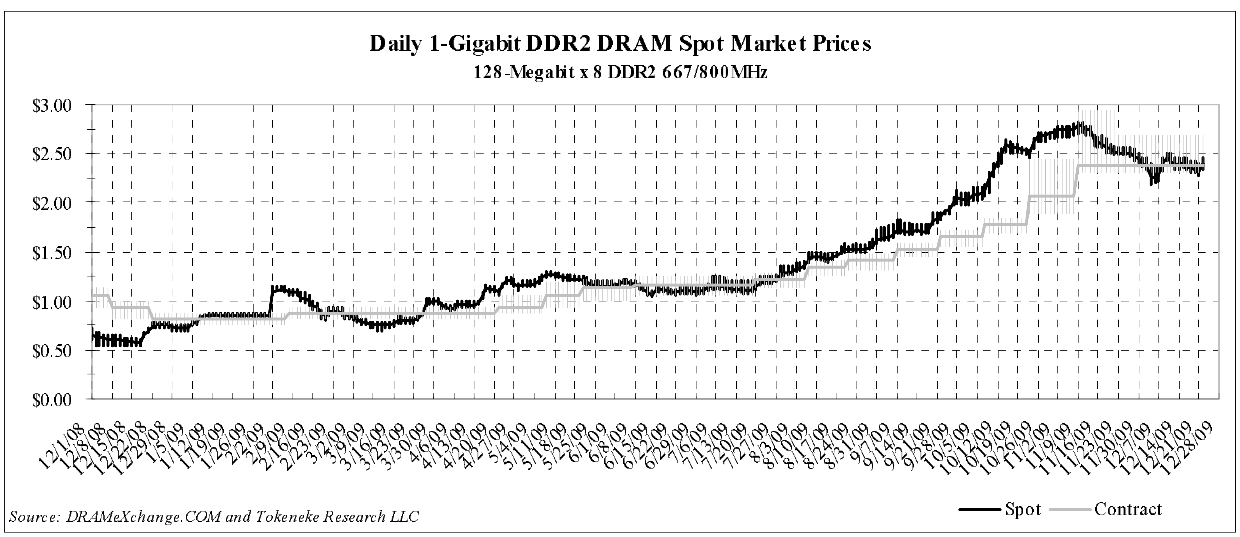
**adjusted for inventory revaluation and charges*

Total memory sales grew by 38%, including $35M in royalties, and memory gross margins improved to 27% from 12%. Image sensor and other revenue declined by 13% to $108M, or 6% of total sales. Core DRAM was 45% of revenue F1Q, specialty DRAM 13%, NAND 33%, and royalties 2%. Gross margin rank is: royalties, specialty DRAMs, trade-customer NAND, core DRAMs, and then image sensors. Recall that Micron sold 65% of its CMOS image sensor business (Aptina) to private equity firms Riverwood Capital and TPG Capital last July, although continues to provide certain manufacturing and services. Sales of previously written-down inventory and inventory charges were insignificant and did not affect gross margin for the period. Non-operating income included a $56M gain associated with Inotera's sale of equity above the carrying value of Micron's investment. Also included was a $20M foreign exchange loss due to the decline of the dollar against the Euro, yen and Singapore. New accounting rules associated with the beginning of a new fiscal year triggered restatements across two fronts. First, $300M of the $1.3B in convertible debt issued in 2007 was converted to equity from debt, and the debt balance incurred an incremental $13M in non-cash interest expense that will persist throughout this fiscal year. And second, minority interest has been repositioned in the balance sheet as part of equity. The prior quarter's loss was restated to ($0.12) from ($0.10), and the prior year's quarter loss was restated to ($0.93) from ($0.91). Diluted share count spiked up due to in-the-money employee stock options as well as convertible debt.

Driven By DRAM: DRAM revenue grew by 50% to just over $1B, bit sales grew by 25%, ASPs were up by 21%, core DRAM ASPs grew by 32%, and cost per bit declined by 9%. Taiwanese joint-venture fab Inotera (with partners Nanya/Formosa) ramped to full production and resulted in a richer mix of core vs. specialty DRAMs. DDR3 DRAM grew by 60% despite a mix shift to lower-priced DDR2 from DDR3 with the ramp of Inotera. Inotera still needs to convert to Micron's 50nm stack from Qimonda's trench technology which will provide significant cost savings and capacity enhancements. DRAM ASPs so far this quarter are up by 5% over the F1Q average and industry bit growth during 2010 is expected at 30-50% depending on supplier success at shrinking line widths. Lack of supply has boosted the DRAM market rather than any significant increase in demand at this point.

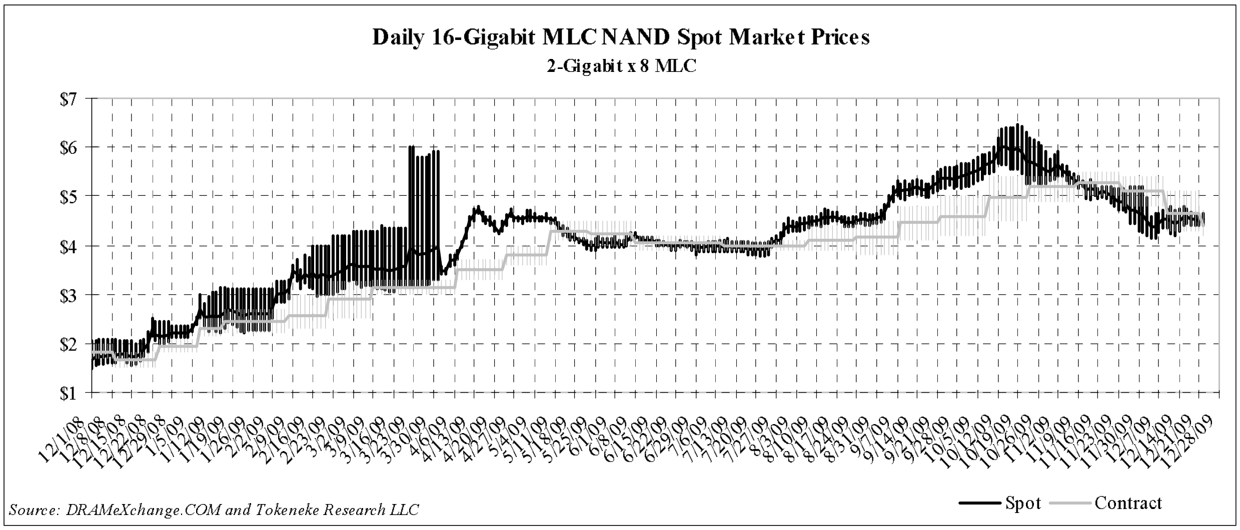
Computer demand is strong with sales across desktops, notebooks and netbooks up by over 80% on ASP strength and Inotera output. DRAM content per system this year was 2.7-2.8GB and is expected to exceed 3GB next year on desktop and notebook strength and despite a drag from netbooks. PC customers expect market growth in 2010 by units at 12-16%. Server business continued strong and grew by 25%. Specialty DRAMs into the network and server space experienced bit growth of 30%. Mobile market sales grew by 60% with low-power DRAMs, MCPs, PSDRAMs and memory cards.

Recall that MU's DRAM business has two pieces: commodity PC DRAM at 50nm process technology and 300mm wafers including output from Inotera; and higher-priced and higher-margin specialty DRAMs that include low-power offerings for cell phones and high-performance offerings for networking and communications applications manufactured on larger geometries and smaller 200mm wafers. Specialty DRAMs are higher-performance devices that face less competition and greater profitability in smaller end-market opportunities used in networks, servers, consumer electronics, communication equipment and certain computer peripherals. Low-power devices go in to portable handheld markets that include smartphones, PDAs, GPSs, and digital cameras. Some of these parts are legacy in generation and most are smaller-density than the mainstream, PC-based DRAMs. My earnings model consolidates both PC-based and specialty DRAMs into a single revenue and gross margin profile, mostly due to the difficulty in obtaining pricing and competitive information from the many market niches served by numerous different DRAM device configurations covered under specialty DRAMs.



Source: DRAMeXchange.COM and Tokeneke Research LLC

NAND Ahoy: NAND revenue grew by 21% to $568M on 16% bit growth and 5% ASP increases, although trade customer ASPs were up by 14%. Recall that Micron's NAND business consists of a joint-venture with partner Intel (called IM Flash) that takes half of total production volume at a price intended to approximate cost. Cost declined by 8% as all shipments were made from the advanced 34nm technology node. ASPs in the consumer/retail segment have stabilized and strong holiday retail sell-through was reported. The ramp of 34nm NAND is complete with bit growth gains at this node expected to be incremental, although the 2X transition sampling soon is expected to yield significant bit gains and cost savings (although the timing and magnitude have not been disclosed). NAND ASPs so far this quarter are down by 10% compared to last quarter's average, which is well within seasonal expectations. A number of high-profile customer design wins for recently introduced SSDs are expected to generate significant revenue during 2010. Industry bit growth next year is expected at 80-90%, although Micron is unlikely to keep up with such growth since incremental capacity is not expected until 2011.



Management Guidance: F2Q10 guidance includes: DRAM bit production in the low-teens percent and cost per bit reduction in the high-single-digit percent; NAND bit production flat and cost reduction in the high-single-digit percent; SG&A at $85-95M; R&D at $135-145M; and FY10 cap ex back-end loaded at $750-850M. DRAM ASPs would increase by 5% if they were to remain flat for the balance of the period, and NAND ASPs would be down by 10% if current market prices were to hold for the next two months.

Raising Estimates: My earnings model incorporates management guidance for operating costs, and then breaks down revenue and COGS by DRAM and NAND and image sensors. For DRAM and NAND I make assumptions for bit growth (or manufacturing output), ASP changes (average selling prices), and manufacturing cost per bit changes. For image sensors I now assume flat revenue and gross margin. My assumptions by quarter are spelled out in the financial model on page 7, and the table below summarizes the changes in my updated model.

FYE August	FY2Q10		FY10		FY11	
$ in millions	Previous	Update	Previous	Update	Previous	Update
Total Revenue	1,693	1,887	7,003	7,695	7,902	8,464
Revenue Growth	11.3%	8.4%	45.8%	60.2%	12.8%	10.0%
Gross Margin	26.3%	32.4%	25.9%	29.7%	29.1%	30.2%
Operating Expenses	215	230	880	953	983	1,051
Taxes	10	10	40	23	40	40
Diluted Shares *(mil)*	1,064.3	1,001.3	1,009.3	1,001.2	1,064.3	1,001.3
Diluted EPS	$0.16	$0.31	$0.68	$1.11	$1.00	$1.20

Even More Attractive: I am maintaining my Buy recommendation and raising my 12-month target price to $15 from $12-$14 based on a slightly less than historical average, two-times price-sales ratio based on expected revenue this year. MU shares continue to trade well below average historical trailing price-sales and price-book ratios, as well as lower than average price-sales ratios relative to two separate peer groups identified on page 8. The shares continue to be very attractive from a fundamental valuation perspective.

However, this attraction comes with ample risk worth repeating: lack of sustained earnings; $2.8B in debt against $1.6B in cash; a dominant and financially robust competitor in Samsung; and participation in two of the most volatile and competitive product markets in the semiconductor industry—NAND and DRAM.

Mitigating factors include: demonstrated and expected positive operating cash flow; multiple joint-venture partner capital expenditure and development subsidies; deep-pocketed partners in Intel and Formosa Plastics; significantly more financially strained competitors across most of the rest of the field in both NAND and DRAM; and significantly improving spot market prices in both of these product areas over the last year.

I continue to believe there is a significantly favorable risk-reward opportunity in MU shares at current price levels, but it is certainly NOT for the faint of heart.

	EPS		
FYE August	**FY2Q10**	**FY10**	**FY11**
Tokeneke-revised	$0.31	$1.11	$1.20
Tokeneke-previous	$0.16	$0.68	$1.00
Consensus-previous	$0.06	$0.37	$0.68
High Estimate-previous	$0.19	$1.10	$1.70
Low Estimate-previous	($0.08)	($0.31)	($0.38)

—Dan K. Scovel
Semiconductor Analyst

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Income Statement **www.micron.com**

dollars in millions, except per share data, * restated

fiscal year ends August

		FY2008					FY2009 act					FY2010 est					FY2011				
	FY07	Q1	Q2	Q3	Q4	FY08	Q1*	Q2	Q3	Q4*	FY09	Q1A	Q2	Q3	Q4	FY10	Q1	Q2	Q3	Q4	FY11
Total Revenue	5,688	1,535	1,359	1,498	1,449	5,841	1,402	993	1,106	1,302	4,803	1,740	1,887	1,996	2,072	7,695	2,184	2,020	2,091	2,169	8,464
COGS	4,610	1,530	1,402	1,450	1,514	5,896	1,851	1,260	999	1,133	5,243	1,297	1,276	1,398	1,439	5,410	1,482	1,400	1,484	1,544	5,910
Gross Profit	1,078	5	(43)	48	(65)	(55)	(449)	(267)	107	169	(440)	443	611	598	633	2,284	702	621	607	625	2,555
SG&A	610	112	120	116	107	455	102	90	80	82	354	97	90	93	95	375	98	101	104	107	411
R&D	805	163	180	170	167	680	178	168	162	139	647	137	140	144	149	570	153	158	162	167	640
Restructuring	19	13	471	8	4	496	(66)	163	19	12	128	(1)	-	-	-	(1)	-	-	-	-	-
Other	(76)	(23)	(42)	(21)	(5)	(91)	9	20	92	(15)	106	9	-	-	-	9	-	-	-	-	-
Operating Expenses	1,358	265	729	273	273	1,540	223	441	353	218	1,235	242	230	237	244	953	251	259	267	275	1,051
Operating Income	(280)	(260)	(772)	(225)	(338)	(1,595)	(672)	(708)	(246)	(49)	(1,675)	201	381	361	389	1,331	450	362	341	350	1,503
Interest Income	103	9	3	(6)	(9)	(3)	(31)	(31)	(31)	(43)	(136)	(45)	(45)	(45)	(45)	(180)	(45)	(45)	(45)	(45)	(180)
Other Non-Opn Inc.	9	(1)	(6)	-	(6)	(13)	(10)	(3)	(3)	(1)	(17)	56	-	-	-	56	-	-	-	-	-
Tax Expense	30	7	(4)	13	2	18	13	4	(2)	(13)	2	(7)	10	10	10	23	10	10	10	10	40
Minority Interest	(122)	(3)	(6)	8	11	10	8	(5)	(12)	(20)	(29)	(15)	(20)	(20)	(20)	(75)	(20)	(20)	(20)	(20)	(80)
Net Income	(320)	(262)	(777)	(236)	(344)	(1,619)	(718)	(751)	(290)	(100)	(1,859)	204	306	286	314	1,109	375	287	266	275	1,203
EPS-basic	($0.42)	($0.34)	($1.01)	($0.31)	($0.45)	($2.10)	($0.93)	($0.97)	($0.36)	($0.12)	($2.32)	$0.24	$0.36	$0.34	$0.37	$1.31	$0.44	$0.34	$0.31	$0.33	$1.42
Shares-basic	769.1	771.9	772.4	772.8	772.9	772.5	773.3	773.9	813.3	844.3	800.7	846.3	846.3	846.3	846.3	846.3	846.3	846.3	846.3	846.3	846.3
EPS-diluted	($0.42)	($0.34)	($1.01)	($0.31)	($0.45)	($2.10)	($0.93)	($0.97)	($0.36)	($0.12)	($2.32)	$0.23	$0.31	$0.29	$0.31	$1.11	$0.37	$0.29	$0.27	$0.27	$1.20
Shares-diluted	769.1	771.9	772.4	772.8	772.9	772.5	773.3	773.9	813.3	844.3	800.7	1,000.7	1,001.3	1,001.3	1,001.3	1,001.2	1,001.3	1,001.3	1,001.3	1,001.3	1,001.3
EPS-pro forma	($0.39)	($0.26)	($0.41)	($0.31)	($0.28)	($1.25)	($0.74)	($0.82)	($0.50)	($0.18)	($2.17)										
Margin Analysis																					
Gross Margin	19.0%	0.3%	-3.2%	3.2%	-4.5%	-0.9%	-32.0%	-26.9%	9.7%	13.0%	-9.2%	25.5%	32.4%	29.9%	30.5%	29.7%	32.1%	30.7%	29.0%	28.8%	30.2%
SG&A	10.7%	7.3%	8.8%	7.7%	7.4%	7.8%	7.3%	9.1%	7.2%	6.3%	7.4%	5.6%	4.8%	4.6%	4.6%	4.9%	4.5%	5.0%	5.0%	5.0%	4.9%
R&D	14.2%	10.6%	13.2%	11.3%	11.5%	11.6%	12.7%	16.9%	14.6%	10.7%	13.5%	7.9%	7.4%	7.2%	7.2%	7.4%	7.0%	7.8%	7.8%	7.7%	7.6%
Operating Expense	23.9%	17.3%	53.6%	18.2%	18.8%	26.4%	15.9%	44.4%	31.9%	16.7%	25.7%	13.9%	12.2%	11.9%	11.8%	12.4%	11.5%	12.8%	12.8%	12.7%	12.4%
Operating Income	-4.9%	-16.9%	-56.8%	-15.0%	-23.3%	-27.3%	-47.9%	-71.3%	-22.2%	-3.8%	-34.9%	11.6%	20.2%	18.1%	18.8%	17.3%	20.6%	17.9%	16.3%	16.2%	17.8%
Interest/Other Income	2.0%	0.5%	-0.2%	-0.4%	-1.0%	-0.3%	-2.9%	-3.4%	-3.1%	-3.4%	-3.2%	0.6%	-2.4%	-2.3%	-2.2%	-1.6%	-2.1%	-2.2%	-2.2%	-2.1%	-2.1%
Tax Rate	-17.9%	-2.8%	0.5%	-5.6%	-0.6%	-1.1%	-1.8%	-0.5%	0.7%	14.0%	-0.1%	-3.3%	3.0%	3.2%	2.9%	1.9%	2.5%	3.2%	3.4%	3.3%	3.0%
Net Income	-5.6%	-17.1%	-57.2%	-15.8%	-23.7%	-27.7%	-51.2%	-75.6%	-26.2%	-7.7%	-38.7%	11.7%	16.2%	14.3%	15.2%	14.4%	17.2%	14.2%	12.7%	12.7%	14.2%
Qtr-to-Qtr Growth																					
Revenue		6.8%	-11.5%	10.2%	-3.3%		-3.2%	-29.2%	11.4%	17.7%		33.6%	8.4%	5.8%	3.8%		5.4%	-7.5%	3.5%	3.7%	
Operating Expenses		-20.7%	175.1%	-62.6%	0.0%		-18.3%	97.8%	-20.0%	-38.2%		11.0%	-5.0%	3.0%	3.0%		3.0%	3.0%	3.0%	3.0%	
Operating Income		61.5%	197%	-70.9%	50.2%		98.8%	5.4%	-65.3%	-80.1%		-510%	89.3%	-5.2%	7.8%		16%	-19.7%	-5.8%	2.8%	
Net Income		65.8%	197%	-69.6%	45.8%		108.7%	4.6%	-61.4%	-65.5%		-304%	50%	-6.5%	9.9%		20%	-23.6%	-7.3%	3.6%	
EPS		65.6%	196%	-69.6%	45.7%		108.6%	4.5%	-63.3%	-66.8%		-292%	34%	-6.5%	9.9%		20%	-23.6%	-7.3%	3.6%	
Year-to-Year Growth																					
Revenue	7.9%	0.3%	-4.8%	15.8%	0.8%	2.7%	-8.7%	-26.9%	-26.2%	-10.1%	-17.8%	24.1%	90.0%	80.4%	59.2%	60.2%	25.5%	7%	4.8%	4.7%	10.0%
Operating Expenses	59.8%	-20.2%	86.4%	-9.3%	-18.3%	13.4%	-15.8%	-39.5%	29.3%	-20.1%	-19.8%	8.5%	-47.8%	-32.9%	11.9%	-22.8%	3.9%	12.6%	12.6%	12.6%	10.3%
Operating Income	-180%	-336%	2171%	15.4%	110%	470%	158%	-8.3%	9.3%	-85.5%	5.0%	-129.9%	-153.8%	-247%	-894%	-179%	124.1%	-5.0%	-5.6%	-9.9%	12.9%
Net Income	-178%	-328%	1394%	4.9%	118%	406%	174%	-3.3%	22.9%	-70.9%	14.8%	-128.4%	-140.7%	-199%	-414.0%	-160%	84%	-6.2%	-7.0%	-12.3%	8.5%
EPS	-174%	-330%	1387%	4.5%	117%	404%	173.5%	-3.5%	16.8%	-73.4%	10.8%	-124.5%	-131.4%	-180%	-364.8%	-148%	65%	-6.2%	-7.0%	-12.3%	8.4%

Dan K. Scovel, *Tokeneke Research LLC*, 203-604-0183, dscovel@tokenekeresearch.com 12/23/09

Micron Technology

Financial Summary
dollars in millions
Fiscal year ends August

	FY2007	FY2008	FY2009	F4Q08	F1Q09	F2Q09	F3Q09	F4Q09	F1Q10
Assets									
Cash and equivalents	2,616	1,362	1,485	1,362	1,028	932	1,306	1,485	1,565
Net accounts receivable	994	1,032	798	1,032	1,031	654	750	798	1,091
Quick Assets	3,610	2,394	2,283	2,394	2,059	1,586	2,056	2,283	2,656
Inventory	1,532	1,291	987	1,291	883	859	999	987	1,037
Other	92	94	74	94	95	78	73	74	76
Current Assets	5,234	3,779	3,344	3,779	3,037	2,523	3,128	3,344	3,769
Property, plant and eqt, net	8,279	8,811	7,081	8,811	8,460	7,910	7,536	7,081	6,876
Goodwill and intangibles	916	364	*355*	364	354	382	355	*355*	*355*
Long-term equities	0	84		84	432	371	306		
Other	389	392	675	392	393	340	339	675	726
Total Assets	14,818	13,430	11,455	13,430	12,676	11,526	11,664	11,455	11,726
Liabilities and Shareholders Equity									
Current portion l-t debt	423	275	424	275	343	353	372	424	618
Accounts payable	1,385	1,111	1,037	1,111	943	950	1,037	1,037	1,059
Deferred Income	84	114		114	192	195			
Other	134	98	431	98	157	139	416	431	565
Current Liabilities	2,026	1,598	1,892	1,598	1,635	1,637	1,825	1,892	2,242
Long-term debt	1,987	2,451	2,674	2,451	2,523	2,542	2,752	2,674	2,143
Other	446	338	249	338	332	261	260	249	250
Total Liabilities	4,459	4,387	4,815	4,387	4,490	4,440	4,837	4,815	4,635
Minority Interest	2,607	2,865	1,986	2,865	2,702	2,344	2,130	1,986	1,896
Common stock	6,595	6,642		6,642	6,650	6,662	6,926		
Retained earnings	1,164	(456)		(456)	(1,162)	(1,913)	(2,203)		
Other	(7)	(8)		(8)	(4)	(7)	(26)		
Total Shareholders Equity	7,752	6,178	4,654	6,178	5,484	4,742	4,697	4,654	5,195
Total Liabilities and Equity	14,818	13,430	11,455	13,430	12,676	11,526	11,664	11,455	11,726
Sales and Income									
Revenue	5,688	5,841	4,803	1,449	1,402	993	1,106	1,302	1,740
COGS	4,610	5,896	5,242	1,514	1,851	1,260	999	1,132	1,297
Net income	(320)	(1,619)	(439)	(344)	(706)	(751)	(290)	(88)	204
Other									
Capital Expenditures	4,090	2,916	632	759	334	139	93	66	111
Depreciation and Amortization	1,718	2,060	2,139	532	*605*	529	514	491	491
Shares (weighted average diluted)	769	773	801	772.9	773.3	773.9	813.3	844.3	1,000.7
Employees (units)		23,509		23,509	21,888	20,794			
Cash Flow from Operations	937	1,018	1,206	243	359	339	151	357	326
Ratios									
Liquidity									
Quick Ratio	1.78	1.50	1.21	1.50	1.26	0.97	1.13	1.21	1.18
Current Ratio	2.58	2.36	1.77	2.36	1.86	1.54	1.71	1.77	1.68
Leverage									
Debt Ratio	0.30	0.33	0.42	0.33	0.35	0.39	0.41	0.42	0.40
Long-term Debt/Capital	0.16	0.21	0.26	0.21	0.23	0.24	0.26	0.26	0.20
Asset Management									
Fixed Asset Turnover	1.4	0.7	0.6	0.66	0.65	0.49	0.57	0.71	1.00
Total Asset Turnover	0.8	0.4	0.4	0.43	0.43	0.33	0.38	0.45	0.60
Receivables DSO	63	64	60	64	66	59	61	55	56
Inventory Days	120	79	68	77	43	61	90	78	72
Inventory Turnover	6.0	4.2	4.6	4.41	6.81	5.79	4.30	4.56	5.13
Annual Revenue/Employee					0.247	0.186	0.213	#DIV/0!	#DIV/0!
Profitability									
Gross Margin	19.0%	-0.9%	-9.1%	-4.5%	-32.0%	-26.9%	9.7%	13.1%	25.5%
Net Margin	-5.6%	-27.7%	-9.1%	-23.7%	-50.4%	-75.6%	-26.2%	-6.8%	11.7%
Return on Assets	-4.3%	-11.5%	-3.5%	-10.2%	-21.6%	-24.8%	-10.0%	-3.0%	7.0%
Return on Equity	-8.3%	-23.2%	-8.1%	-21.7%	-48.4%	-58.8%	-24.6%	-7.5%	16.6%
Per Share Data									
Book Value/Share	$10.08	$8.00	$5.81	$7.99	$7.09	$6.13	$5.78	$5.51	$5.19
Tangible Book Value/Share	$8.89	$7.53	$5.37	$7.52	$6.63	$5.63	$5.34	$5.09	$4.84
Cash/Share (gross)	$3.40	$1.76	$1.85	$1.76	$1.33	$1.20	$1.61	$1.76	$1.56
Cash/Share (net)	$0.27	($1.77)	($2.01)	($1.76)	($2.38)	($2.54)	($2.24)	($1.91)	($1.20)
Earnings/Share	($0.42)	($2.10)	($0.55)	($0.45)	($0.91)	($0.97)	($0.36)	($0.10)	$0.20

Micron Technology

Financial Model

dollars in millions

fiscal year ends August

	FY2008				FY2009 act				FY2010 est				FY2011			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1QA	2Q	3Q	4Q	1Q	2Q	3Q	4Q
DRAM																
Bits Sold	25.0%	0.0%	10.0%	-5.0%	35.0%	0.0%	18.0%	**18.6%**	**25.0%**	13.0%	15.0%	10.0%	10.0%	10.0%	10.0%	10.0%
ASP change	-20.0%	-15.0%	-5.0%	0.0%	-34.0%	-30.0%	-2.0%	**8.0%**	**21.0%**	5.0%	-10.0%	-7.0%	-7.5%	-7.5%	-7.5%	-7.5%
Revenue	859.5	748.4	802.7	763.9	689.2	483.0	547.7	701.5	1,061.0	1,258.9	1,302.9	1,332.9	1,356.2	1,380.0	1,404.1	1,428.7
Royalties *(included)*	5.0	-	-	38.0	36.0	33.0	32.0	34.0	35.0							
Revenue growth		-12.9%	7.3%	-4.8%	-9.8%	-29.9%	13.4%	28.1%	51.3%							
Revenue % *(incl roy)*	56.0%	55.1%	53.6%	52.7%	49.2%	48.6%	49.5%	54.0%	60.8%							
Production Bits		0.0%	15.0%	15.0%	23.0%	-8.0%	15.0%	20.0%								
DDR2/3 Revenue	491.2	407.7	449.4	405.7	350.5	258.2	331.8	454.5								
DDR2/3 Revenue %	32.0%	30.0%	30.0%	28.0%	25.0%	26.0%	30.0%	35.0%								
Cost/bit change	-10.0%	-15.0%	-15.0%	-5.0%	-12.0%	-5.0%	-11.0%	**-21.0%**	**-9.0%**	-9.0%	-8.0%	-8.0%	-8.0%	-8.0%	-8.0%	-8.0%
Gross Margin	*5.0%*	*2.6%*	*12.1%*	*17.7%*	*-13.0%*	*-36.0%*	*-30.4%*	-9.1%	19.9%	37.3%	33.4%	34.0%	33.9%	33.7%	33.6%	33.5%
Gross Profit	43.0	19.7	97.4	135.5	(89.4)	(174.0)	(166.6)	(63.6)	211.5							
COGS	816.5	728.6	705.3	628.4	778.6	657.0	714.2	765.1	849.5	789.8	867.5	879.6	896.8	914.4	932.3	950.5
NAND																
Bits Sold	60.0%	30.0%	40.0%	10.0%	40.0%	-8.0%	20.3%	**23.5%**	**16.0%**	0.0%	25.0%	20.0%	20.0%	-15.0%	25.0%	20.0%
ASP change	-30.0%	-30.0%	-20.0%	-20.0%	-24.0%	-13.0%	-17.0%	**-11.0%**	**5.0%**	-10.0%	-10.0%	-10.0%	-5.0%	-13.0%	-13.0%	-9.0%
Revenue	506.6	475.7	524.3	507.2	532.8	427.0	431.3	474.1	577.5	519.7	584.7	631.5	719.9	532.3	578.9	632.2
Revenue growth		-6.1%	10.2%	-3.3%	5.0%	-19.9%	1.0%	9.9%	21.8%							
Revenue %	33.0%	35.0%	35.0%	35.0%	38.0%	43.0%	39.0%	36.5%	33.1%							
Production Bits		30.0%	55.0%	12.0%	17.0%	-5.0%	30.0%									
Cost/bit change	-15.0%	-25.0%	-25.0%	-15.0%	-14.0%	-25.0%	-35.0%	**-13.0%**	**-8.0%**	-9.0%	-12.0%	-12.0%	-10.0%	-10.0%	-10.0%	-10.0%
Gross Margin	-6.7%	*-18.4%*	*-18.4%*	*-24.9%*	*-34.9%*	*-29.2%*	-20.7%	10.6%	25.5%	23.1%	24.1%	25.0%	30.7%	25.1%	19.7%	19.8%
gm est	***-6.7%***	***-17.0%***	***-20.7%***	***-25.3%***	***-37.7%***	***-32.3%***	***13.6%***	***31.8%***	***25.5%***							
Gross Profit	(34.0)	(80.7)	(108.4)	(128.5)	(200.6)	(138.0)	58.6	150.7	147.0							
COGS	540.5	556.4	632.7	635.6	733.4	565.0	372.8	323.4	430.5	399.8	444.1	473.3	499.1	399.0	465.0	507.0
Memory Revenue																
Revenue	**1,366.0**	**1,224.0**	**1,327.0**	**1,271.0**	**1,222.0**	**910.0**	**979.0**	1,175.6	1,638.5							
Revenue Growth		-10.4%	8.4%	-4.2%	-3.9%	-25.5%	7.6%	20.1%	39.4%							
Revenue %	89.0%	90.1%	88.6%	87.7%	87.2%	91.6%	88.5%	90.5%	93.8%							
Gross Profit	**(39.0)**	**(76.0)**	**(11.0)**	**(115.0)**	**(502.0)**	**(269.0)**	**104.00**	141.07	442.38							
Gross Margin	-2.9%	-6.2%	-0.8%	-9.0%	-41.1%	-29.6%	10.6%	**12.0%**	**27.0%**							
Adjusted Gross Profit	9.0	(61.0)	(11.0)	77.0	(290.0)	(312.00)	(108.00)	87.07	442.38							
Adjusted Gross Margin	0.7%	-5.0%	-0.8%	6.1%	-23.7%	-34.3%	-11.0%	7.4%	27.0%							
COGS	1,357.0	1,285.0	1,338.0	1,194.0	1,512.0	1,222.0	1,087.0	1,088.5	1,196.1							
Image Sensors																
Revenue	**169.0**	**135.0**	**171.0**	**178.0**	**180.0**	**83.0**	**127.0**	**123.0**	**108.0**	108.0	108.0	108.0	108.0	108.0	108.0	108.0
Revenue growth		-20.1%	26.7%	4.1%	1.1%	-53.9%	53.0%	-3.1%	-12.2%							
Revenue %	11.0%	9.9%	11.4%	12.3%	12.8%	8.4%	11.5%	9.5%	6.2%							
Gross Profit	**44.0**	**33.0**	**59.0**	**50.0**	**53.0**	**2.0**	**3.0**									
Gross Margin	26.0%	24.4%	34.5%	28.1%	29.4%	2.4%	2.4%	**20.0%**	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
COGS	125.0	102.0	112.0	128.0	127.0	81.0	124.0	98.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4
TOTAL																
Revenue	1,535.0	1,359.0	1,498.0	1,449.0	1,402.0	993.0	1,106.0	1,298.6	1,746.5	1,886.6	1,995.6	2,072.4	2,184.1	2,020.3	2,091.0	2,168.9
Royalty	5.0			38.0	36.0	33.0	32.0	34.0	35.0							
Revenue growth		-11.5%	10.2%	-3.3%	-3.2%	-29.2%	11.4%	17.4%	34.5%	8.0%	5.8%	3.8%	5.4%	-7.5%	3.5%	3.7%
COGS	1,482.0	1,387.0	1,450.0	1,392.0	1,639.0	1,303.0	1,211.0	1,186.9	1,366.4	1,276.0	1,398.0	1,439.3	1,482.3	1,399.8	1,483.7	1,543.9
Gross Profit	53.0	(28.0)	48.0	57.0	(237.0)	(310.0)	(105.0)	111.7	380.1	610.6	597.7	633.0	701.8	620.5	607.3	624.9
Gross Margin	3.5%	-2.1%	3.2%	3.9%	-16.9%	-31.2%	-9.5%	8.6%	21.8%	32.4%	29.9%	30.5%	32.1%	30.7%	29.0%	28.8%
Reported																
Revenue	1,535.0	1,359.0	1,498.0	1,449.0	1,402.0	993.0	1,106.0	1,302.0	1,740.0							
COGS	1,530.0	1,402.0	1,450.0	1,514.0	1,851.0	1,260.0	999.0	1,132.0	1,297.0							
Gross Margin	0.3%	-3.2%	3.2%	-4.5%	-32.0%	-26.9%	9.7%	13.1%	25.5%							
Adjusted COGS	1,482.0	1,387.0	1,450.0	1,392.0	1,639.0	1,303.0	1,211.0	1,186.0	1,297.0							
Adjusted Gross Margin	3.5%	-2.1%	3.2%	3.9%	-16.9%	-31.2%	-9.5%	8.9%	25.5%							

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Micron Technology

Valuation

Relative Valuation

Company	Ticker	Price 12/22/09	52-Week Low - High	CY EPS 2007	CY EPS 2008	CY EPS 2009	CY EPS 2010	CY P/E 2007	CY P/E 2008	CY P/E 2009	CY P/E 2010	Diluted Shares(mil)	CAP ($ mil)	Price-Sales TTM	Price-Sales Cur FY	Price-Sales Nxt FY	FY Ends
Micron Technology *	**MU**	**9.41**	**2.12 - 9.31**	**-0.80**	**-1.72**	**-1.26**	**1.28**	**NM**	**NM**	**NM**	**7.4**	**1,001**	**9,417**	**1.8**	**1.2**	**1.1**	**Aug**
Advanced Micro Devices	AMD	9.43	1.86 - 9.59	-2.59	-1.96	-1.54	-0.66	NM	NM	NM	NM	694	6,544	1.3	1.2	1.1	Dec
Atmel	ATML	4.66	2.75 - 4.50	0.16	0.17	-0.07	0.13	29.1	27.4	NM	35.8	452	2,108	1.7	1.7	1.5	Dec
Intel *	INTC	20.04	12.05 - 21.27	1.16	0.92	0.93	1.12	17.3	21.8	21.5	17.9	5,616	112,545	3.4	3.2	2.8	Dec
STMicroelectronics	STM	8.95	3.73 - 10.28	0.44	0.44	-0.73	0.25	20.3	20.3	NM	35.8	879	7,865	1.0	0.9	0.8	Dec-ADR
Texas Instruments *	TXN	25.64	13.70 - 27.00	1.80	1.58	1.25	1.87	14.2	16.2	20.5	13.7	1,268	32,512	3.3	3.1	2.7	Dec
Average								20.2	21.4	21.0	25.8			2.1	2.1	1.8	

Company	Ticker	Price 12/22/09	52-Week Low - High	CY EPS 2007	CY EPS 2008	CY EPS 2009	CY EPS 2010	CY P/E 2007	CY P/E 2008	CY P/E 2009	CY P/E 2010	Diluted Shares(mil)	CAP ($ mil)	Price-Sales TTM	Price-Sales Cur FY	Price-Sales Nxt FY	FY Ends
Micron Technology *	**MU**	**9.41**	**2.12 - 9.31**	**-0.8**	**-1.72**	**-1.26**	**1.28**	**NM**	**NM**	**NM**	**7.4**	**1,001**	**9,417**	**1.8**	**1.2**	**1.1**	**Aug**
Integrated Silicon Solutions	ISSI	5.44	1.31 - 5.10	0.49	0	-0.03	0.26	11.1	NM	NM	20.9	26	139	0.9	0.7	0.6	Sep
OmniVision	OVTI	14.22	4.62 - 17.48	1.47	0.47	0.08	0.76	9.7	30.3	NM	18.7	53	747	1.6	1.2	1.1	Apr
SanDisk	SNDK	27.44	7.53 - 26.81	1.72	-2.13	1.31	1.32	16.0	NM	20.9	20.8	233	6,394	2.0	1.8	1.6	Dec
SMART Modular	SMOD	5.94	0.99 - 6.33	0.86	0.39	0.2	0.18	6.9	15.2	29.7	33.0	64	380	0.9	0.8	0.7	Aug
STEC	STEC	14.68	3.68 - 42.50	0.23	0.31	1.61	1.9	63.8	47.4	9.1	7.7	52	766	2.5	2.2	1.8	Dec
Average								21.5	30.9	19.9	20.2			1.6	1.4	1.2	

** Tokeneke estimate*

Source: consensus as of 12/22/09

Historical Valuation

Company	Ticker	Price 12/22/09	Trailing 12-month Price/Earnings Current	Price/Earnings Historical*	Price/Sales Current	Price/Sales Historical*	Price/Book Current	Price/Book Historical*
Micron Technology	MU	$9.41	NM		1.8		1.8	
			Average	50.6	**Average**	2.7	**Average**	2.5
			High	568.0	**High**	9.0	**High**	9.8
			Low	4.6	**Low**	0.8	**Low**	0.6

** 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.
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My Background

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

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

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

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