

Déjà Vu All Over Again, Micron F4Q Mix Limits Upside Cost Reductions Great, But ASP Gains Limited on Mix: Raising Est, Reit Buy

Diluted Shares(mil) :	844.3	<u>Closing Price 9/29/09</u>	<u>fye August</u>	<u>FY09 act</u>	<u>FY10</u>	<u>FY11</u>
Market Cap(\$mil) :	\$7,092	\$8.40	Revenue(\$mil)	\$4,803	\$7,003	\$7,902
Avg Volume(,000) :	20,271		EPS	(\$2.17)	\$0.68	\$1.00
Net Cash/Share:	(\$1.91)	<u>Recommendation/Target</u>	Price/Sales	1.5	1.0	0.9
Tangible Book/Share	\$5.09	Buy, \$12-\$14 from \$10.	Price/EPS	NM	12.4	8.4

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

Summary: For the second quarter in a row Micron's impressive operating gains were somewhat neutralized by product and customer mix issues, resulting in F4Q results that were better than expected—but not as good as hoped. I am slightly lowering my revenue estimates, but more significantly raising my earnings estimates and boosting my 12-month target price to \$12-\$14 from \$10. 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 DRAM market prices, cost reductions and production expansion from technology migration, and significant future capacity enhancements.

Operating Strength—Again: MU once again performed quite well from an operational perspective as it accelerated process technology migration and its DRAM manufacturing partner initiated production. DRAM cost per bit fell by an impressive 21% compared to guidance in the low-teens; NAND cost declined by 13% compared to guidance of a high-single digit drop; NAND bit shipment growth of 23% outpaced guidance in the mid-teens percentage; and DRAM bit shipment growth of 19% came in at the high-end of guidance that called for gains in the mid- to high-teens percentage. Combined R&D and SG&A also came in slightly below the mid-point of guidance.

ASP Disappointment—Again: Unfortunately, all these operating strengths were partially offset by weaker than expected average selling prices despite consistent spot and contract price gains for both DRAM and NAND over the last few months. DRAM ASPs increased by only 8% against my expectation of 10% (and hope for more), while NAND ASPs actually declined by 11% compared to my modeling of flat (and hope for much more). DRAM mix continues to shift away from the higher ASP and more profitable specialty DRAMs to commodity/PC-oriented DRAMs; and sales of NAND to partner Intel approximate cost, so the better-than-expected cost reductions more than offset market price gains after netting out the difference between sales to Intel and other, merchant customers.

F4Q Review: MU's quarter exceeded expectations despite the tempering mix issues that limited potential upside for the period. Sequential revenue growth of 17.7% to \$1.3B surpassed published expectations on better than expected output, and gross margin (adjusted for idle capacity charges of \$37M and the sale of previously written off inventory of \$91M) of 8.9% significantly exceeded my 0.8% estimate due to much better than expected manufacturing cost reductions. Operating expenses of \$221M were as expected, although other charges netting to a \$2M benefit (including a \$12M restructuring charge, equipment sales, for ex, and a \$12M revaluation benefit from Aptina) bettered my expected charge of \$20M. A tax benefit of \$13M also bettered my expected charge of \$10M, while interest expense of \$31M and a net minority interest expense of \$20M approximated my expectations. Cash flow from operations was \$357M, cash grew by \$179M to \$1.485B, cap ex totaled \$66M, \$56M of debt was paid, and total debt remains \$3.1B. Receivables grew by \$48M to \$798M and inventory declined by \$12M to \$987M.

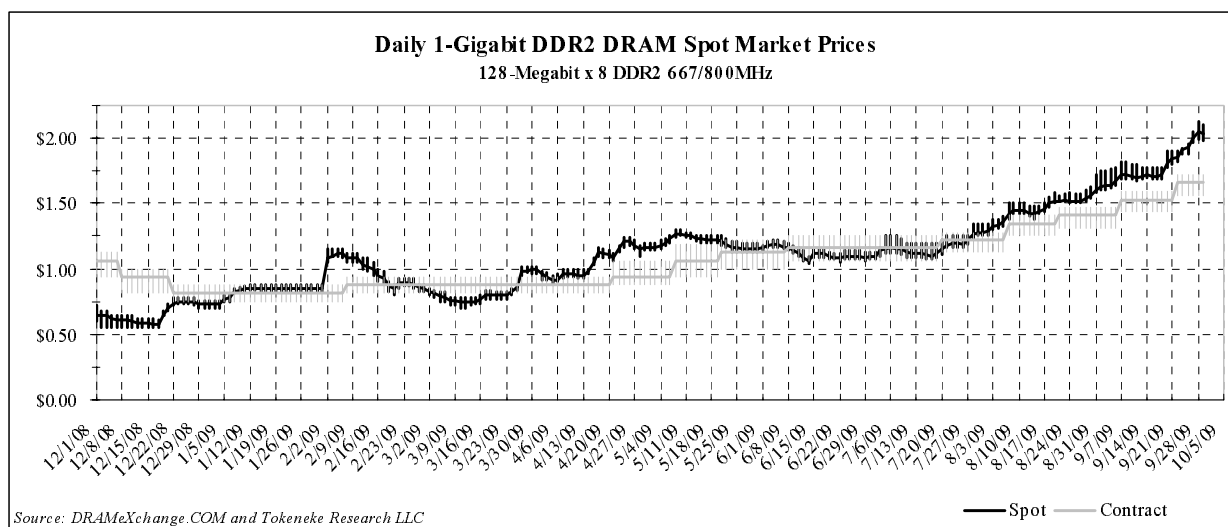
Metric	FYE August		FY4Q09		
	Estimate	Actual	Guidance	Consensus	Range
DRAM Bits Shipped	17.0%	19.0%	mid-hi teens		
NAND Bits Shipped	15.0%	23.0%	mid teens%		
DRAM ASP change	10.0%	8.0%			
NAND ASP change	0.0%	-11.0%			
DRAM Cost/bit change *	-13.0%	-21.0%	low teens%		
NAND Cost/bit change *	-8.0%	-13.0%	hi 1-digit%		
Revenue (\$ mil)	1,240	1,302		1,270	1,220-1,350
Revenue Growth	12.1%	17.7%		14.8%	+10%+22%
Gross Margin *	0.8%	8.9%			
Opn Expenses (\$ mil)*	223	221	215-230		
Taxes (\$ mil)	10	(13)			
Diluted Shares (mil)	843.0	844.3			
EPS reported		(\$0.10)			
EPS (excl charges)*	(\$0.34)	(\$0.17)		(\$0.19)	(\$0.35-\$0.05)

*adjusted for inventory revaluation and charges

Driven by DRAMs: DRAM revenue grew by 28% and accounted for \$708M or 54% of total sales, up from 50%. Bit sales grew by 19%, ASPs increased by 8%, and cost per bit declined by -21% as commodity DRAMs completed their migration to lower cost 50nm technology from 78 and 68nm and Inotera ramped production. 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. ASP gains resulted from increasing commodity PC and specialty DRAM prices (amid market price improvements as noted in the chart below, and MU leading the conversion to higher priced DDR3 devices) being partially offset by a shift away from specialty DRAM sales. Commodity PC sales accounted for 35% of total sales, up from 30%. This is the third quarter in a row that we have been disappointed net DRAM ASP changes at MU lagged market price gains due to the offsetting mix of commodity and specialty product sales, although the magnitude of the change and disappointment continue to lessen.

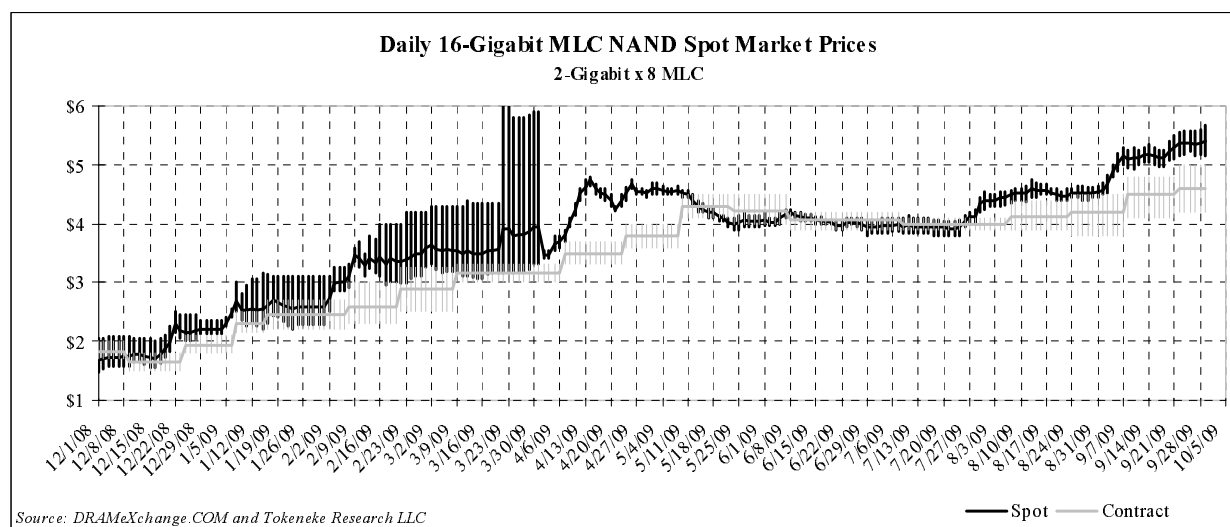
Specialty DRAMs are higher-performance devices that face less competition and greater profitability in smaller end-market opportunities used in networks, servers, consumer electronics, communication equipment and certain computer peripherals. Low-power devices go in to portable handheld markets that 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. Specialty DRAMs used to account for half of all DRAM sales, but this has fallen to under 40%. 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 the specialty DRAM umbrella. Unfortunately, this lack of transparency has been an issue for each of the last three quarters.

Inotera Interest: Taiwanese joint-venture fab Inotera (with partners Nanya/Formosa) is still manufacturing former partner Qimonda's trench technology DRAMs, but has established a pilot line running Micron's stack technology at 50nm. Qimonda's bankruptcy and failure to continue to accept deliveries lead to idle capacity at Inotera and the \$37M COGS charge at MU last quarter, which will probably increase near-term with MU's rights to output. Inotera output just started, accounted for 10% of DRAM bits last quarter, is expected to double this quarter, be 50% converted to MU's 50nm by summer, and then complete by the end of next calendar year. Management expects publicly-traded Inotera to finance its own conversion to Micron's stack technology. Separately, potential participation in the Taiwanese Government's recently formed Taiwan Memory Corp. appears increasingly unlikely.



Neutered NAND: NAND revenue grew by 10% and accounted for \$469M or 36.5% of total sales, down from 39%. Bit sales grew by 23%, ASPs declined by 11%, and cost per bit declined by -13% with the migration to 34nm process technology now largely complete at 80% (although better yields are expected to improve costs in the future). Recall that MU'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. So even though 23% more NAND bits were manufactured, half of all this increase was shipped to Intel. Even worse, the shipments to Intel were transferred at

cost—which decreased by the aforementioned -13%. The ASP on sales to customers other than Intel was flat. NAND flash is used in USB, flash-drives, solid-state drives, and various memory card configurations for use in PCs, digital cameras, MP3 and MP4 players, and cell phone handsets. Market prices have improved considerably since the end of last year, as noted in the chart below.



CMOS Sensor Residual: On June 1 management announced the sale of 65% of its CMOS image sensor business (called Aptina) to private equity firms Riverwood Capital and TPG Capital, and the deal closed, as expected, in early-July. Micron retains 35% ownership and continues to provide certain manufacturing and services. Last quarter included one month of legacy sales, and then two months of wafer foundry sales to the spin-out. The net result was better than expected as sales declined by only 3% to \$123M for 9.5% of revenue on a 30% increase in units, and gross margin spiked up to 20% from 2%. MU also gained \$12M in other operating income due to a revaluation benefit associated with the spin out. Headcount in SG&A decreased by 9% and in R&D by 16% due to the spin out, thereby resulting in on-going operating expense savings. I have also included quarterly sales of \$50M to reflect on-going foundry business.

Management Guidance: For F1Q10: DRAM bit production is expected to grow in the mid-20% range; DRAM cost reductions are expected in the low- to mid-teens percent; DRAM ASPs would increase by 5% if they were to remain flat for the balance of the period; NAND bit production is expected to grow in the mid- to high-teens percent; NAND cost reductions are expected in the low- to mid-teens percent; ASPs would be up by 5% if current market prices were to hold for the next two months; SG&A is expected at \$80-85M; and R&D at \$130-135M. Capital expenditures for the fiscal year FY10 are expected to total \$750-850M and be heavily back-end loaded.

Lowering Revenue, Raising Earnings: My earnings model incorporates management guidance for operating costs, and then breaks down revenue and COGS by DRAM, 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 \$ in millions	FY1Q10		FY10		FY11	
	Previous	Update	Previous	Update	Previous	Update
Total Revenue	1,453	1,521	7,033	7,003	8,065	7,902
Revenue Growth	17.2%	16.8%	48.3%	45.8%	14.7%	12.8%
Gross Margin	13.1%	17.3%	24.7%	25.9%	28.5%	29.1%
Operating Expenses	215	215	883	880	983	983
Taxes	10	10	40	40	40	40
Diluted Shares (mil)	843.0	844.3	1,008.0	1,009.3	1,063.0	1,064.3
Diluted EPS	(\$0.13)	(\$0.01)	\$0.51	\$0.68	\$0.92	\$1.00

Still Attractive: I am maintaining my Buy recommendation and raising my 12-month target price to \$12-\$14 from \$10 based on a slightly less than historical average, two-times price-sales ratio based on expected revenue this year. I am using 1B shares which includes anti-dilutive potential common shares approximating 220M.

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: current lack of earnings; \$3.1B in debt against \$1.5B 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 few months.

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.

<i>FYE August</i>	EPS		
	FY1Q10	FY10	FY11
Tokeneke-revised	(\$0.01)	\$0.68	\$1.00
Tokeneke-previous	(\$0.13)	\$0.51	\$0.92
Consensus-previous	(\$0.07)	(\$0.07)	
High Estimate-previous	\$0.06	\$0.60	
Low Estimate-previous	(\$0.26)	(\$0.92)	

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Income Statement

www.micron.com

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

	FY07	FY2008					FY2009 act					FY2010 est					FY2011				
		Q1	Q2	Q3	Q4	FY08	Q1	Q2	Q3	Q4	FY09	Q1	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	1,521	1,693	1,859	1,930	7,003	2,029	1,891	1,955	2,026	7,902
COGS	4,610	1,530	1,402	1,450	1,514	5,896	1,851	1,260	999	1,132	5,242	1,258	1,248	1,323	1,360	5,189	1,399	1,334	1,409	1,464	5,606
Gross Profit	1,078	5	(43)	48	(65)	(55)	(449)	(267)	107	170	(439)	263	444	536	569	1,813	631	557	546	562	2,296
SG&A	610	112	120	116	107	455	102	90	80	82	354	83	83	85	88	337	90	93	96	99	377
R&D	805	163	180	170	167	680	178	168	162	139	647	133	133	136	141	542	145	149	154	158	606
Restructuring	19	13	471	8	4	496	(66)	163	19	12	128	-	-	-	-	-	-	-	-	-	-
Other	(76)	(23)	(42)	(21)	(5)	(91)	9	20	92	(14)	107	-	-	-	-	-	-	-	-	-	-
Operating Expenses	1,358	265	729	273	273	1,540	223	441	353	219	1,236	215	215	221	228	880	235	242	249	257	983
Operating Income	(280)	(260)	(772)	(225)	(338)	(1,595)	(672)	(708)	(246)	(49)	(1,675)	48	229	315	341	934	396	315	297	306	1,313
Interest Income	103	9	3	(6)	(9)	(3)	(20)	(31)	(31)	(31)	(113)	(31)	(31)	(31)	(31)	(124)	(31)	(31)	(31)	(31)	(124)
Other Non-Opn Inc.	9	(1)	(6)	-	(6)	(13)	(14)	(3)	(3)	(1)	(21)	-	-	-	-	-	-	-	-	-	-
Tax Expense	30	7	(4)	13	2	18	13	4	(2)	(13)	2	10	10	10	10	40	10	10	10	10	40
Minority Interest	(122)	(3)	(6)	8	11	10	13	(5)	(12)	(20)	(24)	(20)	(20)	(20)	(20)	(80)	(20)	(20)	(20)	(20)	(80)
Net Income	(320)	(262)	(777)	(236)	(344)	(1,619)	(706)	(751)	(290)	(88)	(1,835)	(13)	168	254	280	690	335	254	236	245	1,069
EPS-basic	(\$0.42)	(\$0.34)	(\$1.01)	(\$0.31)	(\$0.45)	(\$2.10)	(\$0.91)	(\$0.97)	(\$0.36)	(\$0.10)	(\$2.29)	(\$0.01)	\$0.20	\$0.30	\$0.33	\$0.82	\$0.40	\$0.30	\$0.28	\$0.29	\$1.27
Shares-basic	769.1	771.9	772.4	772.8	772.9	772.5	773.3	773.9	813.3	844.3	800.7	844.3	844.3	844.3	844.3	844.3	844.3	844.3	844.3	844.3	844.3
EPS-diluted	(\$0.42)	(\$0.34)	(\$1.01)	(\$0.31)	(\$0.45)	(\$2.10)	(\$0.91)	(\$0.97)	(\$0.36)	(\$0.10)	(\$2.29)	(\$0.01)	\$0.16	\$0.24	\$0.26	\$0.68	\$0.31	\$0.24	\$0.22	\$0.23	\$1.00
Shares-diluted	769.1	771.9	772.4	772.8	772.9	772.5	773.3	773.9	813.3	844.3	800.7	844.3	1,064.3	1,064.3	1,064.3	1,009.3	1,064.3	1,064.3	1,064.3	1,064.3	1,064.3
EPS-pro forma	(\$0.39)	(\$0.26)	(\$0.41)	(\$0.31)	(\$0.28)	(\$1.25)	(\$0.72)	(\$0.82)	(\$0.50)	(\$0.17)	(\$2.17)										
Margin Analysis																					
Gross Margin	19.0%	0.3%	-3.2%	3.2%	-4.5%	-0.9%	-32.0%	-26.9%	9.7%	13.1%	-9.1%	17.3%	26.3%	28.9%	29.5%	25.9%	31.1%	29.5%	27.9%	27.8%	29.1%
SG&A	10.7%	7.3%	8.8%	7.7%	7.4%	7.8%	7.3%	9.1%	7.2%	6.3%	7.4%	5.4%	4.9%	4.6%	4.6%	4.8%	4.4%	4.9%	4.9%	4.9%	4.8%
R&D	14.2%	10.6%	13.2%	11.3%	11.5%	11.6%	12.7%	16.9%	14.6%	10.7%	13.5%	8.7%	7.8%	7.3%	7.3%	7.7%	7.1%	7.9%	7.9%	7.8%	7.7%
Operating Expense	23.9%	17.3%	53.6%	18.2%	18.8%	26.4%	15.9%	44.4%	31.9%	16.8%	25.7%	14.1%	12.7%	11.9%	11.8%	12.6%	11.6%	12.8%	12.7%	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%	3.2%	13.6%	16.9%	17.7%	13.3%	19.5%	16.7%	15.2%	15.1%	16.6%
Interest/Other Income	2.0%	0.5%	-0.2%	-0.4%	-1.0%	-0.3%	-2.4%	-3.4%	-3.1%	-2.5%	-2.8%	-2.0%	-1.8%	-1.7%	-1.6%	-1.8%	-1.5%	-1.6%	-1.6%	-1.5%	-1.6%
Tax Rate	-17.9%	-2.8%	0.5%	-5.6%	-0.6%	-1.1%	-1.8%	-0.5%	0.7%	16.0%	-0.1%	57.5%	5.0%	3.5%	3.2%	4.9%	2.7%	3.5%	3.8%	3.6%	3.4%
Net Income	-5.6%	-17.1%	-57.2%	-15.8%	-23.7%	-27.7%	-50.4%	-75.6%	-26.2%	-6.8%	-38.2%	-0.8%	10.0%	13.7%	14.5%	9.9%	16.5%	13.4%	12.1%	12.1%	13.5%
Qtr-to-Qtr Growth																					
Revenue		6.8%	-11.5%	10.2%	-3.3%		-3.2%	-29.2%	11.4%	17.7%		16.8%	11.3%	9.8%	3.8%		5.2%	-6.8%	3.4%	3.6%	
Operating Expenses		-20.7%	175.1%	-62.6%	0.0%		-18.3%	97.8%	-20.0%	-38.0%		-1.8%	0.0%	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%		-199%	374.3%	37.3%	8.3%		16%	-20.4%	-5.8%	2.9%	
Net Income		65.8%	197%	-69.6%	45.8%		105.2%	6.4%	-61.4%	-69.7%		-86%	-1435%	50.7%	10.3%		20%	-24.1%	-7.1%	3.7%	
EPS		65.6%	196%	-69.6%	45.7%		105.1%	6.3%	-63.3%	-70.8%		-86%	-1159%	50.7%	10.3%		20%	-24.1%	-7.1%	3.7%	
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%	8.5%	70.5%	68.1%	48.2%	45.8%	33.4%	12%	5.2%	5.0%	12.8%
Operating Expenses	59.8%	-20.2%	86.4%	-9.3%	-18.3%	13.4%	-15.8%	-39.5%	29.3%	-19.8%	-19.7%	-3.6%	-51.2%	-37.3%	4.2%	-28.8%	9.3%	12.6%	12.6%	12.6%	11.7%
Operating Income	-180%	-336%	2171%	15.4%	110%	470%	158%	-8.3%	9.3%	-85.5%	5.0%	-107.2%	-132.4%	-228%	-796%	-156%	718.1%	37.3%	-5.7%	-10.4%	40.6%
Net Income	-178%	-328%	1394%	4.9%	118%	406%	169%	-3.3%	22.9%	-74.4%	13.3%	-98.2%	-122.4%	-188%	-41.8.2%	-138%	-2753%	50.8%	-7.1%	-12.7%	55.0%
EPS	-174%	-330%	1387%	4.5%	117%	404%	169.0%	-3.5%	16.8%	-76.6%	9.3%	-98.4%	-116.3%	-167%	-352.4%	-130%	-2205%	50.8%	-7.1%	-12.7%	47.0%

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9/30/09

Micron Technology

Financial Summary

dollars in millions

Fiscal year ends August

	FY2007	FY2008	FY2009	F3Q08	F4Q08	F1Q09	F2Q09	F3Q09	F4Q09
Assets									
Cash and equivalents	2,616	1,362	1,485	1,584	1,362	1,028	932	1,306	1,485
Net accounts receivable	994	1,032	798	995	1,032	1,031	654	750	798
Quick Assets	3,610	2,394	2,283	2,579	2,394	2,059	1,586	2,056	2,283
Inventory	1,532	1,291	987	1,453	1,291	883	859	999	987
Other	92	94	74	97	94	95	78	73	74
Current Assets	5,234	3,779	3,344	4,129	3,779	3,037	2,523	3,128	3,344
Property, plant and eqt, net	8,279	8,811	7,081	8,721	8,811	8,460	7,910	7,536	7,081
Goodwill and intangibles	916	364	355	433	364	354	382	355	355
Long-term equities	0	84		0	84	432	371	306	
Other	389	392	675	333	392	393	340	339	675
Total Assets	14,818	13,430	11,455	13,616	13,430	12,676	11,526	11,664	11,455
Liabilities and Shareholders Equity									
Current portion lt. debt	423	275	424	262	275	343	353	372	424
Accounts payable	1,385	1,111	1,037	1,374	1,111	943	950	1,037	1,037
Deferred Income	84	114		80	114	192	195		
Other	134	98	431	68	98	157	139	416	431
Current Liabilities	2,026	1,598	1,892	1,784	1,598	1,635	1,637	1,825	1,892
Long-term debt	1,987	2,451	2,674	2,159	2,451	2,523	2,542	2,752	2,674
Other	446	338	249	354	338	332	261	260	249
Total Liabilities	4,459	4,387	4,815	4,297	4,387	4,490	4,440	4,837	4,815
Minority Interest	2,607	2,865	1,986	2,811	2,865	2,702	2,344	2,130	1,986
Common stock	6,595	6,642		6,634	6,642	6,650	6,662	6,926	
Retained earnings	1,164	(456)		(112)	(456)	(1,162)	(1,913)	(2,203)	
Other	(7)	(8)		(14)	(8)	(4)	(7)	(26)	
Total Shareholders Equity	7,752	6,178	4,654	6,508	6,178	5,484	4,742	4,697	4,654
Total Liabilities and Equity	14,818	13,430	11,455	13,616	13,430	12,676	11,526	11,664	11,455
Sales and Income									
Revenue	5,688	5,841	4,803	1,498	1,449	1,402	993	1,106	1,302
COGS	4,610	5,896	5,242	1,450	1,514	1,851	1,260	999	1,132
Net income	(320)	(1,619)	(439)	(236)	(344)	(706)	(751)	(290)	(88)
Other									
Capital Expenditures	4,090	2,916	632	577	759	334	139	93	66
Depreciation and Amortization	1,718	2,060	2,139	513	532	594	540	514	491
Shares (weighted average diluted)	769	773	801	772.8	772.9	773.3	773.9	813.3	844.3
Employees (units)		23,509			23,509	21,888	20,794		
Cash Flow from Operations	937	1,018	1,206	217	243	359	339	151	357
Ratios									
Liquidity									
Quick Ratio	1.78	1.50	1.21	1.45	1.50	1.26	0.97	1.13	1.21
Current Ratio	2.58	2.36	1.77	2.31	2.36	1.86	1.54	1.71	1.77
Leverage									
Debt Ratio	0.30	0.33	0.42	0.32	0.33	0.35	0.39	0.41	0.42
Long-term Debt/Capital	0.16	0.21	0.26	0.18	0.21	0.23	0.24	0.26	0.26
Asset Management									
Fixed Asset Turnover	1.4	0.7	0.6	0.69	0.66	0.65	0.49	0.57	0.71
Total Asset Turnover	0.8	0.4	0.4	0.88	0.43	0.43	0.33	0.38	0.45
Receivables DSO	63	64	60	60	64	66	59	61	55
Inventory Days	120	79	68	90	77	43	61	90	78
Inventory Turnover	6.0	4.2	4.6	3.99	4.41	6.81	5.79	4.30	4.56
Annual Revenue/Employee						0.247	0.186	0.213	#DIV/0!
Profitability									
Gross Margin	19.0%	-0.9%	-9.1%	3.2%	-4.5%	-32.0%	-26.9%	9.7%	13.1%
Net Margin	-5.6%	-27.7%	-9.1%	-15.8%	-23.7%	-50.4%	-75.6%	-26.2%	-6.8%
Return on Assets	-4.3%	-11.5%	-3.5%	-13.9%	-10.2%	-21.6%	-24.8%	-10.0%	-3.0%
Return on Equity	-8.3%	-23.2%	-8.1%	-29.0%	-21.7%	-48.4%	-58.8%	-24.6%	-7.5%
Per Share Data									
Book Value/Share	\$10.08	\$8.00	\$5.81	\$8.42	\$7.99	\$7.09	\$6.13	\$5.78	\$5.51
Tangible Book Value/Share	\$8.89	\$7.53	\$5.37	\$7.86	\$7.52	\$6.63	\$5.63	\$5.34	\$5.09
Cash/Share (gross)	\$3.40	\$1.76	\$1.85	\$2.05	\$1.76	\$1.33	\$1.20	\$1.61	\$1.76
Cash/Share (net)	\$0.27	(\$1.77)	(\$2.01)	(\$1.08)	(\$1.76)	(\$2.38)	(\$2.54)	(\$2.24)	(\$1.91)
Earnings/Share	(\$0.42)	(\$2.10)	(\$0.55)	(\$0.31)	(\$0.45)	(\$0.91)	(\$0.97)	(\$0.36)	(\$0.10)

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	1Q	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%	20.0%	25.0%	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%	5.0%	8.0%	-5.0%	-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	883.9	1,193.2	1,303.6	1,333.6	1,356.9	1,380.7	1,404.8	1,429.4
Royalties (included)	5.0	-	-	38.0	36.0	33.0	32.0	34.0								
Revenue growth		-12.9%	7.3%	-4.8%	-9.8%	-29.9%	13.4%	28.1%								
Revenue % (incl roy)	56.0%	55.1%	53.6%	52.7%	49.2%	48.6%	49.5%	54.0%								
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%	-13.0%	-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%	7.9%	27.0%	30.3%	30.9%	30.8%	30.6%	30.5%	30.4%
Gross Profit	43.0	19.7	97.4	135.5	(89.4)	(174.0)	(166.6)	(63.6)								
COGS	816.5	728.6	705.3	628.4	778.6	657.0	714.2	765.1	814.1	870.9	908.4	921.7	939.6	957.8	976.4	995.4
NAND																
Bits Sold	60.0%	30.0%	40.0%	10.0%	40.0%	-8.0%	20.3%	23.5%	18.0%	-10.0%	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%	-15.0%	-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	587.4	449.4	505.5	546.0	622.4	460.3	500.6	546.6
Revenue growth		-6.1%	10.2%	-3.3%	5.0%	-19.9%	1.0%	9.9%								
Revenue %	33.0%	35.0%	35.0%	35.0%	38.0%	43.0%	39.0%	36.5%								
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%	-13.0%	-12.0%	-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%	31.3%	25.0%	26.0%	27.0%	32.7%	27.0%	21.5%	21.6%
gm est	-6.7%	-17.0%	-20.7%	-25.3%	-37.7%	-32.3%	13.6%	31.8%								
Gross Profit	(34.0)	(80.7)	(108.4)	(128.5)	(200.6)	(138.0)	58.6	150.7								
COGS	540.5	556.4	632.7	635.6	733.4	565.0	372.8	323.4	403.8	337.2	374.3	398.8	419.0	336.1	392.9	428.4
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								
Revenue Growth		-10.4%	8.4%	-4.2%	-3.9%	-25.5%	7.6%	20.1%								
Revenue %	89.0%	90.1%	88.6%	87.7%	87.2%	91.6%	88.5%	90.5%								
Gross Profit	(39.0)	(76.0)	(11.0)	(115.0)	(502.0)	(269.0)	104.00	141.07								
Gross Margin	-2.9%	-6.2%	-0.8%	-9.0%	-41.1%	-29.6%	10.6%	0.12								
Adjusted Gross Profit	9.0	(61.0)	(11.0)	77.0	(290.0)	(312.00)	(108.00)	87.07								
Adjusted Gross Margin	0.7%	-5.0%	-0.8%	6.1%	-23.7%	-34.3%	-11.0%	7.4%								
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								
Image Sensors																
Revenue	169.0	135.0	171.0	178.0	180.0	83.0	127.0	123.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Revenue growth		-20.1%	26.7%	4.1%	1.1%	-53.9%	53.0%	-3.1%								
Revenue %	11.0%	9.9%	11.4%	12.3%	12.8%	8.4%	11.5%	9.5%								
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	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
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	1,521.3	1,692.6	1,859.2	1,929.6	2,029.4	1,891.0	1,955.4	2,026.0
Royalty	5.0				38.0	33.0	32.0	34.0								
Revenue growth		-11.5%	10.2%	-3.3%	-3.2%	-29.2%	11.4%	17.4%	17.1%	11.3%	9.8%	3.8%	5.2%	-6.8%	3.4%	3.6%
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	1,257.9	1,248.1	1,322.8	1,360.4	1,398.6	1,334.0	1,409.3	1,463.7
Gross Profit	53.0	(28.0)	48.0	57.0	(237.0)	(310.0)	(105.0)	111.7	263.4	444.5	536.4	569.1	630.7	557.0	546.1	562.3
Gross Margin	3.5%	-2.1%	3.2%	3.9%	-16.9%	-31.2%	-9.5%	8.6%	17.3%	26.3%	28.9%	29.5%	31.1%	29.5%	27.9%	27.8%
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								
COGS	1,530.0	1,402.0	1,450.0	1,514.0	1,851.0	1,260.0	999.0	1,132.0								
Gross Margin	0.3%	-3.2%	3.2%	-4.5%	-32.0%	-26.9%	9.7%	13.1%								
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								
Adjusted Gross Margin	3.5%	-2.1%	3.2%	3.9%	-16.9%	-31.2%	-9.5%	8.9%								

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9/30/09

Micron Technology

Valuation

Relative Valuation

Company	Ticker	Price 9/29/09	52-Week		CY EPS				CY P/E				Diluted Shares(mil)	CAP (\$ mil)	Price-Sales			FY Ends	
			Low	High	2007	2008	2009	2010	2007	2008	2009	2010			TTM	Cur FY	Nxt FY		
Micron Technology *	MU	8.40	1.59 - 8.80		-0.80	-1.72	-1.50	0.97	NM	NM	NM	8.7	844	7,092	1.5	1.0	0.9	Aug	
Advanced Micro Devices	AMD	5.78	1.62 - 6.30		-2.59	-1.96	-1.92	-0.98	NM	NM	NM	NM	667	3,855	0.7	0.8	0.7	Dec	
Atmel	ATML	4.20	2.50 - 4.69		0.16	0.17	-0.05	0.13	26.3	24.7	NM	32.3	451	1,894	1.5	1.6	1.4	Dec	
Intel *	INTC	19.48	12.05 - 20.65		1.16	0.92	0.93	1.12	16.8	21.2	20.9	17.4	5,678	110,607	3.3	3.2	2.8	Dec	
STMicroelectronics	STM	9.33	3.73 - 10.50		0.44	0.44	-0.75	0.16	21.2	21.2	NM	58.3	877	8,179	0.9	1.0	0.9	Dec-ADR	
Texas Instruments *	TXN	23.55	13.38 - 25.35		1.80	1.51	1.09	1.48	13.1	15.6	21.6	15.9	1,272	29,956	2.9	3.0	2.8	Dec	
Average									19.3	20.7	21.3	31.0				1.9	1.9	1.7	
Company	Ticker	Price 9/29/09	52-Week		CY EPS				CY P/E				Diluted Shares(mil)	CAP (\$ mil)	Price-Sales			FY Ends	
Company	Ticker	Price 9/29/09	Low	High	2007	2008	2009	2010	2007	2008	2009	2010			TTM	Cur FY	Nxt FY		
Micron Technology *	MU	8.40	1.59 - 8.80		-0.8	-1.72	-1.5	0.97	NM	NM	NM	8.7	844	7,092	1.5	1.0	0.9	Aug	
Integrated Silicon Solutions	ISSI	3.78	1.31 - 3.85		0.49	0	-0.29	-0.06	7.7	NM	NM	NM	25	96	0.6	0.6	0.5	Sep	
OmniVision	OVTI	16.42	4.12 - 17.48		1.47	0.47	-0.02	0.71	11.2	34.9	NM	23.1	51	831	1.9	1.4	1.2	Apr	
SanDisk	SNDK	21.76	5.07 - 23.20		1.72	-2.13	0.28	0.4	12.7	NM	77.7	54.4	232	5,044	1.6	1.7	1.5	Dec	
SMART Modular	SMOD	5.20	0.76 - 5.62		0.86	0.39	0.09	0.25	6.0	13.3	57.8	20.8	64	330	0.7	0.8	0.7	Aug	
STEC	STEC	29.67	3.42 - 42.50		0.23	0.31	1.59	2.36	NM	95.7	18.7	12.6	51	1,504	5.6	4.3	3.1	Dec	
Average									9.4	48.0	51.4	27.7				2.1	1.7	1.4	

* Tokeneke estimate
Source: consensus as of 9/29/09

Historical Valuation

Company	Ticker	Price 9/29/09	Trailing 12-month								
			Price/Earnings		Price/Sales		Price/Book				
			Current	Historical*	Current	Historical*	Current	Historical*			
Micron Technology	MU	\$8.40	NM		1.5		1.5				
			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.
- *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.
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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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