

Micron F2Q10 Profitability Accelerates DRAM Strength Drives Upside Again: Raising Estimates, Reiterate Buy

Diluted Shares(mil):	1,005.3	Closing Price 3/31/10	fye August	FY09 act	FY10	FY11
Market Cap(\$mil):	\$10,425	\$10.37	Revenue(\$mil)	\$4,803	\$8,237	\$9,908
Avg Volume(,000):	29,702		EPS	(\$2.17)	\$1.22	\$1.23
Net Cash/Share:	(\$0.84)	Recommendation/Target	Price/Sales	2.2	1.3	1.1
Tangible Book/Share	\$5.24	Buy, \$16 from \$15.	Price/EPS	NM	8.5	8.4

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

Summary: MU significantly exceeded expectations F2Q and improved upon its return to profitability in the prior quarter primarily due to DRAM bit growth and ASP strength, although NAND ASPs have held unseasonably firm. I am slightly increasing my estimates and 12-month target price to \$16 from \$15 based on two-times sales this fiscal year. I reiterate my Buy recommendation for investors with very high tolerance for risk, and continue to believe MU is well positioned to benefit from market price strength, cost reductions and production expansion from technology migration and significant future capacity enhancements.

F2Q Review: F2Q revenue and EPS significantly exceeded published expectations, but did not exceed the high-end of the range. Revenue of \$1,961M grew by 12.7% sequentially primarily due to better than expected strength in DRAM bit shipments and ASPs, although NAND ASP degradation at -1% was much better than the -10% I had modeled—all despite slack seasonality. Cost reductions were slightly lower than anticipated although gross margins met my expectation and grew by 720 basis points to 32.7%. EPS is calculated assuming the convertible notes on the if-converted method, which means I added \$24M to net income of interest payments on the convert to achieve \$0.39 per share. Memory royalty was flat at \$34M for the quarter. Other income of \$11M included a payment from the US government associated with competitive anti-dumping penalties. CFO \$804M, capital expenditures of \$180M, and total cash grew by \$305M to \$1,870M.

Metric	FYE August		FY2Q10		
	Estimate	Actual	Guidance	Consensus	Range
DRAM Bits Shipped	13.0%	17.0%	low teen%		
NAND Bits Shipped	0.0%	0.0%	flat		
DRAM ASP change	5.0%	7.0%			
NAND ASP change	-10.0%	-1.0%			
DRAM Cost/bit change *	-9.0%	-7.0%	high 1-digit		
NAND Cost/bit change *	-9.0%	-6.0%	high 1-digit		
Revenue (\$ mil)	1,887	1,961		1,820	1,650-1,980
Revenue Growth	8.4%	12.7%		4.6%	-5%+14%
Gross Margin *	32.4%	32.7%			
Opn Expenses (\$ mil)*	230	230	220-240		
Taxes (\$ mil)	10	4			
Diluted Shares (mil)	1,001.3	1,005.3			
EPS reported	\$0.31	\$0.39			
EPS (excl. charges)*	\$0.31	\$0.39		\$0.24	\$0.15-\$0.42

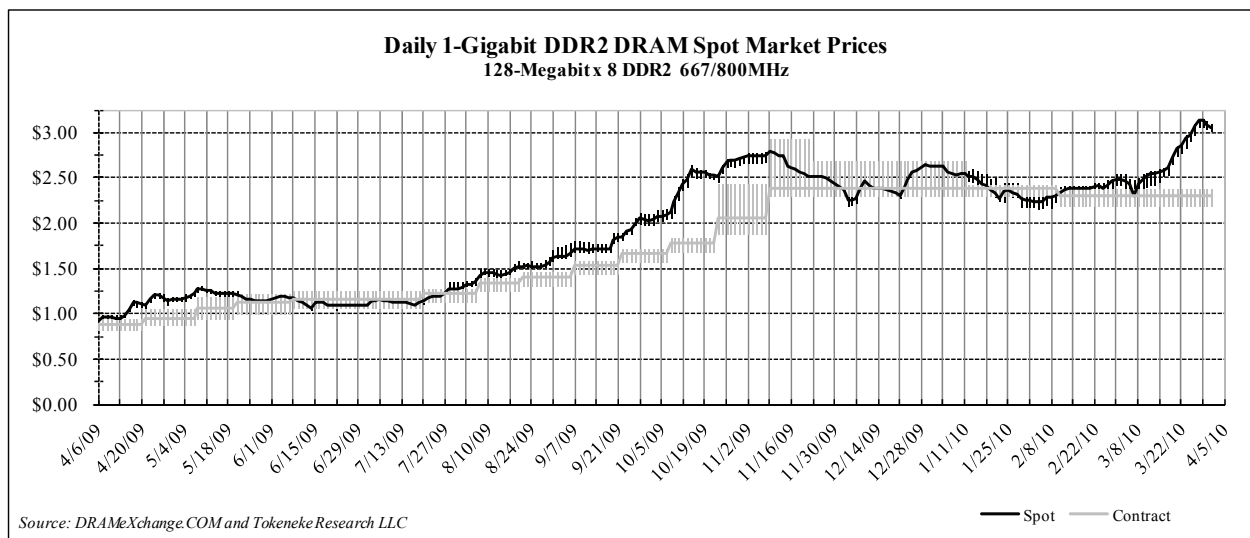
*adjusted for inventory revaluation and charges

PC revenue grew by 34% on volume and ASPs due to strength from both corporate and retail that is expected to continue this calendar year. Core DRAMs to server markets grew by 23% and the server market bit forecast this year expects growth of 80-100%. Networking and storage markets grew by 24% on 20% growth in specialty DRAM ASPs and robust demand for infrastructure equipment. The Inotera DRAM joint venture with Nanya is accounted for via the equity method, while the TECH DRAM fab in Singapore is reported on a consolidated basis. Micron also took 50% in a development stage solar company by contributing \$65M in assets that included Fab 1A in Boise along with equipment and intellectual property. Channel inventory for both DRAM and NAND remains lean and around 3 weeks, and management does not see any inventory building. Wafer production was flat.

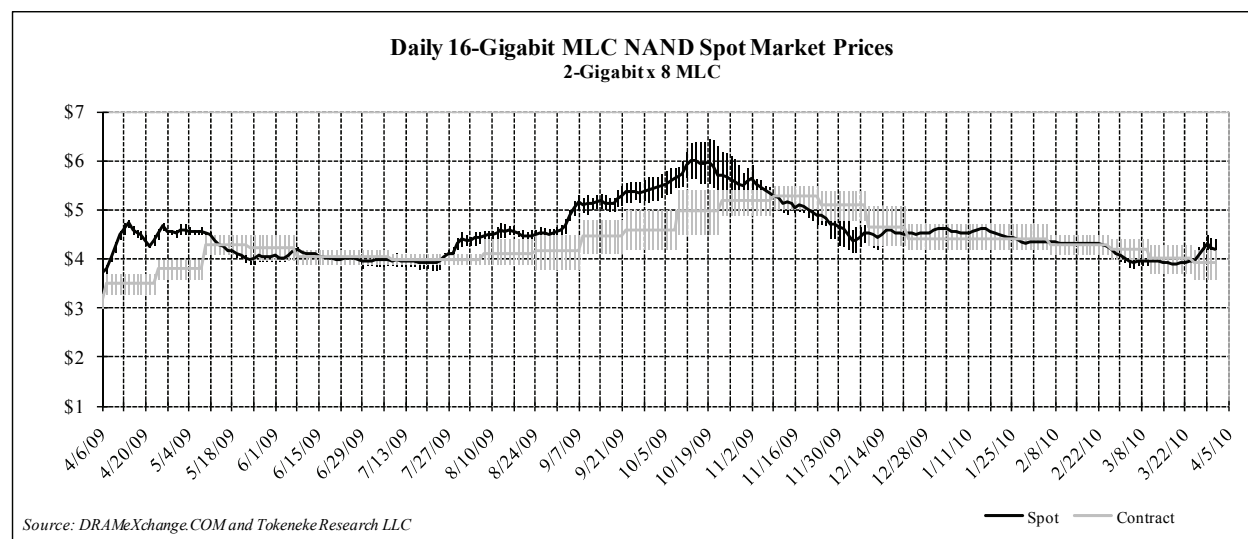
Still Driven By DRAM: Overall DRAM demand remains strong. DRAM revenue grew by 24% on increasing density offerings of DDR3 devices as well as increasing volumes of DDR2 parts from Inotera's production ramp. DRAM bit shipments grew by 17% compared to guidance in the low-teens, ASPs were up by 7%, and cost per bit declined by 7% (excluding inventory write-offs) which was at the low-end of guidance in the high-single digits. Core DRAM ASPs increased by 10% while specialty DRAM ASPs increased by 13%. The overall mix shifted richer to core from specialty with increasing density of DDR3 as well as DDR2 volume from Inotera. DDR3 bits grew by 28% to 45% from 40% of the core DRAM mix, although DDR2 bits also grew by 11% from Inotera output. Older DDR2 prices have increased since January and now DDR2 and DDR3 are at price parity in the market. Management continues to believe competitive debt burden and technology node demands position Micron very favorably, and I agree. DRAM content per PC looks to grow by 30% this year and is now in the mid-3GB range. Management does not see any evidence of DRAM content per box decreasing due to market price increases despite analyst predictions. DRAM industry bit growth this year is forecast at +40+50% primarily reflecting technology shrinks and the lack of incremental production capacity. Still no new fab plans worldwide for the first time in years.

Inotera cost per bit actually increased due the gross margin sharing agreement associated with the joint venture, although MU subsequently benefits on the income statement minority interest line item, and Micron's internal production of DRAM cost per bit declined by more than the reported 7% net. Inotera sold equity last quarter and MU invested \$138M to maintain its 30% stake. MU expects Inotera to be able to fund its own conversion to MU's stack DRAM cell technology. F3Q DRAM bit production is expected to be flat sequentially, ASPs QTD have been flat as well, and costs are also expected to remain unchanged as Micron's on-going reductions are likely to be offset by accounting cost increases to Inotera, start-up costs at Inotera for 50nm stack technology from Micron, Inotera under-utilization charges, and on-going production of legacy trench-cell technology at Inotera. DRAM bit growth and manufacturing cost savings are expected to accelerate at MU throughout calendar 2010 due to activities at Inotera.

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 smart phones, 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.



NAND Gains: NAND revenue was flat sequentially on flat bit production due to lesser use of third party suppliers for retail markets, and a nominal 1% decrease in ASPs. NAND cost declined by 6%, also on the low-side of guidance in the high-single digit range. NAND trade bit shipments (the half that doesn't go to partner Intel) grew by 5% despite slack seasonality. Virtually all NAND product is shipping at 34nm technology. The SSD introduction sold out quickly after introduction last quarter, and management is not sure how soon it will be able to come off allocation. The Crucial.com website purged its allocation in the first two days of availability. Strong demand is expected 2HF10 from mobile, consumer and SSD markets. Trade NAND gross margin is currently comparable to core DRAM gross margin, and 3x cell technology remains under 5% of output. R&D included accelerating development costs for 25nm NAND that is nearing production—qualification has begun for Lexar retail product—and first shipments are expected this quarter. This will significantly lower manufacturing cost, although the benefit will probably be realized more next quarter than this quarter. The Singapore fab has been energized with tooling orders and installation that will occur mostly during FY11. F3Q NAND cost is expected to decline in the high-single digit range and bit production is expected to grow in the mid- to high-teens.



Management F3Q Guidance: F3Q10 DRAM bit production is expected to be flat sequentially, ASPs QTD have been flat, and costs are also expected to remain unchanged as Micron's reductions are likely to be offset by accounting increases to Inotera as well as start-up costs at Inotera for 50nm stack technology from Micron this quarter. NAND cost is expected to decline in the high-single digit range and bit production is expected to grow in the mid- to high-teens. SGA is expected at \$95-105M and R&D at \$140-150M. The pending acquisition of Numonyx remains on-track to close probably next quarter when operating costs will then be incurred along with incremental revenue. Capital expenses this fiscal year remain at \$850-950M, and may edge up FY11 due to outfitting the IMFL flash fab in Singapore.

Edging-Up Estimates: My earnings model incorporates management guidance for operating costs, and then breaks down revenue and COGS by DRAM and NAND and other (formerly image sensors). For DRAM and NAND I make assumptions for bit growth, ASP changes, and manufacturing cost per bit changes. For other I 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	FY3Q10		FY10		FY11	
	Previous	Update	Previous	Update	Previous	Update
Total Revenue	1,996	2,129	7,695	8,237	8,464	9,908
Revenue Growth	5.8%	8.6%	60.2%	71.5%	10.0%	20.3%
Gross Margin	29.9%	25.9%	29.7%	28.5%	30.2%	25.7%
Operating Expenses	237	245	953	966	1,051	1,087
Taxes	10	10	23	17	40	40
Diluted Shares (mil)	1,001.3	1,005.6	1,001.2	1,004.3	1,001.3	1,005.6
Diluted EPS	\$0.29	\$0.25	\$1.11	\$1.22	\$1.20	\$1.23

Still Attractive: I am maintaining my Buy recommendation and raising my 12-month target price to \$16 from \$15 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; \$2.72B in debt against \$1.87B 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.

<i>FYE August</i>	EPS		
	FY3Q10	FY10	FY11
Tokeneke-revised	\$0.25	\$1.22	\$1.23
Tokeneke-previous	\$0.29	\$1.11	\$1.20
Consensus-previous	\$0.27	\$1.04	\$1.12
High Estimate-previous	\$0.42	\$1.46	\$1.90
Low Estimate-previous	\$0.15	\$0.69	\$0.68

—Dan K. Scovel
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Income Statement

www.micron.com

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

	FY07	FY2008				FY08	FY2009 act				FY09	FY2010 est					FY2011				
		Q1	Q2	Q3	Q4		Q1*	Q2*	Q3	Q4*		Q1A	Q2A	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	1,961	2,129	2,406	8,237	2,558	2,363	2,447	2,540	9,908
COGS	4,610	1,530	1,402	1,450	1,514	5,896	1,851	1,260	999	1,133	5,243	1,297	1,319	1,578	1,694	5,889	1,887	1,726	1,831	1,917	7,361
Gross Profit	1,078	5	(43)	48	(65)	(55)	(449)	(267)	107	169	(440)	443	642	551	712	2,348	672	636	616	624	2,547
SG&A	610	112	120	116	107	455	102	90	80	82	354	97	100	100	103	400	106	109	113	116	444
R&D	805	163	180	170	167	680	178	168	162	139	647	137	148	145	149	579	154	158	163	168	644
Restructuring	19	13	471	8	4	496	(66)	105	19	12	70	(1)	(1)	-	-	(2)	-	-	-	-	-
Other	(76)	(23)	(42)	(21)	(5)	(91)	9	79	92	(15)	165	9	(20)	-	-	(11)	-	-	-	-	-
Operating Expenses	1,358	265	729	273	273	1,540	223	442	353	218	1,236	242	227	245	252	966	260	268	276	284	1,087
Operating Income	(280)	(260)	(772)	(225)	(338)	(1,595)	(672)	(709)	(246)	(49)	(1,676)	201	415	306	460	1,382	412	369	340	340	1,460
Interest Income	103	9	3	(6)	(9)	(3)	(31)	(43)	(31)	(43)	(148)	(45)	(44)	(45)	(45)	(179)	(45)	(45)	(45)	(45)	(180)
Other Non-Opn Inc.	9	(1)	(6)	-	(6)	(13)	(10)	(1)	(3)	(1)	(15)	56	(1)	-	-	55	-	-	-	-	-
Tax Expense	30	7	(4)	13	2	18	13	5	(2)	(13)	3	(7)	4	10	10	17	10	10	10	10	40
Minority Interest	(122)	(3)	(6)	8	11	10	8	(5)	(12)	(20)	(29)	(15)	(1)	-	-	(16)	-	-	-	-	-
Net Income	(320)	(262)	(777)	(236)	(344)	(1,619)	(718)	(763)	(290)	(100)	(1,871)	204	365	251	405	1,225	357	314	285	285	1,240
EPS-basic	(\$0.42)	(\$0.34)	(\$1.01)	(\$0.31)	(\$0.45)	(\$2.10)	(\$0.93)	(\$0.99)	(\$0.36)	(\$0.12)	(\$2.34)	\$0.24	\$0.43	\$0.30	\$0.48	\$1.45	\$0.42	\$0.37	\$0.34	\$0.34	\$1.46
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	847.6	847.6	847.6	847.3	847.6	847.6	847.6	847.6	847.6
EPS-diluted	(\$0.42)	(\$0.34)	(\$1.01)	(\$0.31)	(\$0.45)	(\$2.10)	(\$0.93)	(\$0.99)	(\$0.36)	(\$0.12)	(\$2.34)	\$0.23	\$0.39	\$0.25	\$0.40	\$1.22	\$0.35	\$0.31	\$0.28	\$0.28	\$1.23
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	1,005.3	1,005.6	1,005.6	1,004.3	1,005.6	1,005.6	1,005.6	1,005.6	1,005.6
EPS-pro forma	(\$0.39)	(\$0.26)	(\$0.41)	(\$0.31)	(\$0.28)	(\$1.25)	(\$0.74)	(\$0.80)	(\$0.50)	(\$0.18)	(\$2.19)										
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%	32.7%	25.9%	29.6%	28.5%	26.3%	26.9%	25.2%	24.5%	25.7%
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%	5.1%	4.7%	4.3%	4.9%	4.1%	4.6%	4.6%	4.6%	4.5%
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%	7.5%	6.8%	6.2%	7.0%	6.0%	6.7%	6.7%	6.6%	6.5%
Operating Expense	23.9%	17.3%	53.6%	18.2%	18.8%	26.4%	15.9%	44.5%	31.9%	16.7%	25.7%	13.9%	11.6%	11.5%	10.5%	11.7%	10.2%	11.3%	11.3%	11.2%	11.0%
Operating Income	-4.9%	-16.9%	-56.8%	-15.0%	-23.3%	-27.3%	-47.9%	-71.4%	-22.2%	-3.8%	-34.9%	11.6%	21.2%	14.4%	19.1%	16.8%	16.1%	15.6%	13.9%	13.4%	14.7%
Interest/Other Income	2.0%	0.5%	-0.2%	-0.4%	-1.0%	-0.3%	-2.9%	-4.4%	-3.1%	-3.4%	-3.4%	0.6%	-2.3%	-2.1%	-1.9%	-1.5%	-1.8%	-1.9%	-1.8%	-1.8%	-1.8%
Tax Rate	-17.9%	-2.8%	0.5%	-5.6%	-0.6%	-1.1%	-1.8%	-0.7%	0.7%	14.0%	-0.2%	-3.3%	1.1%	3.8%	2.4%	1.4%	2.7%	3.1%	3.4%	3.4%	3.1%
Net Income	-5.6%	-17.1%	-57.2%	-15.8%	-23.7%	-27.7%	-51.2%	-76.8%	-26.2%	-7.7%	-39.0%	11.7%	18.6%	11.8%	16.8%	14.9%	13.9%	13.3%	11.6%	11.2%	12.5%
Qtr-to-Qtr Growth																					
Revenue		6.8%	-11.5%	10.2%	-3.3%		-3.2%	-29.2%	11.4%	17.7%		33.6%	12.7%	8.6%	13.0%		6.3%	-7.7%	3.6%	3.8%	
Operating Expenses		-20.7%	175.1%	-62.6%	0.0%		-18.3%	98.2%	-20.1%	-38.2%		11.0%	-6.2%	7.9%	3.0%		3.0%	3.0%	3.0%	3.0%	
Operating Income		61.5%	197%	-70.9%	50.2%		98.8%	5.5%	-65.3%	-80.1%		-510%	106.5%	-26.3%	50.2%		-10%	-10.5%	-7.8%	-0.1%	
Net Income		65.8%	197%	-69.6%	45.8%		108.7%	6.3%	-62.0%	-65.5%		-304%	79%	-31.2%	61.2%		-12%	-12.1%	-9.1%	-0.1%	
EPS		65.6%	196%	-69.6%	45.7%		108.6%	6.2%	-63.8%	-66.8%		-292%	70%	-35.5%	61.2%		-12%	-12.1%	-9.1%	-0.1%	
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%	97.5%	92.5%	84.8%	71.5%	47.0%	20%	14.9%	5.6%	20.3%
Operating Expenses	59.8%	-20.2%	86.4%	-9.3%	-18.3%	13.4%	-15.8%	-39.4%	29.3%	-20.1%	-19.7%	8.5%	-48.6%	-30.6%	15.8%	-21.8%	7.4%	17.9%	12.6%	12.6%	12.5%
Operating Income	-180%	-338%	2171%	15.4%	110%	470%	158%	-8.2%	9.3%	-85.5%	5.1%	-129.9%	-158.5%	-224%	-1038%	-182%	104.9%	-11.2%	11.1%	-26.1%	5.7%
Net Income	-178%	-328%	1394%	4.9%	118%	406%	174%	-1.8%	22.9%	-70.9%	15.6%	-128.4%	-147.8%	-187%	-504.5%	-165%	75%	-14.1%	13.5%	-29.7%	1.2%
EPS	-174%	-330%	1387%	4.5%	117%	404%	173.5%	-2.0%	16.8%	-73.4%	11.5%	-124.5%	-139.2%	-170%	-439.6%	-152%	56%	-19.4%	13.5%	-29.7%	1.1%

Micron Technology

Financial Summary

dollars in millions

Fiscal year ends August

	FY2007	FY2008	FY2009	F1Q09	F2Q09	F3Q09	F4Q09	F1Q10	F2Q10
Assets									
Cash and equivalents	2,616	1,362	1,485	1,028	932	1,306	1,485	1,565	1,870
Net accounts receivable	<u>994</u>	<u>1,032</u>	<u>798</u>	<u>1,031</u>	<u>654</u>	<u>750</u>	<u>798</u>	<u>1,091</u>	<u>1,072</u>
Quick Assets	3,610	2,394	2,283	2,059	1,586	2,056	2,283	2,656	2,942
Inventory	1,532	1,291	987	883	859	999	987	1,037	1,075
Other	<u>92</u>	<u>94</u>	<u>74</u>	<u>95</u>	<u>78</u>	<u>73</u>	<u>74</u>	<u>76</u>	<u>72</u>
Current Assets	5,234	3,779	3,344	3,037	2,523	3,128	3,344	3,769	4,089
Property, plant and eqt, net	8,279	8,811	7,089	8,460	7,910	7,536	7,089	6,876	6,876
Goodwill and intangibles	916	364	344	354	382	355	344	334	334
Long-term equities	0	84	315	432	371	306	315	366	366
Other	<u>389</u>	<u>392</u>	<u>367</u>	<u>393</u>	<u>340</u>	<u>339</u>	<u>367</u>	<u>381</u>	<u>287</u>
Total Assets	14,818	13,430	11,459	12,676	11,526	11,664	11,459	11,726	11,952
Liabilities and Shareholders Equity									
Current portion l-t debt	423	275	424	343	353	372	424	618	725
Accounts payable	1,385	1,111	1,037	943	950	1,037	1,037	1,059	1,040
Deferred Income	84	114	209	192	195		209	212	
Other	<u>134</u>	<u>98</u>	<u>222</u>	<u>157</u>	<u>139</u>	<u>416</u>	<u>222</u>	<u>353</u>	<u>482</u>
Current Liabilities	2,026	1,598	1,892	1,635	1,637	1,825	1,892	2,242	2,247
Long-term debt	1,987	2,451	2,379	2,523	2,542	2,752	2,379	2,143	1,994
Other	<u>446</u>	<u>338</u>	<u>249</u>	<u>332</u>	<u>261</u>	<u>260</u>	<u>249</u>	<u>250</u>	<u>293</u>
Total Liabilities	4,459	4,387	4,520	4,490	4,440	4,837	4,520	4,635	4,534
Minority Interest	2,607	2,865	1,986	2,702	2,344	2,130	1,986	1,896	1,816
Common stock	6,595	6,642	7,342	6,650	6,662	6,926	7,342	7,372	
Retained earnings	1,164	(456)	(2,385)	(1,162)	(1,913)	(2,203)	(2,385)	(2,181)	
Other	<u>(7)</u>	<u>(8)</u>	<u>(4)</u>	<u>(4)</u>	<u>(7)</u>	<u>(26)</u>	<u>(4)</u>	<u>4</u>	
Total MU Shareholders Equity	<u>7,752</u>	<u>6,178</u>	<u>4,953</u>	<u>5,484</u>	<u>4,742</u>	<u>4,697</u>	<u>4,953</u>	<u>5,195</u>	<u>5,602</u>
Total Liabilities and Equity	14,818	13,430	11,459	12,676	11,526	11,664	11,459	11,726	11,952
Sales and Income									
Revenue	5,688	5,841	4,803	1,402	993	1,106	1,302	1,740	1,961
COGS	4,610	5,896	5,242	1,851	1,260	999	1,132	1,297	1,319
Net income	(320)	(1,619)	(439)	(706)	(751)	(290)	(88)	204	365
Other									
Capital Expenditures	4,090	2,916	632	334	139	93	66	111	180
Depreciation and Amortization	1,718	2,060	2,139	605	529	514	491	491	486
Shares (weighted average diluted)	769	773	801	773.3	773.9	813.3	844.3	1,000.7	1,005.3
Employees (units)		23,509		21,888	20,794				
Cash Flow from Operations	937	1,018	1,206	359	339	151	357	326	804
Ratios									
Liquidity									
Quick Ratio	1.78	1.50	1.21	1.26	0.97	1.13	1.21	1.18	1.31
Current Ratio	2.58	2.36	1.77	1.86	1.54	1.71	1.77	1.68	1.82
Leverage									
Debt Ratio	0.30	0.33	0.39	0.35	0.39	0.41	0.39	0.40	0.38
Long-term Debt/Capital	0.16	0.21	0.23	0.23	0.24	0.26	0.23	0.20	0.19
Asset Management									
Fixed Asset Turnover	1.4	0.7	0.6	0.65	0.49	0.57	0.71	1.00	1.14
Total Asset Turnover	0.8	0.4	0.4	0.43	0.33	0.38	0.45	0.60	0.66
Receivables DSO	63	64	60	66	59	61	55	56	49
Inventory Days	120	79	68	43	61	90	78	72	73
Inventory Turnover	6.0	4.2	4.6	6.81	5.79	4.30	4.56	5.13	5.00
Annual Revenue/Employee				0.247	0.186				
Profitability									
Gross Margin	19.0%	-0.9%	-9.1%	-32.0%	-26.9%	9.7%	13.1%	25.5%	32.7%
Net Margin	-5.6%	-27.7%	-9.1%	-50.4%	-75.6%	-26.2%	-6.8%	11.7%	18.6%
Return on Assets	-4.3%	-11.5%	-3.5%	-21.6%	-24.8%	-10.0%	-3.0%	7.0%	12.3%
Return on Equity	-8.3%	-23.2%	-7.9%	-48.4%	-58.8%	-24.6%	-7.3%	16.1%	27.0%
Per Share Data									
Book Value/Share	\$10.08	\$8.00	\$6.19	\$7.09	\$6.13	\$5.78	\$5.87	\$5.19	\$5.57
Tangible Book Value/Share	\$8.89	\$7.53	\$5.76	\$6.63	\$5.63	\$5.34	\$5.46	\$4.86	\$5.24
Cash/Share (gross)	\$3.40	\$1.76	\$1.85	\$1.33	\$1.20	\$1.61	\$1.76	\$1.56	\$1.86
Cash/Share (net)	\$0.27	(\$1.77)	(\$1.65)	(\$2.38)	(\$2.54)	(\$2.24)	(\$1.56)	(\$1.20)	(\$0.84)
Earnings/Share	(\$0.42)	(\$2.10)	(\$0.55)	(\$0.91)	(\$0.97)	(\$0.36)	(\$0.10)	\$0.20	\$0.36

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	2QA	3Q	4Q	1Q	2Q	3Q	4Q
DRAM																
Bits Sold	25.0%	0.0%	10.0%	-5.0%	35.0%	0.0%	18.0%	18.0%	25.0%	17.0%	0.0%	20.0%	17.0%	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%	7.0%	5.0%	-5.0%	-12.0%	-7.5%	-7.5%	-7.5%
Revenue	859.5	748.4	802.7	763.9	689.2	483.0	547.7	708.8	1,048.8	1,313.0	1,378.6	1,571.7	1,618.2	1,646.5	1,675.3	1,704.6
Royalties (included)	5.0	-	-	38.0	36.0	33.0	32.0	34.0	35.0	34.0						
Revenue growth		-12.9%	7.3%	-4.8%	-9.8%	-29.9%	13.4%	29.4%	48.0%	25.2%						
Revenue % (incl roy)	56.0%	55.1%	53.6%	52.7%	49.2%	48.6%	49.5%	54.3%	60.3%							
Production Bits		0.0%	15.0%	15.0%	23.0%	-8.0%	15.0%	20.0%	30.0%	12.0%						
DDR2/3 Revenue	491.2	407.7	449.4	405.7	350.5	258.2	331.8	470.2	783.0							
DDR2/3 Revenue %	32.0%	30.0%	30.0%	28.0%	25.0%	26.0%	30.0%	36.0%	45.0%							
Cost/bit change	-10.0%	-15.0%	-15.0%	-5.0%	-12.0%	-5.0%	-11.0%	-21.0%	-7.0%	-7.0%	0.0%	-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%	17.7%	34.8%	41.5%	45.2%	38.0%	37.9%	37.7%	37.6%
Gross Profit	43.0	19.7	97.4	135.5	(89.4)	(174.0)	(166.6)	(64.3)	186.0	456.8						
COGS	816.5	728.6	705.3	628.4	778.6	657.0	714.2	773.1	862.8	856.2	806.1	861.1	1,003.1	1,023.0	1,043.2	1,063.8
NAND																
Bits Sold	60.0%	30.0%	40.0%	10.0%	40.0%	-8.0%	20.3%	23.5%	16.0%	0.0%	18.0%	25.0%	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%	-1.0%	0.0%	-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	470.2	574.2	568.5	670.8	754.6	860.3	636.2	691.8	755.5
Revenue growth		-6.1%	10.2%	-3.3%	5.0%	-19.9%	1.0%	9.0%	22.1%	-1.0%						
Revenue %	33.0%	35.0%	35.0%	35.0%	38.0%	43.0%	39.0%	36.0%	33.0%	33.0%						
Production Bits		30.0%	55.0%	12.0%	17.0%	-5.0%	30.0%		30.0%	-1.0%						
Cost/bit change	-15.0%	-25.0%	-25.0%	-15.0%	-14.0%	-25.0%	-35.0%	-13.0%	-2.0%	-6.0%	-8.0%	-15.0%	-12.0%	-10.0%	-10.0%	-10.0%
Gross Margin	-6.7%	-18.4%	-18.4%	-24.9%	-34.9%	-29.2%	-20.7%	-20.3%	-14.6%	-10.4%	-3.2%	0.2%	6.6%	2.0%	-2.4%	-2.3%
gm est	-6.7%	-17.0%	-20.7%	-25.3%	-37.7%	-32.3%	13.6%	33.0%	44.6%	35.5%						
Gross Profit	(34.0)	(80.7)	(108.4)	(128.5)	(200.6)	(138.0)	58.6	155.3	256.0	201.7						
COGS	540.5	556.4	632.7	635.6	733.4	565.0	372.8	314.9	318.2	366.8	692.3	753.3	803.6	623.4	708.3	772.7
Memory Revenue																
Revenue	1,366.0	1,224.0	1,327.0	1,271.0	1,222.0	910.0	979.0	1,179.0	1,623.0	1,881.45						
Revenue Growth		-10.4%	8.4%	-4.2%	-3.9%	-25.5%	7.6%	20.4%	37.7%	15.9%						
Revenue %	89.0%	90.1%	88.6%	87.7%	87.2%	91.6%	88.5%	90.3%	93.3%	95.9%						
Gross Profit	(39.0)	(76.0)	(11.0)	(115.0)	(502.0)	(269.0)	104.0	145.0	442.0	658.51						
Gross Margin	-2.9%	-6.2%	-0.8%	-9.0%	-41.1%	-29.6%	10.6%	12.3%	27.2%	35.0%						
Adjusted Gross Profit	9.0	(61.0)	(11.0)	77.0	(290.0)	(312.0)	(108.0)	91.0	442.0	658.51						
Adjusted Gross Margin	0.7%	-5.0%	-0.8%	6.1%	-23.7%	-34.3%	-11.0%	7.7%	27.2%	35.0%						
COGS	1,357.0	1,285.0	1,338.0	1,194.0	1,512.0	1,222.0	1,087.0	1,088.0	1,181.0	1,222.9						
Image Sensors																
Revenue	169.0	135.0	171.0	178.0	180.0	83.0	127.0	127.0	117.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
Revenue growth		-20.1%	26.7%	4.1%	1.1%	-53.9%	53.0%	0.0%	-7.9%	-31.6%						
Revenue %	11.0%	9.9%	11.4%	12.3%	12.8%	8.4%	11.5%	9.7%	6.7%	4.1%						
Gross Profit	44.0	33.0	59.0	50.0	53.0	2.0	3.0	24.0	1.0	0.0						
Gross Margin	26.0%	24.4%	34.5%	28.1%	29.4%	2.4%	2.4%	18.9%	0.9%	-21.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
COGS	125.0	102.0	112.0	128.0	127.0	81.0	124.0	103.0	116.0	96.8	80.0	80.0	80.0	80.0	80.0	80.0
TOTAL																
Revenue	1,535.0	1,359.0	1,498.0	1,449.0	1,402.0	993.0	1,106.0	1,306.0	1,740.0	1,961.5	2,129.4	2,406.3	2,558.4	2,362.7	2,447.1	2,540.1
Royalty	5.0			38.0	36.0	33.0	32.0	34.0	35.0	34.0						
Revenue growth		-11.5%	10.2%	-3.3%	-3.2%	-29.2%	11.4%	18.1%	33.2%	12.7%	8.6%	13.0%	6.3%	-7.7%	3.6%	3.8%
COGS	1,482.0	1,387.0	1,450.0	1,392.0	1,639.0	1,303.0	1,211.0	1,191.0	1,297.0	1,319.7	1,578.4	1,694.4	1,886.7	1,726.4	1,831.5	1,916.5
Gross Profit	53.0	(28.0)	48.0	57.0	(237.0)	(310.0)	(105.0)	115.0	443.0	641.7	551.0	711.9	671.7	636.3	615.7	623.6
Gross Margin	3.5%	-2.1%	3.2%	3.9%	-16.9%	-31.2%	-9.5%	8.8%	25.5%	32.7%	25.9%	29.6%	26.3%	26.9%	25.2%	24.5%
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	1,961.0						
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	1,319.0						
Gross Margin	0.3%	-3.2%	3.2%	-4.5%	-32.0%	-26.9%	9.7%	13.1%	25.5%	32.7%						
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	1,319.0						
Adjusted Gross Margin	3.5%	-2.1%	3.2%	3.9%	-16.9%	-31.2%	-9.5%	8.9%	25.5%	32.7%						

Micron Technology

Valuation

Relative Valuation

Company	Ticker	Price 3/31/10	52-Week		CY EPS				CY P/E				Diluted Shares(mil)	CAP (\$ mil)	Price-Sales			FY Ends	
			Low	High	2008	2009	2010	2011	2008	2009	2010	2011			TTM	Cur FY	Nxt FY		
Micron Technology *	MU	10.37	3.78 - 11.34		-1.72	-1.26	1.39	1.17	NM	NM	7.5	8.9	1,005	10,425	1.7	1.3	1.1	Aug	
Advanced Micro Devices	AMD	9.27	2.92 - 10.04		-1.96	-1.53	-0.19	0.12	NM	NM	NM	77.3	791	7,333	1.4	1.1	1.1	Dec	
Atmel	ATML	5.04	3.25 - 5.40		0.17	-0.07	0.15	0.34	29.6	NM	33.6	14.8	477	2,402	2.0	1.7	1.5	Dec	
Intel *	INTC	22.29	14.62 - 22.75		0.92	1.17	1.47	1.65	24.2	19.1	15.2	13.5	5,650	125,939	3.6	3.0	2.8	Dec	
STMicroelectronics	STM	9.86	4.88 - 10.28		0.44	-0.73	0.47	0.76	22.4	NM	21.0	13.0	878	8,660	1.0	0.9	0.8	Dec-ADR	
Texas Instruments *	TXN	24.47	16.00 - 27.00		1.58	1.26	2.14	2.37	15.5	19.4	11.4	10.3	1,257	30,759	2.9	2.4	2.2	Dec	
Average									22.9	19.2	20.3	25.8				2.2	1.8	1.7	

Company	Ticker	Price 3/31/10	52-Week		CY EPS				CY P/E				Diluted Shares(mil)	CAP (\$ mil)	Price-Sales			FY Ends	
			Low	High	2008	2009	2010	2011	2008	2009	2010	2011			TTM	Cur FY	Nxt FY		
Micron Technology *	MU	10.37	3.78 - 11.34		-1.72	-1.26	1.39	1.17	NM	NM	7.5	8.9	1,005	10,425	1.7	1.3	1.1	Aug	
Integrated Silicon Solutions	ISSI	10.55	1.51 - 10.83		0	0.22	0.97	1.11	NM	48.0	10.9	9.5	26	271	1.6	1.2	1.0	Sep	
OmniVision	OVTI	17.18	6.38 - 17.48		0.47	0.09	0.84	0.99	36.6	NM	20.5	17.4	53	917	1.7	1.5	1.3	Apr	
SanDisk	SNDK	34.63	12.04 - 36.25		-2.07	1.31	2.71	2.81	NM	26.4	12.8	12.3	235	8,121	2.3	1.8	1.6	Dec	
SMART Modular	SMOD	7.72	1.31 - 8.74		0.39	0.2	0.83	0.82	19.8	38.6	9.3	9.4	65	502	1.1	0.8	0.7	Aug	
STEC	STEC	11.98	7.24 - 42.50		0.31	1.61	0.11	0.97	38.6	7.4	NM	12.4	52	618	1.7	2.9	1.8	Dec	
Average									31.7	30.1	13.4	12.2				1.7	1.6	1.3	

* Tokeneke estimate
Source: consensus as of 3/31/10

Historical Valuation

Company	Ticker	Price 3/31/10	Trailing 12-month					
			Price/Earnings		Price/Sales		Price/Book	
			Current	Historical*	Current	Historical*	Current	Historical*
Micron Technology	MU	\$10.37	NM		1.7		1.9	
			Average	50.2	Average	2.5	Average	2.5
			High	568.0	High	9.0	High	9.8
			Low	4.6	Low	0.3	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 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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