

16 June 2013 | 12 pages

Semiconductors (GICS) | Semiconductors (Citi)  
North America | United States

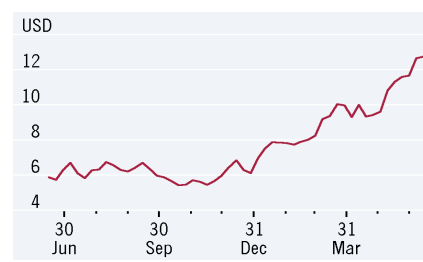
# Micron Technology Inc (MU)

## Improving Elpida Deal and Positive Memory Trends Keep Micron on Top Picks Live!

- Best Ideas
- Estimate Change
- Target Price Change

<b>Buy/High Risk</b>	<b>1H</b>
Price (14 Jun 13)	US\$12.76
Target price	US\$19.00
	from US\$13.50
Expected share price return	48.9%
Expected dividend yield	0.0%
<b>Expected total return</b>	<b>48.9%</b>
Market Cap	US\$13,144M

### Price Performance (RIC: MU.O, BB: MU US)



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- **Quick Take.** — With the Elpida deal nearing closure (bearing enhanced financial benefits due to yen devaluation) and memory prices likely to continue to rise, we remain positively biased to Micron shares, despite their 100% increase YTD. We estimate that Elpida will add \$0.88 in incremental earnings to Micron—at 10x (a 32% discount to the current market multiple), this represents \$8.80 in potential share price leverage or 147% of the ~\$6.00 increase in MU shares since the deal was announced. Of course, since this time, DRAM prices have risen steadily, up 75% YTD. While Micron was still money losing as of F2Q13, we see potential for a swing toward profitability in their upcoming results. And given the significant leverage in their model, if we are right that memory prices remain stable or rise from here, we estimate a substantial improvement in core Micron earnings to \$1.17 in FY14. Applying a similar 10x multiple to this figure and we derive a value for the core Micron of \$11.70 + \$8.80 for Elpida = \$20.50 or 61% potential upside. Adding the value of Elpida to our core Micron price target of \$13.50 results in \$22.30 or 75% potential upside. We reiterate MU as our Top Pick in semiconductors. We increase our PT to \$19, using our previous book-based valuation methodology; we recognize that should positive earnings become more stable, a shift to an earnings based methodology is conceivable.
- **Closing in on Closing.** — The final hurdle in Micron's proposed merger with Elpida Memory appears to have been crossed Friday, as US creditors failed to object Elpida's request that the U.S. bankruptcy court (Delaware) enforce its restructuring plan. Since its origin, we have consistently viewed the Elpida deal favorably (see: [Favorably Seals the Elpida Deal—The Benefits of Consolidation Ahead](#)), recognizing the benefits of industry consolidation, cost-effective capacity addition, and EPS accretion. We are further encouraged by the recent devaluation in the yen, noting that since Micron first announced the Elpida deal (7/2/2012), the Japanese yen has fallen 22% relative to the US dollar. Because Micron's offer was yen denominated, this has the effect of lowering the US dollar price for Elpida. We note that in pro forma numbers provided on 2/5/2013, Micron wrote the value of Elpida assets down to the dollar-denominated deal price. Based on the devaluation of the yen, the new deal price is ~US\$2.04B.
- **Accretion is Creeping Higher...** — If Micron were again to write the asset value of Elpida down to this lower level (we expect them to do so), there would be a related *(continued below...)*

EPS	Q1	Q2	Q3	Q4	FY	FC Cons
<b>2012A</b>	-0.19A	-0.29A	-0.32A	-0.24A	-1.04A	-1.04A
<b>2013E</b>	<b>-0.27A</b>	<b>-0.28A</b>	<b>-0.07E</b>	<b>0.33E</b>	<b>-0.28E</b>	<b>-0.39E</b>
Previous	-0.27A	-0.28A	-0.07E	0.20E	-0.42E	na
<b>2014E</b>	<b>0.45E</b>	<b>0.47E</b>	<b>0.55E</b>	<b>0.57E</b>	<b>2.05E</b>	<b>0.71E</b>
Previous	0.29E	0.30E	0.34E	0.31E	1.24E	na
<b>2015E</b>	<b>0.61E</b>	<b>0.64E</b>	<b>0.61E</b>	<b>0.61E</b>	<b>2.47E</b>	<b>1.10E</b>
Previous	0.40E	0.43E	0.39E	0.41E	1.63E	na

Source: Company Reports and dataCentral, Citi Research. FC Cons: First Call Consensus.

### See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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MU.O: Fiscal year end 31-Aug						Price: US\$12.76; TP: US\$19.00; Market Cap: US\$13,144m; Recomm: Buy/High Risk					
Profit & Loss (US\$m)	2011	2012	2013E	2014E	2015E	Valuation ratios	2011	2012	2013E	2014E	2015E
Sales revenue	8,788	8,234	10,059	15,751	16,359	PE (x)	78.4	-12.3	-46.3	6.2	5.2
Cost of sales	-7,030	-7,266	-7,796	-10,093	-10,181	PB (x)	1.5	1.6	1.7	1.1	0.8
Gross profit	1,758	968	2,263	5,657	6,178	EV/EBITDA (x)	5.5	8.6	6.5	3.3	2.7
Gross Margin (%)	20.0	11.8	22.5	35.9	37.8	FCF yield (%)	0.6	5.7	-9.8	11.2	14.8
EBITDA (Adj)	2,535	1,614	2,423	5,237	5,691	Dividend yield (%)	0	0	0	0	0
EBITDA Margin (Adj) (%)	28.8	19.6	24.1	33.2	34.8	Payout ratio (%)	0	0	0	0	0
Depreciation	-2,162	-2,231	-2,010	-2,280	-2,280	ROE (%)	2.0	-12.8	-3.7	23.1	19.1
Amortisation	0	0	0	0	0	Cashflow (US\$m)					
EBIT (Adj)	373	-617	413	2,957	3,411	EBITDA	2,535	1,614	2,423	5,237	5,691
EBIT Margin (Adj) (%)	4.2	-7.5	4.1	18.8	20.9	Working capital	-138	609	-1,587	-739	-770
Net interest	-101	-171	-294	-528	-528	Other	228	195	-174	-467	-467
Associates	0	0	0	0	0	Operating cashflow					
Non-op/Except	279	35	-156	8	8	Capex	-2,550	-1,699	-1,950	-2,500	-2,420
Pre-tax profit	551	-753	-37	2,437	2,891	Net acq/disposals	-159	0	0	0	0
Tax	-203	17	-18	-36	-36	Other	508	-613	-29	0	0
Extraord./Min.Int./Pref.div.	-181	-295	-228	-209	-207	Investing cashflow					
Reported net profit	167	-1,031	-283	2,192	2,649	Dividends paid	0	0	0	0	0
Net Margin (%)	1.9	-12.5	-2.8	13.9	16.2	Financing cashflow					
Core NPAT	167	-1,031	-283	2,192	2,649	Net change in cash	-595	603	-1,186	682	1,835
Per share data						Free cashflow to s/holders					
Reported EPS (\$)	0.16	-1.04	-0.28	2.05	2.47		75	719	-1,288	1,530	2,035
Core EPS (\$)	0.16	-1.04	-0.28	2.05	2.47						
DPS (\$)	0	0	0	0	0						
CFPS (\$)	2.56	2.44	0.64	3.76	4.15						
FCFPS (\$)	0.07	0.72	-1.25	1.43	1.89						
BVPS (\$)	8.57	7.77	7.36	11.30	15.78						
Wtd avg ord shares (m)	988	991	1,016	1,021	1,025						
Wtd avg diluted shares (m)	1,026	991	1,029	1,071	1,075						
Growth rates											
Sales revenue (%)	3.6	-6.3	22.2	56.6	3.9						
EBIT (Adj) (%)	-76.5	-265.4	166.9	616.2	15.4						
Core NPAT (%)	-91.0	-717.4	72.5	873.2	20.9						
Core EPS (%)	-90.8	-738.8	73.5	843.0	20.4						
Balance Sheet (US\$m)											
Cash & cash equiv.	2,160	2,559	1,373	2,055	3,890						
Accounts receivables	1,497	1,289	2,279	2,345	2,387						
Inventory	2,080	1,812	2,674	2,508	2,535						
Net fixed & other tangibles	8,023	7,407	8,785	11,405	13,945						
Goodwill & intangibles	414	386	407	407	407						
Financial & other assets	578	875	1,808	1,808	1,808						
<b>Total assets</b>	<b>14,752</b>	<b>14,328</b>	<b>17,326</b>	<b>20,529</b>	<b>24,972</b>						
Accounts payable	1,830	1,641	1,953	1,953	1,953						
Short-term debt	140	224	1,126	1,126	1,126						
Long-term debt	1,861	3,038	4,936	4,088	3,888						
Provisions & other liab	1,069	1,008	893	893	893						
<b>Total liabilities</b>	<b>4,900</b>	<b>5,911</b>	<b>8,908</b>	<b>8,060</b>	<b>7,860</b>						
Shareholders' equity	8,470	7,700	7,672	11,723	16,366						
Minority interests	1,382	717	746	746	746						
<b>Total equity</b>	<b>9,852</b>	<b>8,417</b>	<b>8,418</b>	<b>12,469</b>	<b>17,112</b>						
<b>Net debt</b>	<b>-159</b>	<b>703</b>	<b>4,689</b>	<b>3,159</b>	<b>1,124</b>						
Net debt to equity (%)	-1.6	8.4	55.7	25.3	6.6						

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For definitions of the items in this table, please click [here](#).

- *(continued from above...)* benefit to Elpida's depreciation (i.e. lower depreciation), increasing the profitability of Elpida's operating model. Using the same pro forma analysis Micron provided in February (see: [Issues Pro Forma Financials for Elpida](#)), the benefit of this lower depreciation would have the effect of increasing Elpida's gross margin to 27.0% (was 26.0% for the period ending 11/29/12). The lower depreciation reverses Elpida's \$140M operating loss to a \$64M operating profit, which is partially offset by incremental interest expense of \$27M. Thus, while beneficial to gross margin, the bottom-line impact from lower depreciation is \$0.03 accretive (was \$0.02 accretive).
- **...and Memory Prices Continue to Rise.** — Since Micron provided the pro forma figures, we note DRAM prices have risen 40%, further adding to Elpida's profitability. Although our analysis involves several assumptions, we estimate that this increase in DRAM pricing increases the accretion of Elpida to \$0.88/year all else being equal. We remain confident that memory prices are poised to continue their upward trajectory, based on recent field work we have done in the memory supply chain. Our checks suggest that NAND memory is on allocation through 3Q13 (including expected utilization increases from Toshiba), with contract prices pointing to low-single-digit ASP increases q/q. Meanwhile, DRAM prices remain firm, despite weak PC fundamentals, as mobile DRAM demand remains high. At several points in the handset supply chain, we heard of mobile memory shortages, affecting the China white-phone market most notably. We concur with many opinions in the supply chain that this shortage will persist throughout the year. As a reminder, Citi expects mobile (smartphone, tablets) / server (data center, cloud computing) / graphics (new game consoles) / consumer (digital TV) applications to drive around 30% DRAM bit demand growth this year, versus supply growth of 27% (see: [Global Memory Beat - Sustaining Strength on Consolidation, Discipline and Technology](#)).
- **Upcoming Micron Quarter.** — We suspect the improved memory markets to drive meaningful improvement in Micron earnings toward profitability, and we note potential upside to our estimates for the quarter. We model +5% increase for Micron's DRAM ASP, noting the average DRAM contract price increase during the quarter was +37.4%. We assume +3% DRAM bit growth, consistent with Micron's guidance. For NAND, we model -5% ASP decline, consistent with Micron's guidance, noting NAND contract prices rose 16% on average during the quarter. NAND bit growth is assumed to be 7%, in line with Micron's guidance. When then considering NOR revenues of \$187M (flat vs. last quarter), we model revenues of \$2,274M and EPS of (\$0.07), compared to consensus of \$2,235M and \$0.02.

## Micron Technology Inc

(MU.O; US\$12.76; 1H)

**Catalyst and Thesis** — Our positive view on Micron begins with a typical “buy the most challenged companies as the cycle is turning” mentality. We add that we remain positively disposed to the direction of DRAM prices, reflecting lowered inventory and stabilizing order trends. When then considering the restrained supply addition in both DRAM and NAND set for 2013, we believe memory prices are poised for an upward move upon any positive demand inflection. We expect the Elpida deal closing will also be a catalyst.

## DETAILS

**Our Elpida Estimates.** Our estimates for Elpida assume accretion from ASP leverage as well as consolidation adjustments for lower depreciation. We estimate Elpida contributes \$0.93 incremental EPS to Micron in C2014, driven by significant ASP leverage in their model and by lower depreciation after consolidation adjustments. We estimate Elpida's quarterly sales have grown to \$1.1B, namely on a 30% increase in ASP since 3Q12. On this increase alone we estimate quarterly gross margin rose to 22% from -1%. After adjusting for lower depreciation due to asset write-downs from consolidation, we estimate gross margin increases further to 37%. On additional ASP leverage in 2014 and modest cost reductions, we see Elpida's gross margin trending higher from this level to 44% for all of C2014. After opex of \$808M, we arrive at an operating margin of 27.1% for Elpida in C2014. After deducting interest expense of \$308M (adjusted for the imputed interest from Elpida's installment payments), taxes, equity method income, and minority interest, we arrive at net income of \$995M, or \$0.93 per share of Micron.

**Significant Leverage from ASP and Cost Changes.** Micron ex-Elpida C2014 EPS impact for every 1% change in Micron's DRAM price is worth \$0.05 to \$0.06 (the sensitivity increases the more the price increases). Elpida's EPS contribution to Micron is between \$0.04 and \$0.05 for every 1% change in ASP, with similar leverage exhibited for greater price increases.

**Figure 1. Micron and Elpida's Sensitivity to DRAM ASP % Changes**

ASP % Change	Micron EPS impact	Elpida EPS impact
-6%	-\$0.306	-\$0.257
-5%	-\$0.256	-\$0.215
-4%	-\$0.206	-\$0.173
-3%	-\$0.155	-\$0.130
-2%	-\$0.104	-\$0.087
-1%	-\$0.052	-\$0.044
0%	\$0.000	\$0.000
1%	\$0.053	\$0.044
2%	\$0.106	\$0.089
3%	\$0.160	\$0.134
4%	\$0.214	\$0.180
5%	\$0.269	\$0.226
6%	\$0.325	\$0.273

Source: Citi Research

Figure 2. Micron and Elpida's Sensitivity to DRAM Cost % Changes

Cost % Change	Micron EPS impact	Elpida EPS impact
-6%	\$0.204	\$0.144
-5%	\$0.170	\$0.120
-4%	\$0.137	\$0.097
-3%	\$0.103	\$0.073
-2%	\$0.069	\$0.049
-1%	\$0.035	\$0.025
0%	\$0.000	\$0.000
1%	-\$0.035	-\$0.025
2%	-\$0.071	-\$0.050
3%	-\$0.106	-\$0.075
4%	-\$0.143	-\$0.101
5%	-\$0.179	-\$0.127
6%	-\$0.216	-\$0.153

Source: Citi Research

Figure 3. Micron's EPS sensitivity to DRAM pricing & cost

ASP per Bit	DRAM Cost per Bit												
	\$0.73	\$0.73	\$0.74	\$0.75	\$0.76	\$0.76	\$0.77	\$0.78	\$0.79	\$0.79	\$0.80	\$0.81	\$0.82
\$1.09	\$1.18	1.15	1.11	1.08	1.05	1.01	0.98	0.94	0.91	0.87	0.83	0.80	0.76
\$1.10	\$1.23	1.20	1.16	1.13	1.10	1.06	1.03	0.99	0.96	0.92	0.88	0.85	0.81
\$1.11	\$1.28	1.25	1.21	1.18	1.15	1.11	1.08	1.04	1.01	0.97	0.93	0.90	0.86
\$1.13	\$1.33	1.30	1.27	1.23	1.20	1.16	1.13	1.09	1.06	1.02	0.99	0.95	0.91
\$1.14	\$1.38	1.35	1.32	1.28	1.25	1.21	1.18	1.14	1.11	1.07	1.04	1.00	0.96
\$1.15	\$1.43	1.40	1.37	1.33	1.30	1.27	1.23	1.20	1.16	1.12	1.09	1.05	1.01
\$1.16	\$1.49	1.45	1.42	1.39	1.35	1.32	1.28	1.25	1.21	1.18	1.14	1.10	1.07
\$1.17	\$1.54	1.51	1.47	1.44	1.41	1.37	1.34	1.30	1.27	1.23	1.19	1.16	1.12
\$1.18	\$1.59	1.56	1.53	1.49	1.46	1.42	1.39	1.35	1.32	1.28	1.25	1.21	1.17
\$1.19	\$1.65	1.61	1.58	1.55	1.51	1.48	1.44	1.41	1.37	1.34	1.30	1.26	1.23
\$1.21	\$1.70	1.67	1.63	1.60	1.57	1.53	1.50	1.46	1.43	1.39	1.36	1.32	1.28
\$1.22	\$1.76	1.72	1.69	1.66	1.62	1.59	1.55	1.52	1.48	1.45	1.41	1.37	1.34
\$1.23	\$1.81	1.78	1.75	1.71	1.68	1.64	1.61	1.57	1.54	1.50	1.47	1.43	1.39

Source: Citi Research

Figure 4. Elpida's contribution to Micron's EPS sensitivity to DRAM pricing & cost

ASP per Bit	DRAM Cost per Bit												
	\$0.45	\$0.45	\$0.46	\$0.46	\$0.46	\$0.47	\$0.47	\$0.48	\$0.48	\$0.49	\$0.49	\$0.50	\$0.50
\$0.80	\$0.82	\$0.80	\$0.78	\$0.75	\$0.73	\$0.71	\$0.68	\$0.66	\$0.63	\$0.61	\$0.58	\$0.55	\$0.53
\$0.81	\$0.87	\$0.84	\$0.82	\$0.80	\$0.77	\$0.75	\$0.72	\$0.70	\$0.67	\$0.65	\$0.62	\$0.60	\$0.57
\$0.81	\$0.91	\$0.89	\$0.86	\$0.84	\$0.81	\$0.79	\$0.76	\$0.74	\$0.71	\$0.69	\$0.66	\$0.64	\$0.61
\$0.82	\$0.95	\$0.93	\$0.90	\$0.88	\$0.86	\$0.83	\$0.81	\$0.78	\$0.76	\$0.73	\$0.71	\$0.68	\$0.65
\$0.83	\$0.99	\$0.97	\$0.95	\$0.92	\$0.90	\$0.88	\$0.85	\$0.83	\$0.80	\$0.78	\$0.75	\$0.72	\$0.70
\$0.84	\$1.04	\$1.01	\$0.99	\$0.97	\$0.94	\$0.92	\$0.89	\$0.87	\$0.84	\$0.82	\$0.79	\$0.77	\$0.74
\$0.85	\$1.08	\$1.06	\$1.03	\$1.01	\$0.99	\$0.96	\$0.94	\$0.91	\$0.89	\$0.86	\$0.84	\$0.81	\$0.79
\$0.86	\$1.13	\$1.10	\$1.08	\$1.06	\$1.03	\$1.01	\$0.98	\$0.96	\$0.93	\$0.91	\$0.88	\$0.86	\$0.83
\$0.86	\$1.17	\$1.15	\$1.12	\$1.10	\$1.08	\$1.05	\$1.03	\$1.00	\$0.98	\$0.95	\$0.93	\$0.90	\$0.87
\$0.87	\$1.22	\$1.19	\$1.17	\$1.15	\$1.12	\$1.10	\$1.07	\$1.05	\$1.02	\$1.00	\$0.97	\$0.95	\$0.92
\$0.88	\$1.26	\$1.24	\$1.21	\$1.19	\$1.17	\$1.14	\$1.12	\$1.09	\$1.07	\$1.04	\$1.02	\$0.99	\$0.97
\$0.89	\$1.31	\$1.28	\$1.26	\$1.24	\$1.21	\$1.19	\$1.16	\$1.14	\$1.11	\$1.09	\$1.06	\$1.04	\$1.01
\$0.90	\$1.35	\$1.33	\$1.31	\$1.28	\$1.26	\$1.24	\$1.21	\$1.19	\$1.16	\$1.14	\$1.11	\$1.08	\$1.06

Source: Citi Research

## Micron Technology Inc

### Company description

Micron Technology (MU) is the fourth-largest WW manufacturer of Dynamic Random Access Memory (DRAM) with ~13% market share. Approximately 38% of Micron's revenues are from DRAM sales (PC DRAM & Specialty DRAM). Micron is the third-largest manufacturer of NAND Flash (~45% of sales), with NOR flash accounting for ~11% of sales from its acquisition of Numonyx. Micron also manufactures CMOS image sensors for Aptina under a wafer supply agreement (~6% of sales), and is a ~30% owner of Inotera (although taking more than 50% of wafers due to additional equity investment), and 50% owner of both MeiYa and Transform. Micron partnered with Intel in Jan 2006 to form a NAND Flash manufacturing joint venture, IM Flash Technologies (IMFT). Under the updated agreement with Intel, Micron will own Intel's prior portion of the fab in Manassas, and IM Flash Singapore, with continued shared ownership of the Lehi, Utah fab (Micron 51% ownership). In June 2006, Micron acquired Lexar Media, a manufacturer of Flash memory products. DRAM, NAND, and NOR prices are a function of supply and demand, and are subject to extreme volatility, impacting revenues and operating profitability.

### Investment strategy

We rate Micron Technology shares Buy/High Risk (1H). Micron is seeing limited benefit in the near term from recovering memory pricing (DRAM ASPs impacted by a mix-shift to non-PC memory where leverage to price increases are less). We note, however, that less volatility relative to DRAM swings is historically normal for Micron. Meanwhile, we remain optimistic about DRAM pricing given improving NT PC dynamics (evident in customer demand), lean inventories, and the bankruptcy of Elpida. Given the longer-term relationship between MU and DRAM pricing, and noting our positive view of the semiconductor cycle, we remain positive on the shares.

### Valuation

Our target price for Micron is \$19.00. Our valuation methodology uses a tangible book value multiple. Our price target assumes the share price will trade to our targeted tangible book value 12-24 months forward. We apply a price-to-tangible book value multiple of 1.5x to our estimate for Micron's estimated tangible BV/share forward eight quarters of \$12.55, to arrive at a value of \$18.83, which we round to \$19.00.

### Risks

We rate Micron shares High Risk primarily due to the competitive landscape facing the company, and the extreme volatility in the pricing of commodity DRAM and NAND. The key risks to our investment thesis on MU are:

Micron is a supplier of commodity memory and is subject to the seasonal and cyclical ups and downs of the PC market and the semiconductor industry, which constitutes both upside and downside risk to our target price.

Approximately 35-40% of Micron's revenues are from DRAM. Steeper-than-expected price declines in commodity or specialty DRAM, or changes in DRAM supply/demand balance, could impact Micron's profitability. A decline in PC demand due to weakness in consumer spending or cannibalization by tablets could impact DRAM demand. Conversely, a greater-than-expected increase in DRAM pricing or cost declines could result in revenue and profitability above our estimates.

Approximately 40% of Micron's revenues are from NAND Flash. Micron's profitability could be impacted by declines in NAND ASPs which are faster than Micron's NAND production cost reductions, or by changes in industry NAND S/D balance. Conversely a greater than expected increase in NAND pricing or cost declines could result in revenue and profitability above our estimates.

If PC and consumer electronics demand declines in a weak macro environment, there is risk of supply/demand imbalances in the DRAM and NAND industries.

Micron's profitability could be impacted by declines in NOR ASPs which are faster than Micron's NOR production cost reductions, or by changes in industry NOR S/D balance.

If any of these risk factors has a greater downside impact than we anticipate, the share price will likely have difficulty attaining our target price. Conversely, if the impact of any of these upside risks is greater than we anticipate, the stock could exceed our target price.

## Appendix A-1

### Analyst Certification

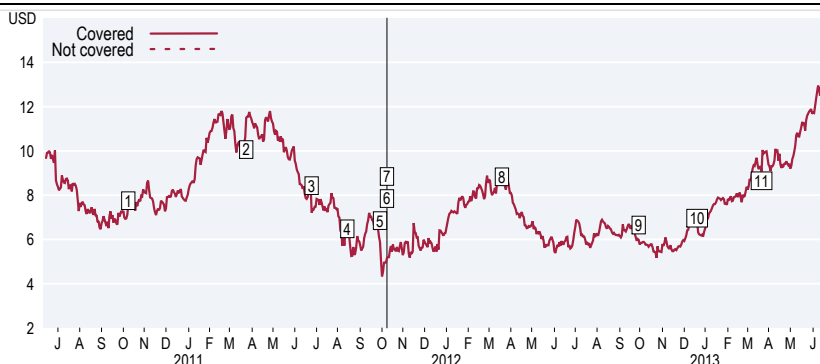
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### IMPORTANT DISCLOSURES

#### Micron Technology Inc (MU)

#### Ratings and Target Price History Fundamental Research

Analyst: Glen Yeung



	Date	Rating	Target Price	Closing Price
1	8-Oct-10	2S	*9.00	7.59
2	24-Mar-11	2S	*13.00	11.50
3	24-Jun-11	2S	*10.50	7.21
4	14-Aug-11	2S	*8.00	6.18

	Date	Rating	Target Price	Closing Price
5	29-Sep-11	2S	*7.00	5.87
6	8-Oct-11	Stock rating system changed		
7	8-Oct-11	*1H	7.00	4.95
8	20-Mar-12	1H	*12.00	8.57

	Date	Rating	Target Price	Closing Price
9	28-Sep-12	1H	*11.00	5.98
10	20-Dec-12	1H	*10.00	6.79
11	21-Mar-13	1H	*13.50	9.07

\* Indicates change

Rating/target price changes above reflect Eastern Standard Time



## Micron Technology Inc (MU)

### Ratings and Target Price History

#### Best Ideas Research

#### Relative Call (3 Month)

Analyst: Glen Yeung



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% of companies in each rating category that are investment banking clients

12 Month Rating			Relative Rating		
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48%	39%	12%	7%	87%	7%
53%	49%	43%	65%	49%	51%

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