

Current Price	Target Price	Upside
\$90.78	\$120	32.19%

Buy: Micron Technology

NASDAQ: MU

Technology Sector

Allison Choi

Executive Summary

Recommendation

BUY: MU

Current Price
\$90.78

Target Price
\$120

Upside
32.19%

Past 5 Years Average Performance

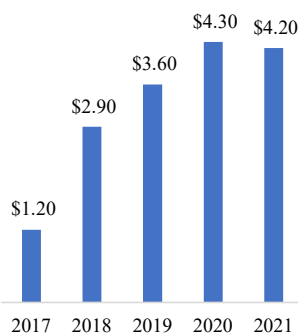
Revenue (Billions)



Op. Cash Flow (Billions)



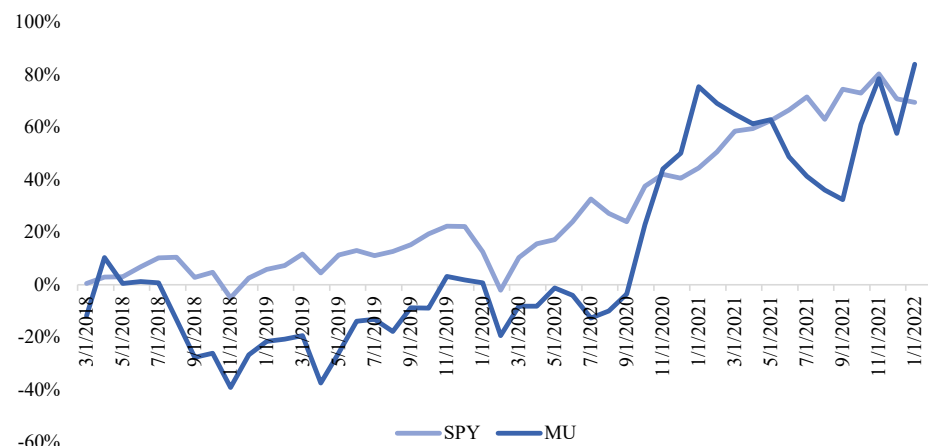
Free Cash Flow (Billions)



Key Statistics and Company Information

Market Cap	\$107.5 B
Diluted EPS	\$2.04
Revenue	\$21.44 B
52 Week Range	\$65.67 - \$98.45
CEO	Sanjay Mehrotra
Headquarters	Boise, Idaho
Num. Employees	43,000

MU vs S&P



Company Overview

Company Description

Designs and manufactures semiconductors, memory, and data storage technology in DRAM and NAND

Client, cloud server, networking, enterprise, mobile devices, graphics, consumer storage, automobile and industry markets

Micron's customers include Apple, Microsoft, Dell Technologies Inc., Hp Inc., Alphabet Inc. and Huawei Technologies

The Technology

DRAM — 73% of revenue

Dynamic Random Access Memory chips hold data temporarily, helping processors crunch data and provides high-speed data retrieval

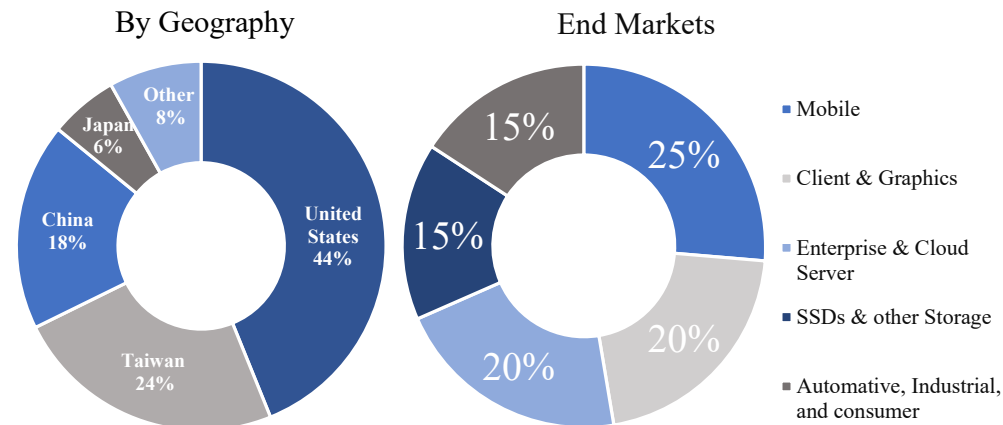
NAND — 24% of revenue

Used for high-capacity and low-cost permanent storage in phones and computers and where large files are frequently edited or replaced, erased or reprogrammed

Business Segments

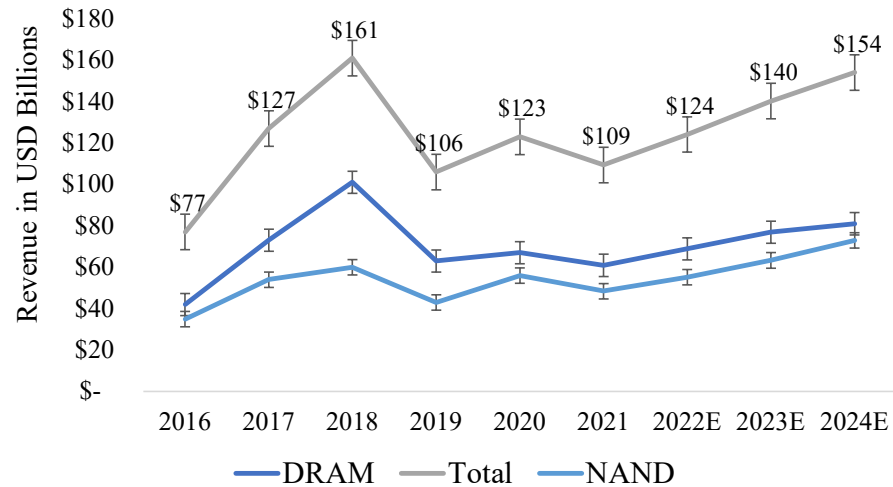
- 1 Compute & Networking** - Includes memory products sold into client, cloud server, enterprise, graphics, and networking markets.
- 2 Mobile Business** - Includes memory and storage products sold into smartphone and other mobile device markets.
- 3 Storage Business** - Includes SSDs and component-level solutions sold into enterprise and cloud, client, and consumer storage markets, and other discrete storage products sold in component and wafer form.
- 4 Embedded Business** - Includes memory and storage products sold into automotive, industrial, and consumer markets.

Revenue Breakdown

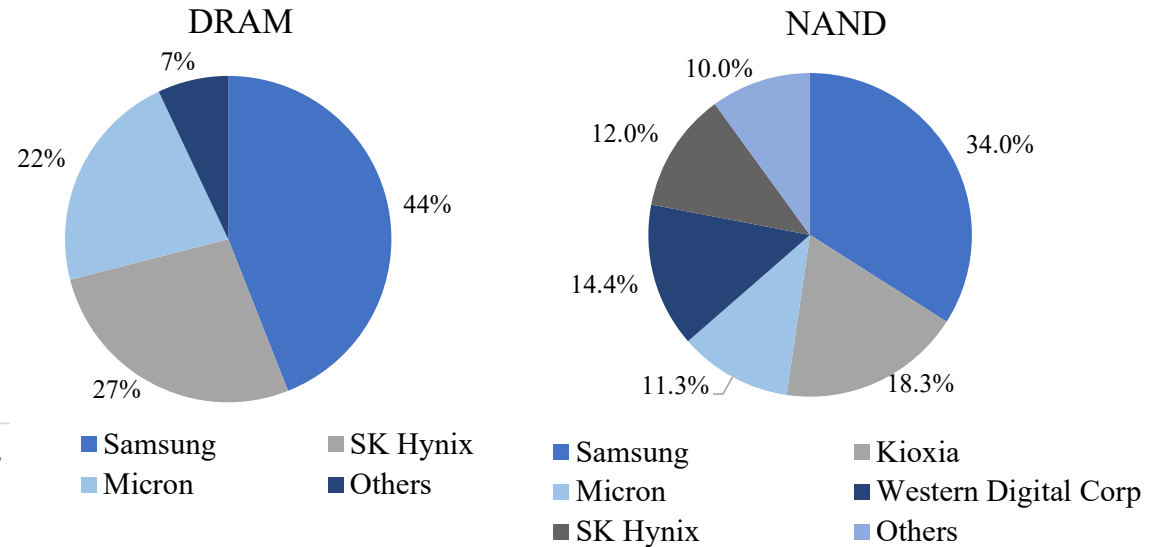


Industry Overview

Current Industry



Competition by Market Share, as of FY 21



Main Competitors, Description, and Market Share

Samsung: South Korean information technology, electronics, memory and storage manufacturer

SK Hynix: South Korean supplier of semiconductor and memory products

Kioxia: Spun off from the Japanese Toshiba conglomerate; computer memory manufacturer

Western Digital Corp: supplies hard disks, data center and cloud storage systems

Intel: semiconductors, memory, graphics, and microprocessor manufacturer



Long Term Trends and Structural Industry Shifts

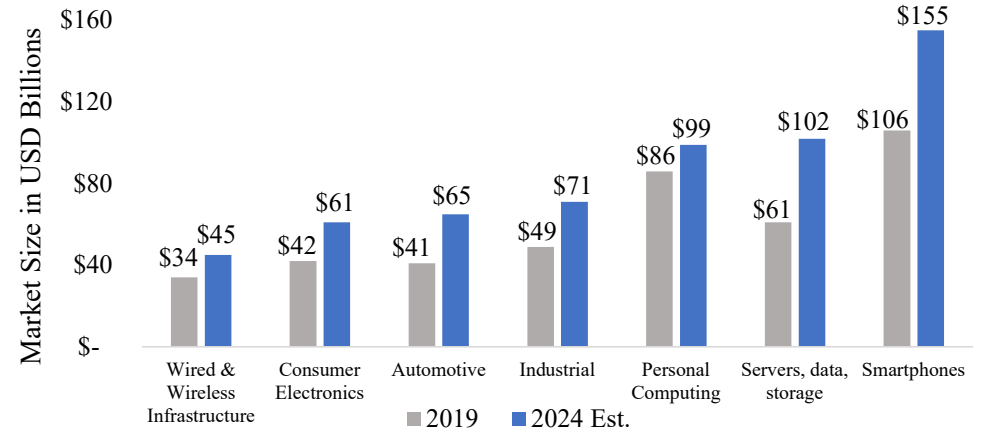
Trends

Computing and data consumption growth from AI, EV, 5G, cryptocurrency and metaverse

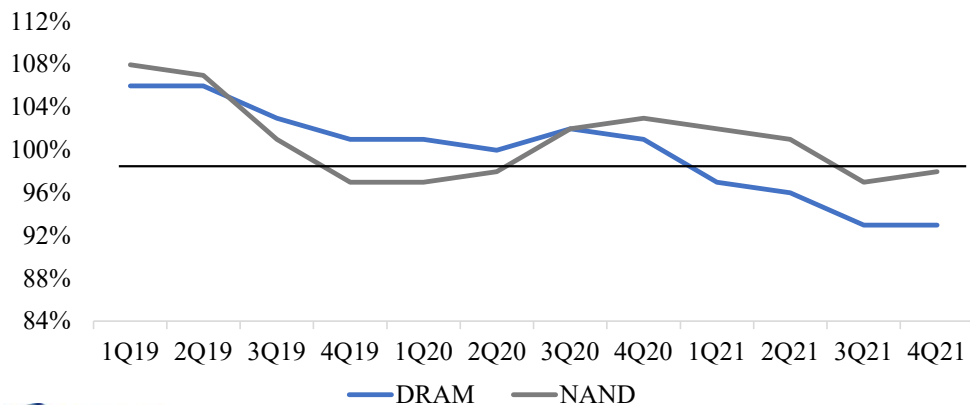
Rise in demand in increasingly diverse and lucrative end markets

Natural cyclical upturn timed for second half of 2022, structural changes in industry dynamics

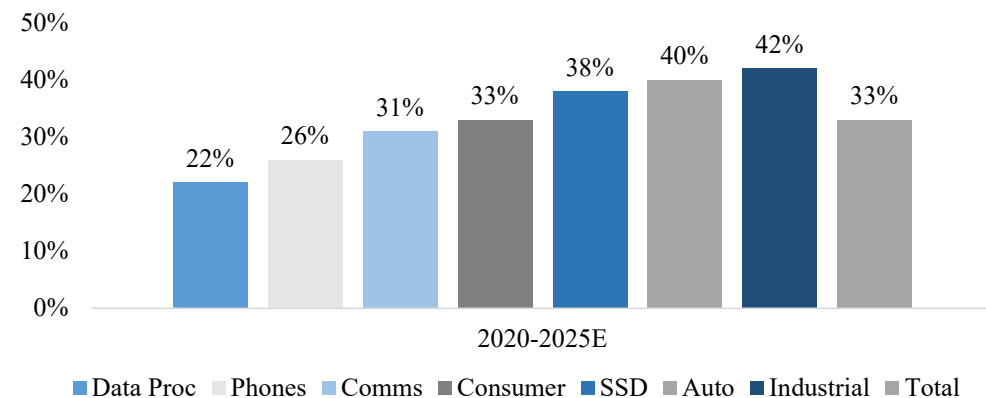
Semiconductor and Memory Use by Application



Supply and Demand Sufficiency Ratio



NAND CAGR by Application



Innovation and Profitability Focused

Technology Leadership

Micron's transition to 1α DRAM and 176L NAND nodes are ahead of competitors by several Q's and have improved margins

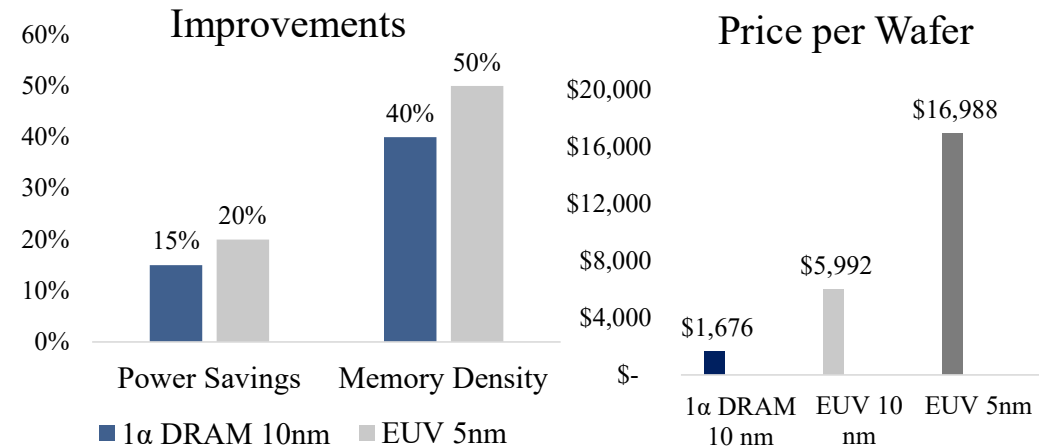
1^α (1 alpha) node DRAM

World's most advanced memory node in high volume production, brings improved operating speeds and memory density

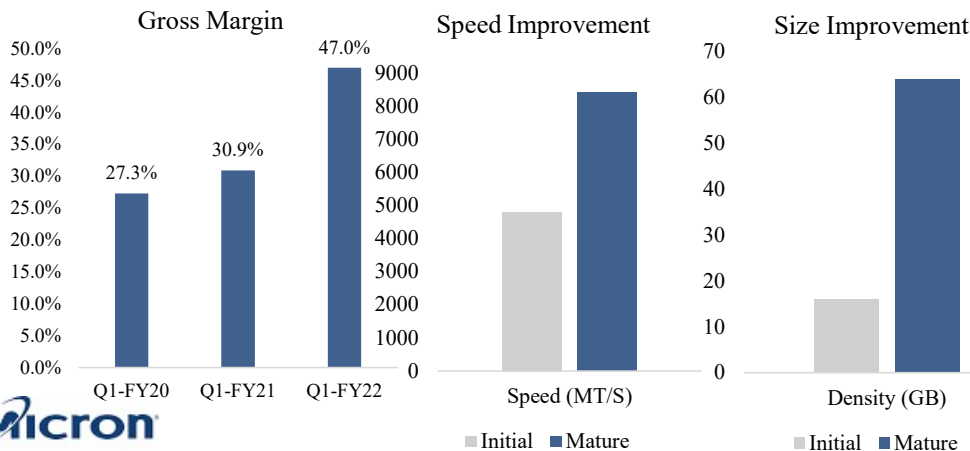
176 layer NAND

World's fastest graphics memory, first with over 96 layers, has faster performance, app launching, switching, reduces bottlenecks

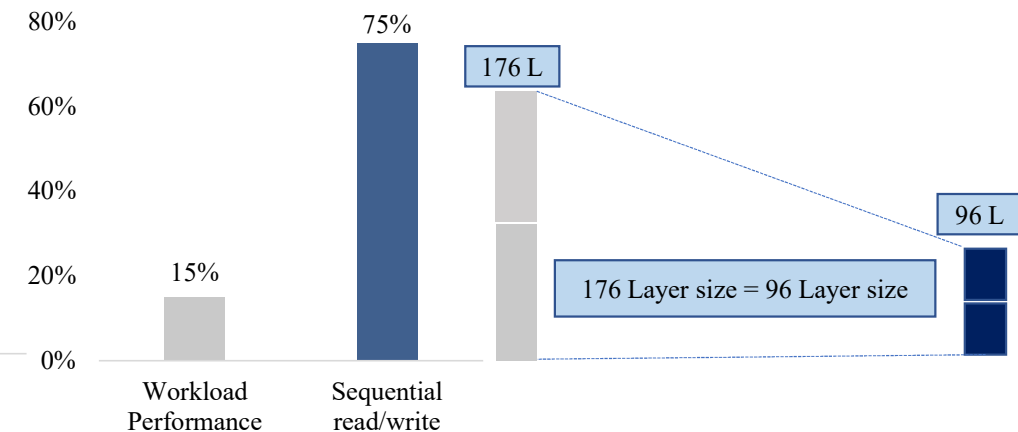
1α DRAM vs EUV



Margin and Product Improvement

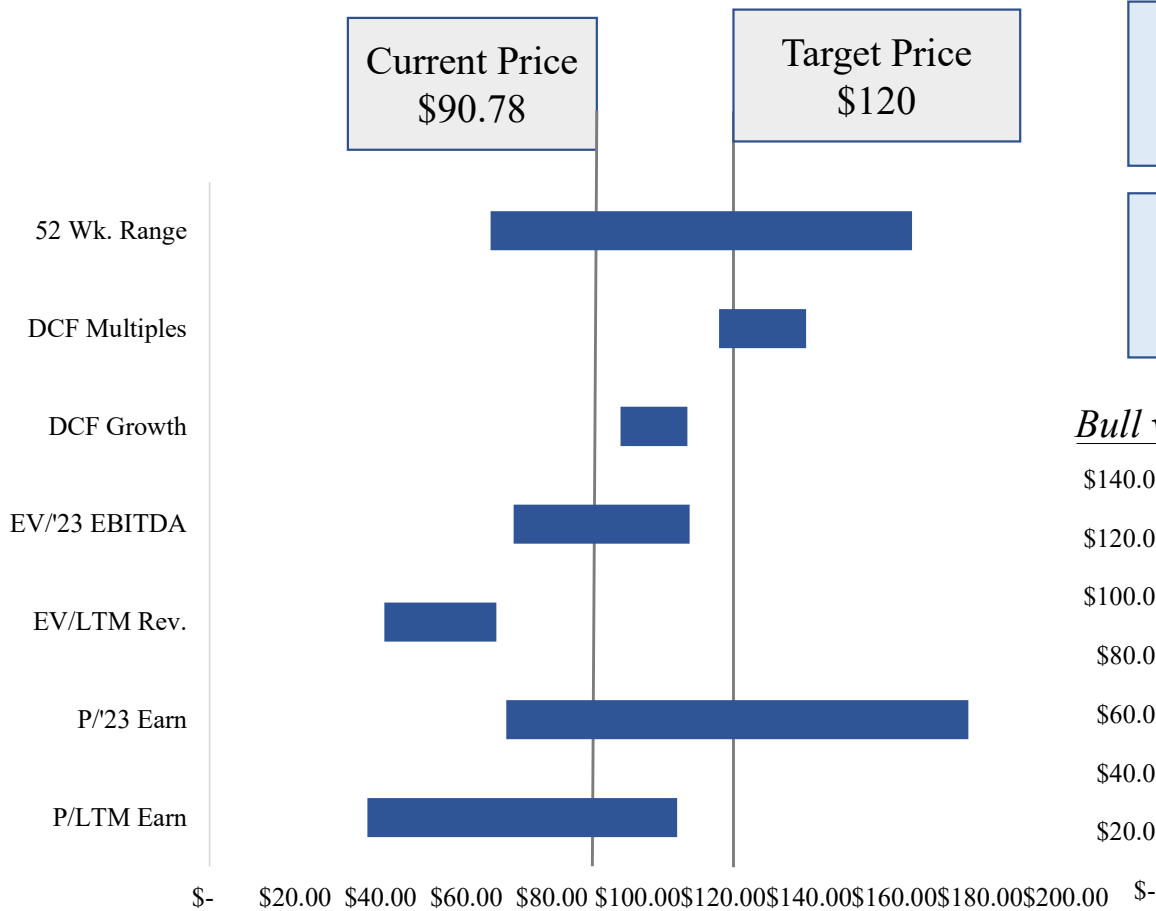


176 Layer NAND

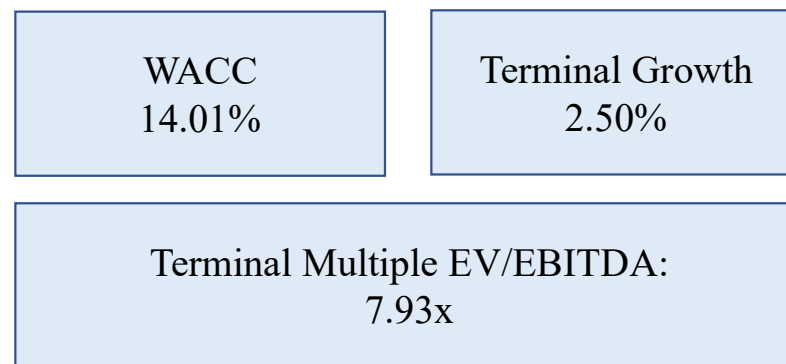


Valuation

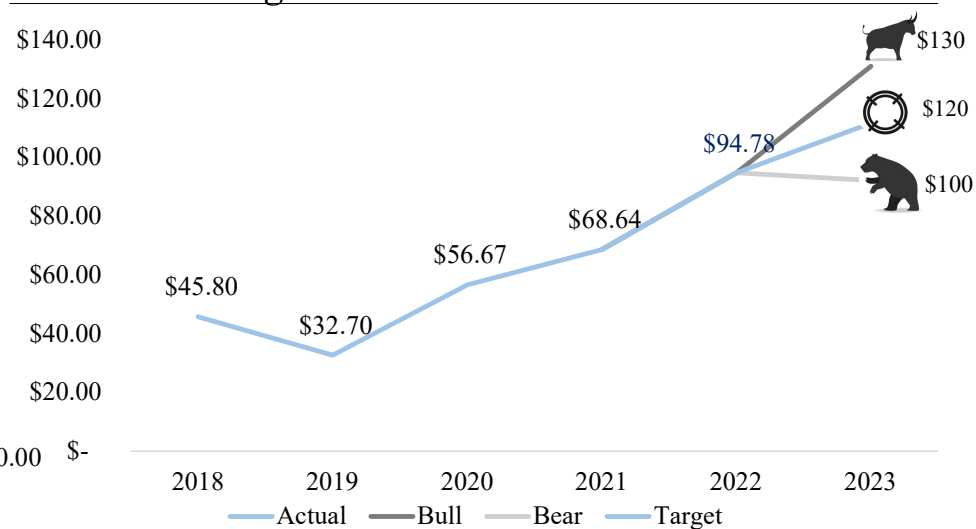
Football Field



Assumptions



Bull vs Bear Target Price



Risks and Mitigants

Micron is dependent on average selling prices that can be volatile

Diversified product portfolio and increasing performance at lower prices

Use of EUV by competitors and mistiming entrance opportunities

Innovation and EUV integration when market is mature and company aligned

Continued supply chain disruptions affecting production and sales

75% of rev from volume-based agreements; strategic agreements to secure component supply entered

Current Price
\$90.78

Target Price
\$120

Upside
32.19%

Thank You!

Questions?

Environmental, Social, & Corporate Governance

ESG Risk Ratings

Environment Risk Score: 7.3

Social Risk Score: 4.2

Governance Risk Score: 6.4

Total ESG Risk Score: 18 (17th percentile, Low)

Environmental

Increase in efficient facilities, renewable energy, low heat transfer fluids

Enhancing water reuse and recycle infrastructure, water restoration projects

Focus on reuse, recycle, recovery through enhanced waste systems and disposal

Goals: 75% emission reduction and water conservation per unit in CY30, 100% renewable energy in US by 2025, 95% reuse, recycle, recovery and 0 hazardous waste to landfill in CY#)

Social

Over \$1 million in donations to NAACP Legal Defense and Education Fund; \$165K to disability focused organizations

9 ERGs with 74 chapters worldwide; \$250M in cash minority managed, including \$100M under Ramirez Asset Management

Global women's mentoring program to connect early career talent with senior leadership; currently have 50% female BoD

Goals: Increase minority representation, drive equitable pay and benefits and inclusive culture, advocate racial and LGBTQ+ equality, engage with minority owned financial institutions and diverse suppliers

Corporate Governance

Strong Audit, Compensation, Finance, Security, Governance and Sustainability committees to provide oversight and guidance

Proactive IT measures to monitor and identify suspicious activity; compliance and ethics program regularly updated and implemented

11 policies and programs to ensure integrity in environmental, social, and business conduct

Supports corporate governance initiatives of NASDAQ Stock Market LLC and SEC; Code of Business Conduct and Ethics and Compliance Helpline emphasize the importance of these principles



Income Statement

Income Statement Projections- USD Millions		12 Months Ended																	
Income Statement	Total 2019	Total 2020	Total 2021	Q1 2022	Q2 2022E	Q3 2022E	Q4 2022E	Total 2022E	Q1 2023E	Q2 2023E	Q3 2023E	Q4 2023E	Total 2023E	Total 2024E	Total 2025E	Total 2026E	Total 2027E	Total 2028E	
Revenue	\$ 23,406	\$ 21,435	\$ 27,705	\$ 7,687	\$ 8,589	\$ 8,589	\$ 8,589	\$ 33,457	\$ 9,159	\$ 9,159	\$ 9,159	\$ 9,159	\$ 36,636	\$ 38,068	\$ 39,953	\$ 45,360	\$ 48,702	\$ 51,981	
Cost of goods sold	\$ 12,704	14,883	17,282	4,037	4,677	4,677	4,677	18,067	4,122	4,283	4,495	5,103	16,486	17,130	17,979	20,412	21,916	23,391	
COGS margin	54%	69%	62%	53%	56%	54%	54%	54%	45%	47%	49%	56%	45%	45%	45%	45%	45%	45%	
Gross margin	10,702	6,552	10,423	3,650	3,913	3,913	3,913	15,390	5,037	4,876	4,664	4,056	20,150	20,937	21,974	24,948	26,786	28,590	
Operating Expenses																			
Research and development	836	2,600	2,663	712	712	712	712	2,848	848	759	759	759	3,119	3,239	3,399	3,859	4,143	4,422	
% of Sales	4%	12%	10%	9%	8%	8%	8%	9%	9%	8%	8%	8%	9%	9%	9%	9%	9%	9%	
Selling, general, and administrative	2,441	881	894	259	259	259	259	1,036	284	284	284	284	1,134	1,428	1,499	1,701	1,827	1,950	
% of Sales	10%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	4%	4%	4%	
Other operating (income) expense, net	49	68	95	(75)	(75)	(75)	(75)	(300)	(89)	(80)	(80)	(80)	(329)	95	100	109	112	114	
% of Sales	0.21%	0.32%	0.34%	-0.98%	-0.87%	-0.87%	-0.87%	-0.90%	-0.98%	-0.87%	-0.87%	-0.87%	-0.90%	0.25%	0.25%	0.24%	0.23%	0.22%	
Total operating expense	3,326	3,549	3,652	896	896	896	896	3,584	1,043	963	963	963	3,925	4,762	4,997	5,669	6,082	6,486	
EBIT	7,376	3,003	6,771	2,754	3,017	3,017	3,017	11,806	3,995	3,914	3,701	3,093	16,225	16,176	16,977	19,279	20,704	22,103	
Interest income	205	114	37	10	10	10	10	40	10	10	10	10	40	37	37	37	38	39	
Interest expense	(128)	(194)	(183)	(45)	(45)	(45)	(45)	(180)	(45)	(45)	(45)	(45)	(180)	(180)	(180)	(180)	(180)	(180)	
Other non-operating income (expense), net	(405)	60	81	(75)	(75)	(75)	(75)	(300)	(75)	(75)	(75)	(75)	(300)	81	81	81	82	83	
EBT	7,048	2,983	6,706	2,644	2,907	2,907	2,907	11,366	3,885	3,804	3,591	2,983	15,785	16,114	16,915	19,217	20,644	22,045	
% Change		-58%	125%	-61%	10%	0%	0%	69%	47%	31%	24%	3%	39%	2%	5%	14%	7%	7%	
Income tax (provision) benefit	(693)	(280)	(394)	(219)	(219)	(219)	(219)	(951)	(219)	(219)	(219)	(219)	(951)	(1,284)	(1,348)	(1,531)	(1,645)	(1,757)	
Effective Tax Rate	10%	9%	6%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	
Equity in net income (loss) of equity method investees	3	7	37	4	4	4	4	16	4	4	4	4	16	16	4	4	4	16	
Net income	6,358	2,710	6,349	2,429	2,692	2,692	2,692	10,431	3,670	3,589	3,376	2,768	14,851	14,846	15,571	17,689	19,003	20,304	
Net income attributable to noncontrolling interests	(45)	(23)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Net income attributable to Micron	\$ 6,313	\$ 2,687	\$ 6,349	\$ 2,429	\$ 2,692	\$ 2,692	\$ 2,692	\$ 10,431	\$ 3,670	\$ 3,589	\$ 3,376	\$ 2,768	\$ 14,851	\$ 14,846	\$ 15,571	\$ 17,689	\$ 19,003	\$ 20,304	
Earnings per share																			
Basic (in dollars per share)	\$ 5.67	\$ 2.42	\$ 5.67	\$ 2.17	\$ 2.40	\$ 2.40	\$ 2.40	\$ 9.36	\$ 3.29	\$ 3.20	\$ 3.01	\$ 2.47	\$ 13.26	\$ 13.25	\$ 13.90	\$ 15.79	\$ 16.97	\$ 18.13	
Diluted (in dollars per share)	\$ 5.51	\$ 2.37	\$ 3.37	\$ 3.37	\$ 3.37	\$ 3.37	\$ 3.37	\$ 9.16	\$ 3.23	\$ 3.15	\$ 2.96	\$ 2.43	\$ 13.03	\$ 13.03	\$ 13.66	\$ 15.52	\$ 16.67	\$ 17.81	
Number of shares used in per share calculations																			
Basic (in shares)	1,114	1,110	1,120	1,120	1,120	1,120	1,120	1,115	1,117	1,120	1,120	1,120	1,120	1,120	1,120	1,120	1,120	1,120	
Diluted (in shares)	1,143	1,131	1,141	1,141	1,141	1,141	1,141	1,138	1,138	1,141	1,141	1,141	1,140	1,140	1,140	1,140	1,140	1,140	



Balance Sheet

Balance Sheet - USD Millions	Total 2019	Total 2020	Total 2021	Q1 2022
Assets				
Cash and equivalents	\$ 7,152	\$ 7,624	\$ 7,763	\$ 8,680
Short-term investments	803	518	870	900
Receivables	3,195	3,912	5,311	5,250
Inventories	5,118	5,607	4,487	4,827
Assets held for sale			974	13
Other current assets	235	304	502	521
Total current assets	16,503	17,965	19,907	20,191
Long-term marketable	1,164	1,048	1,765	1,817
Property, plant, and equipment	28,240	31,031	33,213	35,155
Operating lease right-of-use	0	584	551	574
Intangible assets	340	334	349	347
Deferred tax assets	837	707	782	746
Goodwill	1,228	1,228	1,228	1,228
Other noncurrent assets	575	781	1,054	1,188
Total assets	48,887	53,678	58,849	61,246
Liabilities and equity				
Accounts payable and accrued	4,626	5,817	5,325	5,470
Current debt	1,310	270	155	118
Other current liabilities	454	548	944	924
Total current liabilities	6,390	6,635	6,424	6,512
Long-term debt	4,541	6,373	6,621	6,904
Operating Lease, Liability,	0	533	504	523
Noncurrent unearned	636	643	808	767
Other noncurrent liabilities	452	498	559	632
Total liabilities	12,019	14,682	14,916	15,338
Commitments and				
Redeemable convertible notes	0	0	0	0
Redeemable noncontrolling	98	0	0	0
Micron shareholders' equity				
Common stock, \$0.10 par value, 3,000 shares authorized, 1,194 shares issued and 1,113	118	119	122	122
Additional capital	8,214	8,917	9,453	9,564
Retained earnings	30,761	33,384	39,051	41,267
Treasury stock, 81 shares held	(3,221)	(3,495)	(4,695)	(4,954)
Accumulated other	9	71	2	(91)
Total Micron shareholders'	35,881	38,996	43,933	45,908
Noncontrolling interest in	889	0	0	
Total equity	36,770	38,996	43,933	45,908
Total liabilities and equity	\$ 48,789	\$ 53,678	\$ 58,849	\$ 61,246



Cash Flow Statement

Cash Flow Statement USD Millions	12 Months Ended			
	Total 2019	Total 2020	Total 2021	Q1 2022
Cash flows from operating activities				
Net income	\$ 6,358	\$ 2,710	\$ 2,710	\$ 2,306
Adjustments to reconcile net income to net cash provided by operating activities				
Depreciation expense and amortization of intangible assets	5,424	5,650	6,241	1,671
Amortization of debt discount and other costs	49	26	30	
Noncash restructure and asset impairment		40	454	
Stock-based compensation	243	328	378	118
(Gains) losses on debt prepayments, repurchases, and conversions	396	(40)	1	83
Change in operating assets and liabilities				
Receivables	2,431	(723)	(1,446)	67
Inventories	(1,528)	(489)	866	(344)
Accounts payable and accrued expenses	(174)	725	210	(42)
Deferred income taxes, net	150	79	(50)	54
Other	(160)	40	(50)	25
Net cash provided by operating activities	13,189	8,346	9,344	3,938
Cash flows from investing activities				
Expenditures for property, plant, and equipment	(9,780)	(8,223)	(10,030)	(3,265)
Purchases of available-for-sale securities	(4,218)	(1,857)	(3,163)	(528)
Proceeds from sale of Lehi, Utah fab				893
Proceeds from sales of available-for-sale securities	1,504	1,458	1,250	313
Proceeds from maturities of available-for-sale securities	1,541	814	856	124
Proceeds from government incentives	748	262	495	55
Other	120	(43)	3	(77)
Net cash provided by (used for) investing activities	(10,085)	(7,589)	(10,589)	(2,485)
Cash flows from financing activities				
Repayments of debt	(3,340)	(4,366)	(1,520)	(1,949)
Acquisition of noncontrolling interest in IMFT	0	(744)	1,294	(259)
Payments to acquire treasury stock	(2,729)	(251)	(295)	(112)
Payments on equipment purchase contracts	(75)	(63)		(102)
Proceeds from issuance of debt	3,550	5,000	1,188	(78)
Proceeds from issuance of stock	179	225		2,000
Other	(23)	(118)	140	(13)
Net cash provided by (used for) financing activities	(2,438)	(317)	807	(513)
Effect of changes in currency exchange rates on cash, cash equivalents, and restricted cash	26	11	41	(6)
Net increase (decrease) in cash, cash equivalents, and restricted cash	692		139	934
Cash, cash equivalents, and restricted cash at beginning of period	6,587	7,279	7,690	7,829
Cash, cash equivalents, and restricted cash at end of period	7,279	7,279	7,829	8,763
Supplemental disclosures				
Income taxes paid, net	(524)	-167	-361	
Interest paid, net of amounts capitalized	(53)	(165)	(171)	
Noncash equipment acquisitions on contracts payable	\$ 119	278	684	



Revenue Build

Micron Revenue Build USD Millions											
Year ended	2018	2019	2020	2021	2022 E	2023 E	2024 E	2025 E	2026 E	2027 E	2028 E
Total Revenue	\$ 30,391.00	\$ 23,406.00	\$ 21,435.00	\$ 27,705.00	\$ 33,456.66	\$ 36,636.24	\$ 38,067.74	\$ 39,952.85	\$ 45,359.91	\$ 48,701.87	\$ 51,980.99
<i>Growth YoY</i>		-23%	-8%	29%	21%	10%	4%	5%	14%	7%	7%
DRAM Revenue	22,625	16,841	14,510	20,039	25,262.96	27,594.92	28,177.91	29,149.57	33,735.76	36,300.93	38,866.09
<i>% Total Revenue</i>	74%	72%	68%	72%	76%	75%	74%	73%	74%	75%	75%
<i>% Market Share</i>	23.9%	16.8%	13.8%	18.2%	19.4%	19.4%	19.4%	19.4%	19.4%	19.4%	19.4%
<i>DRAM Market Size, Total Industry</i>	94,500	100,000	105,500	110,000	135,000	142,000	145,000	150,000	173,600	186,800	200,000
NAND Revenue	6,510.00	5,355.00	6,131	7,007	7,519.03	8,346.12	9,180.73	10,080.00	10,886.40	11,648.45	12,347.35
<i>% Growth from Prev Yr</i>		-18%	14%	14%	12%	11%	10%	9%	8%	7%	6%
<i>% Total Revenue</i>	21%	23%	29%	25%	21%	23%	24%	25%	24%	23%	23%
<i>% Market Share</i>	14.0%	10.9%	13.2%	13.2%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%
<i>NAND Market Size, Total Industry</i>	49,710	49,000	46,620	53,281.09	59,674.82	66,239.05	72,862.95	80,000.00	86,400.00	92,448.00	97,994.88
Other Revenue	1256	1210	794	659.00	674.68	695.19	709.10	723.28	737.75	752.50	767.55
<i>% Total Revenue</i>	4%	5%	4%	2%	3%	2%	2%	2%	2%	2%	2%



D&A, CapEx, and NWC Calculations

Depreciation and Amortization and CapEx in Millions		12 Months Ended									
Projections	Total 2019	Total 2020	Total 2021	Total 2022	Total 2023	Total 2024	Total 2025	Total 2026	Total 2027	Total 2028	
Revenue	\$ 23,406.00	\$ 21,435.00	\$ 27,705.00	\$ 33,456.66	\$ 36,636.24	\$ 38,067.74	\$ 39,952.85	\$ 45,359.91	\$ 48,701.87	\$ 51,980.99	
Capital Expenditures	(9,780)	(8,223)	(10,030)	(12,112)	(12,998)	(13,236)	(13,613)	(15,147)	(15,937)	(16,670)	
<i>CapEx as a % of Sales</i>	42%	38%	36%	36%	35%	35%	34%	33%	33%	32%	
Depreciation & Amortization	5,424	5,650	6,241	7,929	8,509	8,868	9,121	10,300	10,837	11,669	
<i>D&A as a % of CapEx</i>	55%	69%	62%	65%	65%	67%	67%	68%	68%	70%	
Net Working Capital in Millions		12 Months Ended									
Projections	Total 2019	Total 2020	Total 2021	Total 2022	Total 2023	Total 2024	Total 2025	Total 2026	Total 2027	Total 2028	
Revenue	\$ 23,406.00	\$ 21,435.00	\$ 27,705.00	\$ 33,456.66	\$ 36,636.24	\$ 38,067.74	\$ 39,952.85	\$ 45,359.91	\$ 48,701.87	\$ 51,980.99	
Accounts Receivable Days	49.82	66.61	69.97	57.28	60.05	60.99	60.99	60.99	60.99	60.99	
Accounts Receivable	3,195.00	3,912.00	5,311.00	5,250.00	6,027.53	6,360.44	6,675.41	7,578.84	8,137.22	8,685.10	
COGS	\$ 12,704.00	\$ 14,883.00	\$ 17,282.00	\$ 18,066.60	\$ 16,486.31	\$ 17,130.48	\$ 17,978.78	\$ 20,411.96	\$ 21,915.84	\$ 23,391.45	
Inventory Days	147.05	137.51	94.77	24.05	116.14	116.14	116.14	116.14	116.14	116.14	
Inventory	5,118.00	5,607.00	4,487.00	4,827.00	5,245.72	5,450.69	5,720.60	6,494.81	6,973.32	7,442.84	
Other current assets	235	304	502	\$ 2,084.00	2,084	2,084	2,084	2,084	8,336	8,336	
<i>% of Revenue</i>	1.00%	1.42%	1.81%	6.23%	5.69%	5.47%	5.22%	4.59%	17.12%	16.04%	
Total current assets	8,548.00	9,823.00	10,300.00	12,161.00	13,357.25	13,895.13	14,480.02	16,157.64	23,446.54	24,463.94	
COGS	12,704	14,883	17,282	18,067	16,486	17,130	17,979	20,412	21,916	23,391	
Accounts Payable & Accrued Expenses Days	132.91	142.66	112.47	27.25	29.86	28.74	27.38	24.12	22.46	21.05	
Accounts Payable & Accrued Expenses	4,626	5,817	5,325	5,470	5,470	5,470	5,470	5,470	5,470	5,470	
Other Current Liabilities	454	548	944	924	924	924	924	924	924	924	
<i>% of Revenue</i>	1.94%	2.56%	3.41%	2.76%	2.52%	2.43%	2.31%	2.04%	1.90%	1.78%	
Total current Liability	5,080	6,365	6,269	6,394	6,394	6,394	6,394	6,394	6,394	6,394	
Net Working Capital	3,468.00	3,458.00	4,031.00	5,767.00	6,963.25	7,501.13	8,086.02	9,763.64	17,052.54	18,069.94	
ΔNWC		10.00	(573.00)	(1,563.00)	(1,490.14)	(537.88)	(584.88)	(1,677.63)	(7,288.90)	(1,017.40)	



WACC

WACC Calculation	
Beta	1.59
Risk-Free Rate	1.94%
Expected Market Return	10%
Risk Premium	8.06%
Cost of Equity	14.79%
Pre-tax cost of debt	2.63%
Tax Rate	8.70%
Cost of Debt	2.40%
Market Cap	104,977.60
Debt Outstanding	7,022.00
Total Capitalization	111,999.60
Weight of Equity	93.73%
Weight of Debt	6.27%
WACC	14.01%

Cost of Debt 1

Interest Coverage Ratio	37.00
Spread	0.69%
Cost of Debt	2.63%

Share Price \$ 93.73

If interest coverage ratio is

>	≤ to	Rating is	Spread is
8.5	100000	Aaa/AAA	0.69%
6.5	8.499999	Aa2/AA	0.85%
5.5	6.499999	A1/A+	1.07%
4.25	5.499999	A2/A	1.18%
3	4.249999	A3/A-	1.33%
2.5	2.999999	Baa2/BBB	1.71%
2.25	2.49999	Ba1/BB+	2.31%
2	2.2499999	Ba2/BB	2.77%
1.75	1.999999	B1/B+	4.05%
1.5	1.749999	B2/B	4.86%
1.25	1.499999	B3/B-	5.94%
0.8	1.249999	Caa/CCC	9.46%
0.65	0.799999	Ca2/CC	9.97%
0.2	0.649999	C2/C	13.09%
-100000	0.199999	D2/D	17.44%

DCF

USD (\$) \$ in Millions	12 Months Ended									
	Total 2019	Total 2020	Total 2021	Total 2022E	Total 2023E	Total 2024E	Total 2025E	Total 2026E	Total 2027E	Total 2028E
EBIT	7,376	3,003	6,771	11,806	16,225	16,176	16,977	19,279	20,704	22,103
Tax Rate	9.80%	9.40%	9.40%	8.70%	8.70%	8.70%	8.70%	8.70%	8.70%	8.70%
D&A	5,424	5,650	6,241	7,929	8,509	8,868	9,121	10,300	10,837	11,669
CapEx	(9,780)	(8,223)	(10,030)	(12,112)	(12,998)	(13,236)	(13,613)	(15,147)	(15,937)	(16,670)
Change in NWC	-	10.00	(573.00)	(1,563.00)	(1,490.14)	(537.88)	(584.88)	(1,677.63)	(7,288.90)	(1,017.40)
FCFF	2,297.15	137.72	2,918.53	8,159.15	11,815.17	10,938.34	11,592.05	14,432.08	21,091.59	16,196.45
Discount Factor				0.5	1.5	2.5	3.5	4.5	5.5	6.5
PV Cash Flows				\$ 7,641.38	\$ 9,705.58	\$ 7,881.11	\$ 7,325.73	\$ 7,999.70	\$ 10,254.35	\$ 6,906.74



Sensitivity Analysis

Gordon Growth

Terminal CF		16,196.45
WACC		14.01%
Terminal Growth Rate		2.50%
Terminal Value	\$	144,225.39
PV of Terminal Value	\$	61,502.84
Enterprise Value	\$	119,217.43
Less: Debt		6,776
Plus: Cash		7763
Equity Value	\$	120,204.43
Diluted Shares Out.		1,138
Price Per Share	\$	105.63

WACC	14.01%
T. Growth Rate	2.50%
Term. Multiple	7.93x

Multiples

Terminal EBITDA		33,772
Terminal Multiple		7.93x
Terminal Value	\$	267,920.27
PV of Term. Value	\$	114,250.73
Enterprise Value	\$	154,804.23
Less: Debt		6,776
Plus: Cash		7763
Equity Value	\$	155,791.23
Shares Outstanding		1,138
Price Per Share	\$	136.90

		WACC							
		\$	15.51%	15.01%	14.51%	14.01%	14.01%	14.01%	14.01%
Growth Rate		105.63				14.01%	14.01%	14.01%	14.01%
	4.00%	99.71	104.23	109.19	114.64	114.64	114.64	114.64	
	3.50%	97.38	101.63	106.27	111.35	111.35	111.35	111.35	
	3.00%	95.24	99.25	103.60	108.36	108.36	108.36	108.36	
	2.50%	93.26	97.05	101.16	105.63	105.63	105.63	105.63	
	2.00%	91.43	95.03	98.91	103.13	103.13	103.13	103.13	
	1.50%	89.73	93.15	96.84	100.82	100.82	100.82	100.82	
	1.00%	88.15	91.41	94.92	98.70	98.70	98.70	98.70	

Quartile 1	98.70
Quartile 3	108.36
Spread	9.66

		WACC							
		\$	15.51%	15.01%	14.51%	14.01%	14.01%	14.01%	14.01%
EV/EBITDA		136.90				14.01%	14.01%	14.01%	14.01%
	909.00%	141.05	144.44	147.93	151.54	151.54	151.54	151.54	
	859.00%	135.24	138.46	141.78	145.21	145.21	145.21	145.21	
	809.00%	129.42	132.48	135.63	138.88	138.88	138.88	138.88	
	759.00%	123.61	126.50	129.48	132.56	132.56	132.56	132.56	
	709.00%	117.80	120.52	123.33	126.23	126.23	126.23	126.23	
	659.00%	111.99	114.54	117.18	119.90	119.90	119.90	119.90	
	609.00%	106.17	108.57	111.03	113.57	113.57	113.57	113.57	

Quartile 1	119.90
Quartile 3	138.88
Spread	18.98



Comparable Companies Analysis

Company	Ticker	Stock Price	Shares Out.	Debt	Cash	Ent. Val.	LTM EPS	LTM EBITDA	LTM Rev.	23 EPS	23 EBITDA	23 Rev.	Market Cap	P/LTM Earn	EV/EBITDA	EV/LTM Rev.	P/'23 Earn	EV/'23 EBITDA
Micron	MU	93.73	1,119	\$ 7,022.00	\$ 8,680.00	\$103,225.87	\$ 5.23	\$ 13,012.00	\$ 27,705.00	\$13.26	\$ 24,734.72	\$ 36,636.24	\$ 104,883.87	17.91x	7.93x	3.73x	7.07x	4.17x
Microchip Tech Inc.	MCHP	71.33	567	\$ 7,938.50	\$ 315.00	\$ 48,089.01	\$ 1.76	\$ 2,771.10	\$ 6,443.80	\$ 5.21	\$ 3,569.70	\$ 7,505.40	\$ 40,465.51	40.53x	17.35x	7.46x	13.69x	13.47x
Intel	INTC	47.63	4,069	\$38,576.00	\$ 34,711.00	\$197,671.47	\$ 4.56	\$ 32,505.00	\$ 74,718.00	\$ 3.66	\$ 30,897.90	\$ 77,241.10	\$ 193,806.47	10.45x	6.08x	2.65x	13.01x	6.40x
Western Digital	WDC	53.73	312	\$ 7,643.00	\$ 2,531.00	\$ 21,875.76	\$ 6.01	\$ 3,419.00	\$ 18,941.00	\$ 9.01	\$ 4,682.00	\$ 20,566.70	\$ 16,763.76	8.94x	6.40x	1.15x	5.96x	4.67x
SK Hynix	KRX: 000660	62.43	686	\$13,382.90	\$ 8,177.00	\$ 48,032.88	\$ 12.11	\$ 12,552.90	\$ 37,570.50	\$17.71	\$ 27,548.10	\$ 53,328.70	\$ 42,826.98	5.16x	3.83x	1.28x	3.53x	1.74x
Samsung	KRX: 005930	110.02	6,381	\$16,088.90	\$101,446.90	\$616,723.63	\$ 5.05	\$ 56,317.40	\$244,312.10	\$ 5.74	\$ 88,177.40	\$279,796.70	\$ 702,081.63	21.79x	10.95x	2.52x	19.17x	0.54x
Minimum														5.16x	3.83x	1.15x	3.53x	0.54x
Q1														7.05x	6.08x	1.59x	5.35x	3.21x
Average														17.37x	8.92x	3.13x	11.07x	5.37x
Q3														20.82x	10.95x	2.65x	13.69x	5.10x
Maximum														21.79x	10.95x	7.46x	19.17x	6.40x
Share Prices																		
Minimum														\$ 26.98	\$ 45.98	\$ 30.08	\$ 46.74	\$ 13.52
Q1														\$ 36.88	\$ 72.20	\$ 40.85	\$ 70.99	\$ 72.39
Average														\$ 90.90	\$ 105.23	\$ 79.03	\$ 146.81	\$ 120.09
Q3														\$ 108.94	\$ 128.82	\$ 66.98	\$ 181.53	\$ 114.29
Maximum														\$ 114.01	\$ 128.82	\$ 186.25	\$ 254.15	\$ 142.90

