



# Micron

For the Celani Fund, Dated: 9/20/21

By Nicholas Bale and Nick Morabito

---



Investment Summary



Business Overview



Business Strategy



Industry Overview



Ratio Analysis



Valuation



Conclusion



# Investment Summary

Recommendation:

**Buy \$75,000**

**Valuation Price: \$88.67**

## Thesis:

- Industry has a long growth pipeline
- Industry consolidation creates pricing advantages.
- Micron trades significantly lower than competitors

MU Market Data	
Price	72.37
Shares Outstanding	1,125.8
Market Cap	81.47B

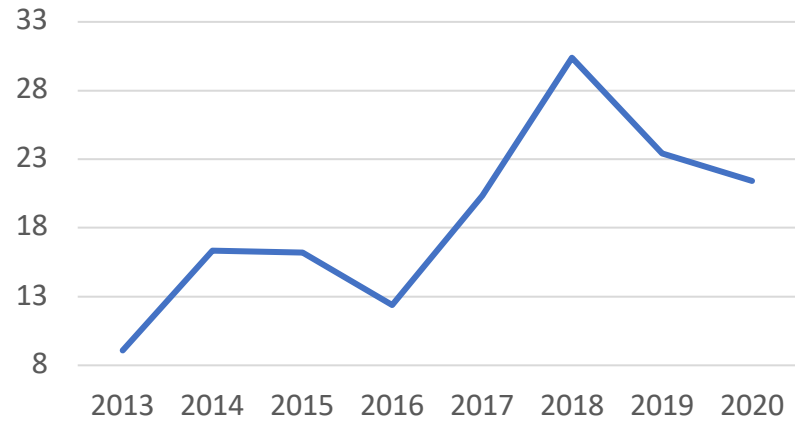
MU 2 Year Stock Price



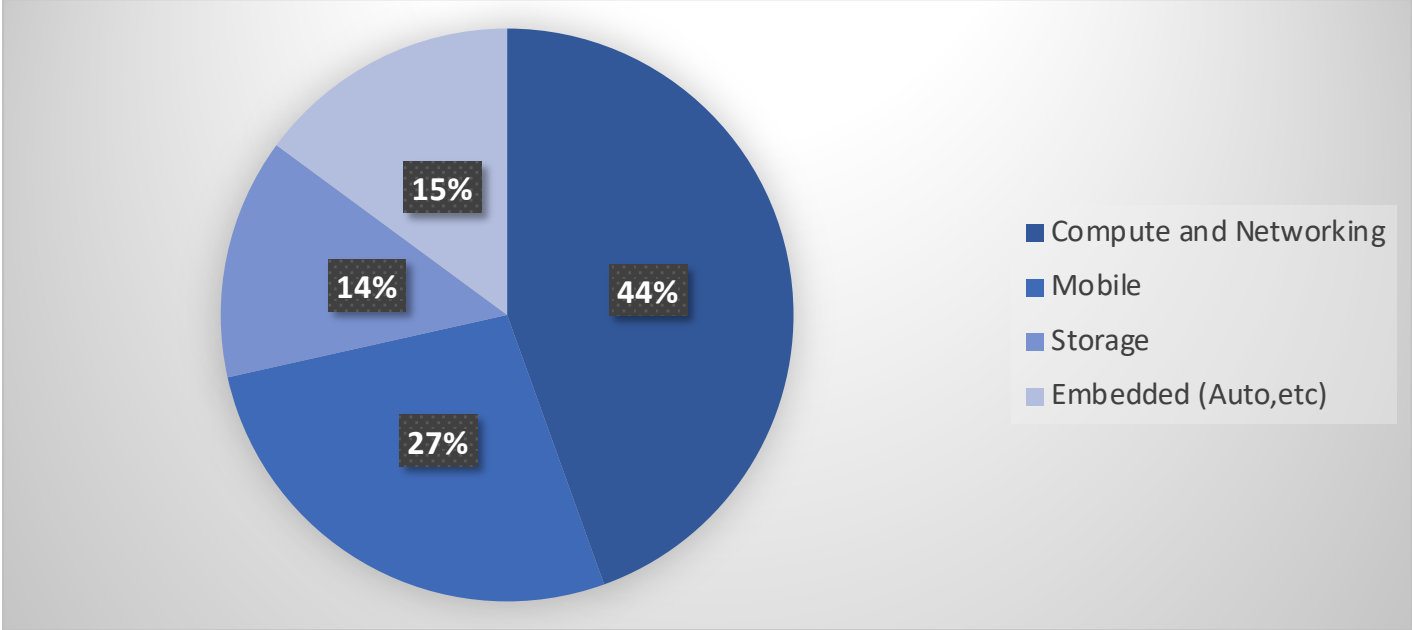


# Business Overview

## Revenue Growth



## Revenue Breakup



## Boise, ID



**DRAM**

**73%**

**NAND**

**24%**



# Business Strategy

- Continue optimizing margins while preparing for the next generation of memory chip technology
- Expand through automotive, server, and mobile markets
- Continue heavily investing in core business growth while paying out 55% of Free Cash Flow after CAPEX

Long-term DRAM bit demand growth CAGR

≈14-18%

**Unmet supply of DRAM and NAND in 2021. Market expected to be as tight in 2022**

Long-term NAND bit demand growth CAGR

≈30%

## Key Drivers and Risks

- Cloud Computing and IOT Growth
- Industry Consolidation and New Supply Discipline
- Strong Long-Term Demand Growth
  
- Risk: CAPEX Intensive
- Risk: Pricing Volatility
- Risk: COVID Supply Chain Disruptions

Investment Summary

Business Overview

Industry Overview

Financial Analysis

Valuation & Investment Risks

# Industry Overview



## Industry Drivers

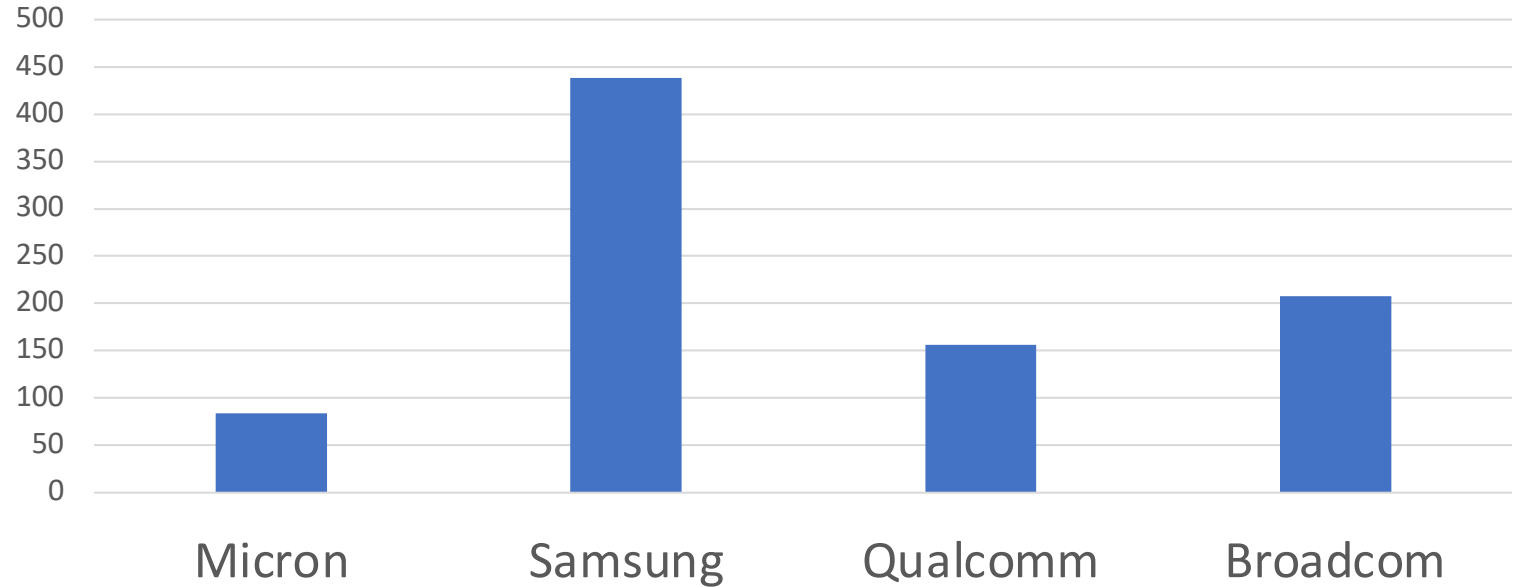
DRAM and NAND Pricing

Covid-19 Reopening

Manufacturing recovery

Supply Issue

## Market Cap. Comparison



- DRAM and NAND trade like a commodity, pricing is sensitive
- Price fluctuations can cause revenue to change dramatically.
- In 2021 the industry failed to meet demand requirements.
- Economic recovery overall will improve increase business CAPEX therefore keeping demand high.
- Manufacturing recovery(ex. Automobile) means more upside for Micron.

Investment  
Summary

Business  
Overview

Industry  
Overview

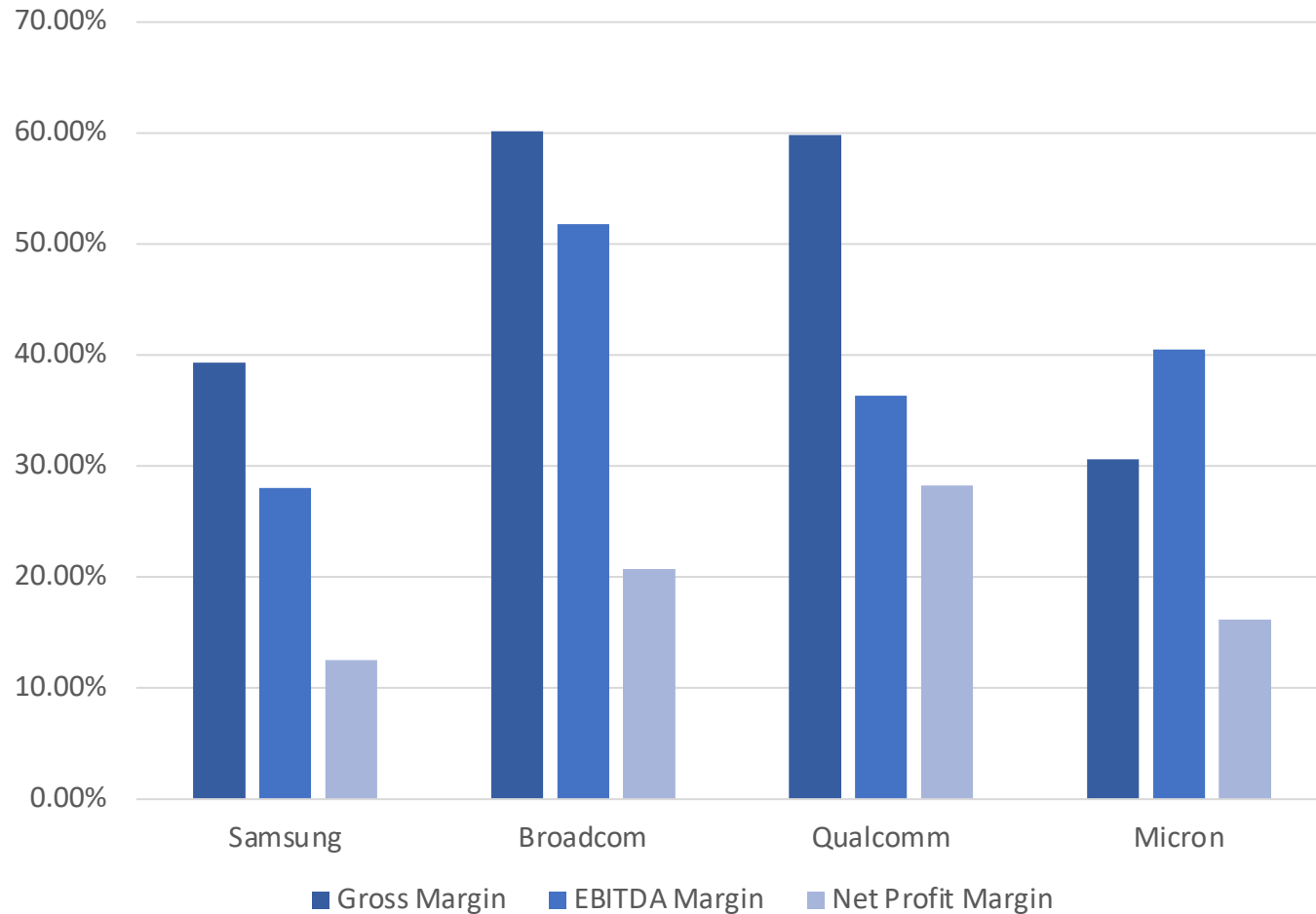
Financial  
Analysis

Valuation &  
Investment Risks

# Ratio Analysis



## Profitability Margins



Company	EBITDA(Millions)
<b>Samsung</b>	<b>\$ 67,424</b>
<b>Broadcom</b>	<b>12,830</b>
<b>Qualcomm</b>	<b>11,835</b>
<b>Micron</b>	<b>8,679</b>

# Ratio Analysis



Liquidity	Samsung	Broadcom	Qualcomm	Micron	Average
Current Ratio	2.64	2.40	1.72	3.40	2.54
Quick Ratio	2.17	2.23	1.45	2.57	2.11
EBIT/Interest	86.63	3.99	17.64	24.69	33.24
Debt/Equity	.058	1.65	1.67	.15	0.88

Earnings Multiples	Samsung	Broadcom	Qualcomm	Micron	Average
EPS	1.24	13.49	8.00	3.63	6.59
P/E	16.26	37.50	16.72	16.81	21.82
P/B	1.91	8.56	18.43	1.98	7.72
EV/EBITDA	5.37	16.78	12.32	7.74	10.55



# Valuation- DCF



Terminal Value	
Numerator	6015
Denominator	4.95%
<b>Terminal Value</b>	<b>121545</b>
Present Value of Terminal Value	86855
Add First Five Years	11985
Enterprise Value	98840
Less: Net Debt	(981)
Equity Value	99821
<b>Price Per Share</b>	<b>88.67</b>

- NOPAT calculated using average tax rate from **2018-2020 fiscal year**.
- Long term growth rate: **2.00%**
- Net reinvestment rate: **29.00%**
- ROIC: **7.79%**

	Weighted Average Cost of Capital					
	88.67	6%	6.50%	6.95%	7.50%	8.00%
LT-Growth Rate	1.00%	90.9	81.9	75.2	68.3	63.0
	1.50%	100.0	89.3	81.3	73.3	67.1
	2.00%	111.3	98.2	<b>88.7</b>	79.1	72.0
	2.50%	126.0	109.4	97.6	86.2	77.8
	3.00%	145.5	123.7	108.9	94.8	84.7

**Accepted**

Implied Valuation: **\$88.67/Per Share**

Suggested: **22.5% Undervalued**

# Valuation: EBITDA Multiple



Earnings Multiples	Samsung	Broadcom	Qualcomm	Micron	Average
EPS	1.24	13.49	8.00	3.63	6.59
P/E	16.26	37.50	16.72	16.81	21.82
P/B	1.91	8.56	18.43	1.98	7.72
EV/EBITDA	5.37	16.78	12.32	7.74	10.55

## Accepted

- P/E trades below peer average
- P/B and EV/EBITDA trade below peer average
- Confirms status as undervalued



**Current Price: \$72.37**

**Valuation Price: \$88.67**

## Entry

- Buy \$75,000 worth of shares at the current market price
- Option to add more shares on a significant market pullback

## Exit

- Sell 50% if stock reaches valuation price of 88.67 in the next 12 months, another 50% if stock reaches 97.53
- Liquidate position if share price falls below \$45 or significant downside changes occur in the DRAM market

# Conclusion



**Current Price: \$72.37**

**Valuation Price: \$88.67**

- Stock has pulled back significantly
- Strong, established company with positive cashflows
- Most current risks are positive for growth
- Industry is high growth with memory usage expected to rise
- Undervalued compared to competitors
- Valuation shows strong value at this price

## Investment Recommendation

### Buy