

FOCUS CAPITAL



Mordechai Yavneh Founder & CIO <u>myavneh@focuscapitaladvisers.com</u>

MOI Global Best Ideas Conference 2022 — January 13, 2022

Focus Capital Management

We focus and concentrate our time, energy, and resources on a few select opportunities — allowing us to achieve superior returns.

- Our focus allows us to do **deep research and analysis** and to really understand the company we are investing in
- Our focus drives higher returns because we only pick our **best ideas**
- Our focus reduces risk by thoroughly vetting and stress-testing every investment

Silicon Motion (SIMO:NASDAQ) Leading Merchant Supplier of NAND Flash Controllers



1. One-Minute Overview

- 2. NAND Flash Controllers
- 3. Divisions
- 4. Financials
- 5. Diminishing Competition
- 6. Valuation
- 7. Thesis is Simple

One-minute Overview

- Highly profitable
- Extreme growth (~70% growth in '21, 30%–40%+ in '22)
- Secular growth market
- Gaining share within the market
- Competition diminishing, ceding the market to them long term
- Fortress balance sheet (14% of market cap in cash, no debt)
- Ultra-cheap valuation (P/E only ~17, ex-cash P/E ~15)

1. One-Minute Overview

2. NAND Flash Controllers

- 3. Divisions
- 4. Financials
- 5. Diminishing Competition
- 6. Valuation
- 7. Thesis is Simple

NAND Flash Controllers

What is NAND Flash and What is a NAND Flash Controller?

- NAND Flash the memory used for *storage* on smartphones, tablets, most modern computers, data centers, and increasingly ubiquitous in all sorts of devices
- NAND Flash Controller manages the NAND Flash and optimizes performance; *all* NAND Flash uses a controller
 - Efficient reading and writing
 - Wear leveling
 - Error correction
 - Garbage collection

- Hardware-level encryption
- Prolonging memory life
- Weak block detection
- Optimization for specific use cases

NAND Flash Controllers

NAND Flash Market Overview

Market segmentation

Customer:

- Flash Manufacturers
- Module Makers
- OEM Programs

Product:

- eMMC, UFS
- Client SSDs
- Enterprise SSDs
- Legacy removable storage

End Use Market:

- Smartphone
- PC
- Data Center
- Etc.



Silicon Motion is benefiting from "double" growth growing their share in a growing market

Growth depends on *unit* growth and actually benefits from declines in NAND Flash pricing

- 1. One-Minute Overview
- 2. NAND Flash Controllers

3. Divisions

- 4. Financials
- 5. Diminishing Competition
- 6. Valuation
- 7. Thesis is Simple

Divisions

eMMC+UFS

Client SSD

Embedded memory

SSD drives (in place of hard drives)

Integrated SSDs (NAND flash + controller)

SSD Solutions

Legacy

Removable storage

Mobile (smartphones, tablets) IoT

PCs, game consoles External drives Some data centers

Ferri (industrial and auto) Shannon (Chinese usbsidiary for Chinese hyperscalers)

SD cards USB keys

~40% of revenue

~50% of revenue

~7% of revenue

~3% of revenue

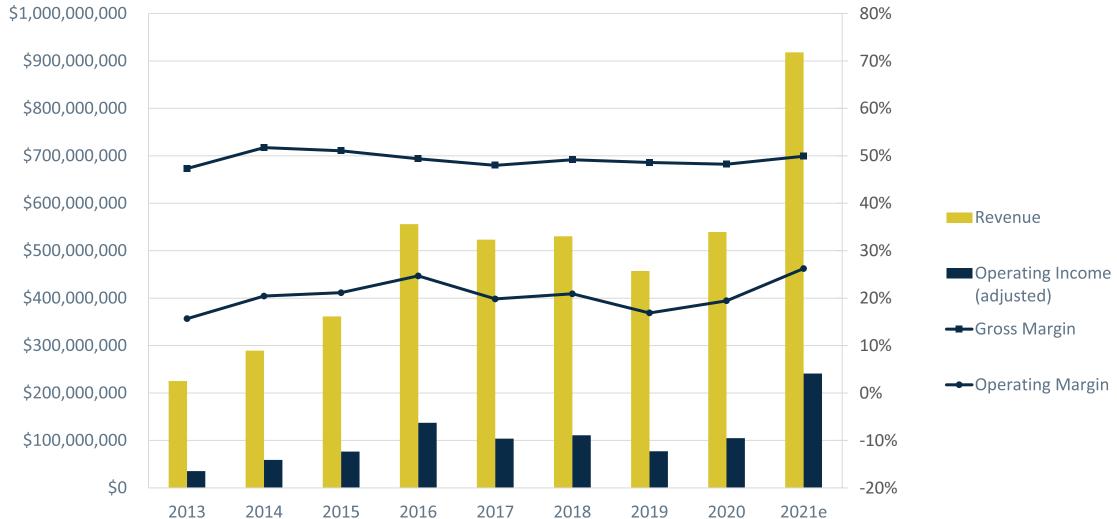
- 1. One-Minute Overview
- 2. NAND Flash Controllers
- 3. Divisions

4. Financials

- 5. Diminishing Competition
- 6. Valuation
- 7. Thesis is Simple

Financials

Silicon Motion 2013-2021



Financials

Evolution of Guidance

February 2021

- Three-year plan to reach \$1 billion in sales in 2023, with 50% gross margin and 30% operating margin
- Close to double 2020 revenue, with net income growing meaningfully faster, in just three years
- Excluding new customers and enterprise SSD initiative

May 2021

- Expecting to reach \$1 billion revenue goal sooner (i.e., 2022)
- Order backlog for 2021 exceeds \$1 billion, if not for tight foundry capacity

July 2021

- Expecting to reach \$1 billion revenue run-rate by Q4 2021
- Expecting sales in 2022 to exceed \$1 billion as they add meaningful incremental foundry capacity
- 2022 order book today exceeds \$1.5 billion; expecting to have much higher backlog by end of year
- Confident to grow 2022 revenue by fair amount of percentage, still gated by foundry capacity

October 2021

- Achieved \$1 billion revenue run rate in Q3, one quarter earlier than projected, due to successfully tilting mix to higher revenue products
- 2022 order book well in excess of \$1.5 billion
- Continuing to expect demand to exceed supply, but expecting very strong revenue growth for 2022 regardless
- Not expecting 50% increase in foundry capacity, but can increase revenue further than increase in foundry capacity by tilting mix to newer technologies, i.e., PCIe Gen 4 and UFS 3.1

- 1. One-Minute Overview
- 2. NAND Flash Controllers
- 3. Divisions
- 4. Financials

5. Diminishing Competition

- 6. Valuation
- 7. Thesis is Simple

Diminishing Competition <u>Competitors</u>

Internal controller teams – Samsung, SK Hynix, etc.

• Historically, this has been the main threat and fear

Merchant controller companies – Phison Marvell Smaller players: Realtek, Maxiotek, etc.

Diminishing Competition What Happened in 2021?

Chip shortage

- Crucial to ecosystem, better access to manufacturing capacity
- Still could not secure enough wafer supply to match demand
- Despite lack of supply, increased revenues by 70% (!)
- Supplier prices (TSMC, packaging+assembly, substrate, etc.) all raised; customer prices mostly contractual
- Despite temporary price "squeeze", operating margins *expanded* (!) by 35% (20% → 27%)

Texas freeze (February 2021)

- Samsung's Austin fab (their main fab for controllers) shut down for more than a month
- Samsung decides to exit eMMC controller market
- Leaves Silicon Motion as essentially the only significant supplier of eMMC controllers, a long-tailed market which is still growing significantly due to low-end smartphones and IoT

Captured more slots due to scale

- Sticky business customer roadmaps extend out years
- Significantly increased presence in OEM programs higher value, higher volume, and stickier business

Permanent step-up in revenues and margins — unlikely to reverse share gains, with more growth to come

Diminishing Competition What Happened in 2021?

eMMC

- With Samsung exiting the market, Silicon Motion is basically the only major game in town
- Exclusive supplier for SK Hynix's eMMC division
- Supplies a slew of Chinese module makers for eMMC, who have been selling eMMC throughout the chain

UFS

- Lost SK Hynix UFS business in 2019, but did extremely well as exclusive supplier to Micron's UFS business
- Added second UFS customer in 2021

Client SSD

- Supply about 70% of module maker merchant controller needs
- Historically only about 30% of OEM contracts, but increasing share
- OEM: 25%-30% (PCIe Gen3) → 40% (2021)
- Growth both from customers gaining share and adding new customers
- 1 NAND Flash customer (2020) → 2 (2021; first iteration of PCIe Gen4)

Diminishing Competition More Growth in the Bag

eMMC

- Samsung's exit from the eMMC controller market paves the path for future growth for eMMC segment
- IoT is a long-tailed and growing market, despite eMMC being "legacy" technology

UFS

- Going from 2 UFS Customers in 2021 to 7 in 2022, basically guaranteeing further growth for UFS segment
- UFS moving from flagship smartphones to mainstream

Client SSDs

- Estimating OEM design share win to reach 50% in 2022 (PCIe Gen 4, fully ramped by early 2023)
- Going from 2 NAND Flash customers in 2021 to 8 in 2022 (second iteration of PCIe Gen4)

Ferri

- Auto industry adding lot of content that needs NAND Flash and controllers
- Infotainment, telematics, assisted driving

Enterprise SSDs

- Greenfield opportunity for them (competing against Marvell, whom they successfully competed against in client SSD space)
- Beginning in 2022, but may start really contributing in 2023

Shannon

- Never reached its potential
- See it as a free option to break into the Chinese hyperscale market (Alibaba, Baidu) in a major way

Diminishing Competition Competitors Exiting

Marvell

 Unsuccessful in competing in Client SSD space and pivoted to focus on enterprise SSDs in 2018, ceding Client SSD space to Silicon Motion

Kingston

- Used to exclusively use Phison controllers; was major shareholder
- Began using Silicon Motion controllers in 2019, ramped up through 2020 and 2021, with Silicon Motion continuing to gain significant share with Kingston

Samsung

Exiting eMMC controller market

Internal Controller Teams

- Increasingly outsourcing controllers to Silicon Motion, both for UFS and Client SSD
- Only small portion of overall Flash costs; makes sense to leave to specialists and focus on their Flash manufacturing
- Merchant suppliers can spread development costs over greater volume than captive teams
- Main long-term risk substantially reduced

Diminishing Competition

In much of the market,

the flash controller wars are over

and

Silicon Motion has won

- 1. One-Minute Overview
- 2. NAND Flash Controllers
- 3. Divisions
- 4. Financials
- 5. Diminishing Competition

6. Valuation

7. Thesis is Simple

Valuation

Price (12/31/21) — \$95.03 Market Cap — \$3.3 billion 2021e Net Income — \$193 million P/E — 17.2 Cash — \sim \$450 million (14% of market cap!) Debt — \$0 **P/E ex-cash** — 14.9 Dividend -2.1% (raised in October by 43%)

- 1. One-Minute Overview
- 2. NAND Flash Controllers
- 3. Divisions
- 4. Financials
- 5. Diminishing Competition
- 6. Valuation

7. Thesis is Simple

Thesis is Simple Extreme Growth

- 70% Revenue growth in 202130–40%+ Revenue growth for 2022Years of growth to come
- Net Income growing even faster than Revenue

Thesis is Simple Highly Profitable

Highly profitable, in both better times and "tougher" times
Gross margins holding steady (~50%) even with increased volume discounts and temporary pricing "squeeze"
Operating margins expanding significantly with increased volumes

Expect operating margin to approach and possibly exceed 30%

Thesis is Simple <u>Reduced Risk</u>

Main risk was always internal captive controller teams freezing them out of the market

That risk proven unfounded as more and more NAND Flash manufacturers and OEM programs turn specifically to merchant controllers and Silicon Motion to fulfill their needs

Multi-year customer roadmaps de-risk future growth as Silicon Motion has good visibility into design wins Thesis is Simple Cheap Valuation

I challenge you to find such a combination of high growth and high profitability with low risk at a P/E of just 17 (P/E ex-cash of just 15!)