

Marvell Technology Group Ltd.

Buy on rising AI momentum and potential legacy 1H trough

Reiterate Rating: BUY | PO: 95.00 USD | Price: 85.09 USD

Legacy under pressure but AI well on track, reiterate Buy

FQ4 was inline, while the FQ1 outlook was -16% below on sharp non-Al, legacy declines. Specifically, FQ1 sales excl. Data Center was guided to -44% QoQ or -58% YoY on weak telco (Carrier), Cisco (Enterprise), and industrial trends. However, the all-important Data Center remains solidly on track and should grow nearly 80% YoY in the quarter, driven by a strong Al electro-optics ramp and initial shipments of custom Al ASICs. In fact, Marvell's Al revenue made up more than 10% of total sales in FY24, up from just 3% in FY23 and should reach nearly 30% in FY25/CY24E (expect more on April 11 Al day in NYC), the second highest in our coverage. While lower volume and unfavorable product mix (lower Carrier/Enterprise and ramping custom ASICs) point to n-t GM headwind, we now believe FY25/CY24 estimates are fully de-risked, with healthy cyclical recoveries expected in F2H25 and beyond. Overall, we lower FY26/27E sales by -3%/-2% and pf-EPS by -8%/-7%. We raise our PO to \$95 from \$80, now on 41x CY25E P/E (still within 17x-43x range) vs. 32x prior on upcoming strong sales growth and increasing Al exposure. Reit Buy.

Likes: 30-35% AI exposure by FY26E, highest after NVDA

MRVL's electro-optics data center business reached a \$1bn+ run-rate in FY24, with the Al-specific portion representing at least ~\$550mn (>\$200mn in FQ4 alone). MRVL enjoys an overall DSP share of >65-70%, and we expect Al contribution to grow to nearly \$1bn by FY25 and \$1.2bn by FY26 on the back of strong Nvidia and non-Nvidia Al accelerator sales. On the other hand, custom Al silicon should start ramping strongly this year (FY25) with a FQ4 exit rate of >\$200mn (closer to \$300mn) and reach \$1bn+ by FY26. Combined, we see MRVL's Al sales of \$2.3bn by FY26E and \$2.7bn by FY27E, or 30-35% of total sales, the second highest in our semis coverage after Nvidia (~80% Al exposure).

Risks: one more EPS cut, though now near cyclical trough

Al upside generally offset by sharp near-term slowdowns in non-Al businesses (FQ1 Carrier guided down -70% YoY, Enterprise -56% YoY, Consumer -70% YoY). However, we see FQ1 as near the cyclical trough and expect F2H recoveries to come through. Coupled with the strong growth in Data Center, we see impact to FY26/CY25 sales as more limited (only down -3% vs. prior). Meanwhile, the ramp of custom ASICs presents modest headwind to GMs in F2H24/FY25E, though OpM fall-through should be better.

Estimates (Jan) (US\$)	2023A	2024A	2025E	2026E	2027E
EPS	2.12	1.51	1.34	2.30	2.96
GAAP EPS	(0.19)	(1.08)	(0.41)	0.40	0.95
EPS Change (YoY)	35.0%	-28.8%	-11.3%	71.6%	28.7%
Consensus EPS (Bloomberg)			2.02	2.78	NA
DPS	0.24	0.24	0.24	0.24	0.24
Valuation (Jan)					
P/E	40.1x	56.4x	63.5x	37.0x	28.7x
GAAP P/E	NM	NM	NM	212.7x	89.6x
Dividend Yield	0.3%	0.3%	0.3%	0.3%	0.3%
EV / EBITDA*	29.8x	37.7x	41.6x	26.8x	21.6x
Free Cash Flow Yield*	1.5%	1.4%	1.5%	2.3%	3.0%
* For full definitions of <i>iQ</i> method SM measures, see page 13.					

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Refer to important disclosures on page 14 to 16. Analyst Certification on page 12. Price Objective Basis/Risk on page 12.

Timestamp: 08 March 2024 12:46AM EST

08 March 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	80.00	95.00
2025E Rev (m)	5,982.9	5,313.3
2026E Rev (m)	7,157.0	6,964.9
2027E Rev (m)	NA	8,031.2
2025E EPS	1.87	1.34
2026E EPS	2.50	2.30
2027E EPS	NA	2.96

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Stock Data

Price	85.09 USD
Price Objective	95.00 USD
Date Established	8-Mar-2024
Investment Opinion	C-1-7
52-Week Range	36.64 USD - 85.76 USD
Mrkt Val (mn) / Shares Out	74,360 USD / 873.9
(mn)	
Free Float	99.5%
Average Daily Value (mn)	1125.15 USD
BofA Ticker / Exchange	MRVL / NAS
Bloomberg / Reuters	MRVL US / MRVL.OQ
ROE (2025E)	7.8%
Net Dbt to Eqty (Jan-2024A)	21.7%
ESGMeter™	High

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to "BofA ESGMeter Methodology".

See page 3 for acronym definitions.

iQprofile[™] Marvell Technology Group Ltd.

iQmethod SM − Bus Performance*					
(US\$ Millions)	2023A	2024A	2025E	2026E	2027
Return on Capital Employed	5.1%	7.2%	6.7%	10.0%	12.2%
Return on Equity	11.6%	8.6%	7.8%	12.8%	15.2%
Operating Margin	35.5%	29.0%	27.3%	33.6%	36.5%
Free Cash Flow	1,083	1,034	1,151	1,743	2,262
<i>iQ</i> method SM – Quality of Earnings*					
(US\$ Millions)	2023A	2024A	2025E	2026E	2027
Cash Realization Ratio	0.7x	1.0x	1.2x	1.1x	1.1x
Asset Replacement Ratio	0.2x	0.3x	0.2x	0.2x	0.3x
Tax Rate	292.1%	NM	8.7%	17.5%	17.5%
Net Debt-to-Equity Ratio	22.9%	21.7%	21.0%	17.2%	10.7%
Interest Cover	13.0x	7.8x	7.5x	12.2x	15.3x
Income Statement Data (Jan)					
(US\$ Millions)	2023A	2024A	2025E	2026E	2027
Sales	5,920	5,508	5,313	6,965	8,031
% Change	32.7%	-7.0%	-3.5%	31.1%	15.3%
Gross Profit	3,817	3,371	3,321	4,368	5,066
% Change	31.7%	-11.7%	-1.5%	31.5%	16.0%
EBITDA	2,404	1,899	1,722	2,676	3,310
% Change	38.9%	-21.0%	-9.3%	55.4%	23.7%
Net Interest & Other Income	(161)	(205)	(192)	(192)	(192)
Net Income (Adjusted) % Change	1,822 42.5%	1,310 -28.1%	1,169 -10.8%	1,974 68.8%	2,491 26.2%
Free Cash Flow Data (Jan)					
(US\$ Millions)	2023A	2024A	2025E	2026E	2027
Net Income from Cont Operations (GAAP)	(164)	(933)	(354)	340	789
Depreciation & Amortization	1,392	1,398	1,335	1,449	1,540
Change in Working Capital	(650)	58	(142)	(315)	(282)
Deferred Taxation Charge	50	151	0	0	C
Other Adjustments, Net	659				
Capital Exponditure		698	577	617	
Capital Expenditure	(206)	(336)	(266)	(348)	(402)
Free Cash Flow	(206) 1,083	(336) 1,034	(266) 1,151	(348) 1,743	(402) 2,262
Free Cash Flow % Change	(206) 1,083 66.5%	(336) 1,034 -4.5%	(266) 1,151 11.3%	(348) 1,743 51.5%	(402) 2,262 29.8%
Free Cash Flow % Change Share / Issue Repurchase	(206) 1,083 66.5% (115)	(336) 1,034 -4.5% (150)	(266) 1,151 11.3% (725)	(348) 1,743 51.5% (950)	(402) 2,262 29.8% (1,000)
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid	(206) 1,083 66.5% (115) (204)	(336) 1,034 -4.5% (150) (207)	(266) 1,151 11.3% (725) (207)	(348) 1,743 51.5% (950) (204)	(402) 2,262 29.8% (1,000) (200)
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Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Jan)	(206) 1,083 66.5% (115) (204) (84)	(336) 1,034 -4.5% (150) (207) (456)	(266) 1,151 11.3% (725) (207) (643)	(348) 1,743 51.5% (950) (204) (644)	(402) 2,262 29.8% (1,000) (200) (644)
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Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Jan) (US\$ Millions) Cash & Equivalents	(206) 1,083 66.5% (115) (204) (84) 2023A 911	(336) 1,034 -4.5% (150) (207) (456) 2024A 951	(266) 1,151 11.3% (725) (207) (643) 2025E 513	(348) 1,743 51.5% (950) (204) (644) 2026E 446	(402) 2,262 29.8% (1,000) (200) (644) 20278
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Jan) (US\$ Millions) Cash & Equivalents Trade Receivables	(206) 1,083 66.5% (115) (204) (84) 2023A 911 1,192	(336) 1,034 -4.5% (150) (207) (456) 2024A 951 1,122	(266) 1,151 11.3% (725) (207) (643) 2025E 513 1,215	(348) 1,743 51.5% (950) (204) (644) 2026E 446 1,454	(402) 2,262 29.8% (1,000) (200) (644) 20278 850 1,667
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Jan) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets	(206) 1,083 66.5% (115) (204) (84) 2023A 911 1,192 1,178	(336) 1,034 -4.5% (150) (207) (456) 2024A 951 1,122 990	(266) 1,151 11.3% (725) (207) (643) 2025E 513 1,215 1,000	(348) 1,743 51.5% (950) (204) (644) 2026E 446 1,454 1,134	617 (402) 2,262 29.8% (1,000) (200) (644) 2027! 850 1,667
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Jan) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment	(206) 1,083 66.5% (115) (204) (84) 2023A 911 1,192 1,178 577	(336) 1,034 -4.5% (150) (207) (456) 2024A 951 1,122 990 756	(266) 1,151 11.3% (725) (207) (643) 2025E 513 1,215 1,000 749	(348) 1,743 51.5% (950) (204) (644) 2026E 446 1,454 1,134 759	(402) 2,262 29.8% (1,000) (200) (644) 20278 850 1,667 1,254 779
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Jan) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets	(206) 1,083 66.5% (115) (204) (84) 2023A 911 1,192 1,178 577 18,664	(336) 1,034 -4.5% (150) (207) (456) 2024A 951 1,122 990 756 17,410	(266) 1,151 11.3% (725) (207) (643) 2025E 513 1,215 1,000 749 17,410	(348) 1,743 51.5% (950) (204) (644) 2026E 446 1,454 1,134 759 17,410	(402) 2,262 29.8% (1,000) (200) (644) 20278 850 1,667 1,254 779 17,410
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Jan) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets	(206) 1,083 66.5% (115) (204) (84) 2023A 911 1,192 1,178 577 18,664 22,522	(336) 1,034 -4.5% (150) (207) (456) 2024A 951 1,122 990 756 17,410 21,229	(266) 1,151 11.3% (725) (207) (643) 2025E 513 1,215 1,000 749 17,410 20,888	(348) 1,743 51.5% (950) (204) (644) 2026E 446 1,454 1,134 759 17,410 21,202	(402) 2,262 29.8% (1,000) (200) (644) 20278 850 1,667 1,254 779 17,410 21,959
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Jan) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt	(206) 1,083 66.5% (115) (204) (84) 2023A 911 1,192 1,178 577 18,664 22,522 584	(336) 1,034 -4.5% (150) (207) (456) 2024A 951 1,122 990 756 17,410 21,229	(266) 1,151 11.3% (725) (207) (643) 2025E 513 1,215 1,000 749 17,410 20,888 107	(348) 1,743 51.5% (950) (204) (644) 2026E 446 1,454 1,134 759 17,410 21,202	(402) 2,262 29.8% (1,000) (644) 2027I 850 1,667 1,254 779 17,410 21,959
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Jan) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities	(206) 1,083 66.5% (115) (204) (84) 2023A 911 1,192 1,178 577 18,664 22,522 584 1,802	(336) 1,034 -4.5% (150) (207) (456) 2024A 951 1,122 990 756 17,410 21,229 107 1,707	(266) 1,151 11.3% (725) (207) (643) 2025E 513 1,215 1,000 749 17,410 20,888 107 1,669	(348) 1,743 51.5% (950) (204) (644) 2026E 446 1,454 1,134 759 17,410 21,202 107 1,727	(402) 2,262 29.8% (1,000) (200) (644) 2027I 850 1,667 1,254 779 17,410 21,959
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Jan) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt	(206) 1,083 66.5% (115) (204) (84) 2023A 911 1,192 1,178 577 18,664 22,522 584 1,802 3,908	(336) 1,034 -4.5% (150) (207) (456) 2024A 951 1,122 990 756 17,410 21,229 107 1,707 4,059	(266) 1,151 11.3% (725) (207) (643) 2025E 513 1,215 1,000 749 17,410 20,888 107 1,669 3,559	(348) 1,743 51.5% (950) (204) (644) 2026E 446 1,454 1,134 759 17,410 21,202 107 1,727 3,059	(402) 2,262 29.8% (1,000) (200) (644) 20278 850 1,667 1,254 779 17,410 21,959 107 1,778 2,559
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Jan) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt	(206) 1,083 66.5% (115) (204) (84) 2023A 911 1,192 1,178 577 18,664 22,522 584 1,802 3,908 591	(336) 1,034 -4.5% (150) (207) (456) 2024A 951 1,122 990 756 17,410 21,229 107 1,707 4,059 524	(266) 1,151 11.3% (725) (207) (643) 2025E 513 1,215 1,000 749 17,410 20,888 107 1,669 3,559 524	(348) 1,743 51.5% (950) (204) (644) 2026E 446 1,454 1,134 759 17,410 21,202 107 1,727 3,059 524	(402) 2,262 29.8% (1,000) (200) (644) 20278 850 1,667 1,254 779 17,410 21,959 107 1,778 2,559 524
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Jan) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt Other Non-Current Liabilities	(206) 1,083 66.5% (115) (204) (84) 2023A 911 1,192 1,178 577 18,664 22,522 584 1,802 3,908	(336) 1,034 -4.5% (150) (207) (456) 2024A 951 1,122 990 756 17,410 21,229 107 1,707 4,059	(266) 1,151 11.3% (725) (207) (643) 2025E 513 1,215 1,000 749 17,410 20,888 107 1,669 3,559	(348) 1,743 51.5% (950) (204) (644) 2026E 446 1,454 1,134 759 17,410 21,202 107 1,727 3,059	(402) 2,262 29.8% (1,000) (200) (644) 20278 850 1,667

Company Sector

Semiconductors

Company Description

Marvell is a leading fabless supplier of high performance standard and semi-custom products with a core strength in developing complex System-on-Chip architectures, and integrating analog, mixed-signal, and digital signal processing functionality. Marvell's broad portfolio of IP spans computing, optics, networking, storage, and security and addresses the enterprise, cloud, telecom, auto, and industrial markets.

Investment Rationale

We rate MRVL a Buy. Through a series of strategic acquisition and divestitures, MRVL has transformed into a data center silicon leader, with a robust IP portfolio well positioned to address secular growth opportunities across cloud data centers, 5G infrastructure, advanced autos, enterprise networking and security markets that can drive 20-25% long-term sales and 25-30% long-term EPS growth.

Stock Data

Average Daily Volume

13,223,047

Quarterly Earnings Estimates

	2024	2025
Q1	0.31A	0.23E
Q2	0.33A	0.27E
Q3	0.41A	0.38E
Q4	0.46A	0.46E

Marvell Revenue Build

Exhibit 1: Marvell Revenue Annual Trends

MRVL Data Center should grow +50% YoY in FY25E/CY24E

	CY22	CY23	CY24E	CY25E
MRVL Revenue Build (\$mn)	FY23	FY24	FY25E	FY26E
Total	\$5,920	\$5,508	\$5,313	\$6,965
YoY		-7.0%	-3.5%	31.1%
DATA CENTER	\$2,409	\$2,217	\$3,610	\$4,726
YoY	-	-8%	63%	31%
CLOUD DATA CTR.	1,445	\$1,663	\$3,069	\$4,017
% of total data center	60%	75%	85%	85%
YoY				
Electro-optics (Inphi DSP/TIA/Drivers, pluggables)	\$600	\$1,100	\$1,540	\$1,925
YoY, %	-	83%	40%	25%
DPU, Custom Al Silicon, Other	\$410	\$308	\$1,092	\$1,517
YoY, %	-	-25%	255%	39%
Storage - Cloud/Nearline	\$300	\$80	\$200	\$280
YoY, %	-	-73%	150%	40%
Ethernet Switching (Innovium), Other Cavium	\$135	\$175	\$236	\$295
YoY, %	-	30%	35%	25%
ON-PREMISE DATA CTR.	\$964	\$554	\$542	\$709
% of total data center	40%	25%	15%	15%
YoY		-42%	-2%	31%
Fibre Channel	\$265	\$175	\$210	\$221
YoY, %		-25%	20%	5%
Storage - Onprem	\$499	\$279	\$227	\$357
YoY, %		-44%	-19%	58%
Other on-Prem Networking (Ethernet PHY/NICs/Aquantia, Retimer, old Avera)	\$200	\$100	\$105	\$131
YoY, %	-	-50%	5%	25%
CARRIER	\$1,084	\$1,052	\$380	\$591
YoY, %	-	-3%	-64%	56%
Wireless (5G processors)	\$600	\$700	\$500	\$690
YoY, %	-	17%	-29%	38%
Wired (incl. Inphi Optics incl/ merchant Coherent DSP, ASIC, Ethernet, Cavium)	\$484	\$352	-\$120	-\$99
YoY, %	-	-27%	-134%	-18%
ENTERPRISE NETWORKING	\$1,369	\$1,228	\$724	\$907
YoY, %	-	-10%	-41%	25%
AUTO/INDUSTRIAL	\$357	\$388	\$356	\$397
YoY, %	-	9%	-8%	12%
Auto	\$200	\$250	\$275	\$330
YoY, %	-	25%	10%	20%
Industrial	\$157	\$138	\$81	\$67
YoY, %	-	-12%	-42%	-17%
CONSUMER	\$701	\$622	\$244	\$344
YoY, %	-	-11%	-61%	41%

Source: BofA Global Research estimates, company data

BofA GLOBAL RESEARCH

Glossary: MRVL: Marvell IPHI: Inphi

AVGO: Broadcom NVDA: Nvidia DC: Data Center

DSP: Digital Signal Processor NIC: Network Interface Card

ASIC: Application-Specific Integrated Circuit

PHY: Physical

DPU: Data Processing Unit Al: Artificial Intelligence

TIA: Trans-Impedance Amplifier DCI: Data Center Interconnect



Summary of model changes

Exhibit 2: MRVL summary of estimate changes

We adjust MRVL FY25/26 sales -11%/-3%, EPS -28%/-8%

		Sales (\$mn)		Non-GAAP EPS (ex. SBC)						
	Old	NEW	delta	Old	NEW	delta				
Apr-24E	\$1,348	\$1,150	(\$198)	\$0.37	\$0.23	(\$0.14)				
Jul-24E	\$1,395	\$1,222	(\$173)	\$0.40	\$0.27	(\$0.13)				
Oct-24E	\$1,575	\$1,395	(\$180)	\$0.53	\$0.38	(\$0.15)				
Jan-25E	\$1,666	\$1,546	(\$120)	\$0.57	\$0.46	(\$0.11)				
FY25E	\$5,983	\$5,313	(\$670)	\$1.87	\$1.34	(\$0.53)				
YoY%	8.7%	-3.5%	-11.2%	24.1%	-11.0%	-28.3%				
Apr-25E	\$1,650	\$1,594	(\$57)	\$0.52	\$0.45	(\$0.07)				
Jul-25E	\$1,750	\$1,723	(\$26)	\$0.58	\$0.55	(\$0.03)				
Oct-25E	\$1,845	\$1,799	(\$46)	\$0.67	\$0.63	(\$0.05)				
Jan-26E	\$1,912	\$1,849	(\$63)	\$0.73	\$0.67	(\$0.05)				
FY26E	\$7,157	\$6,965	(\$192)	\$2.50	\$2.30	(\$0.20)				
YoY%	19.6%	31.1%	-2.7%	33.6%	71.4%	-8.0%				
Apr-26E	\$1,895	\$1,866	(\$29)	\$0.68	\$0.64	(\$0.04)				
Jul-26E	\$2,003	\$1,979	(\$24)	\$0.75	\$0.71	(\$0.04)				
Oct-26E	\$2,117	\$2,066	(\$51)	\$0.85	\$0.79	(\$0.06)				
Jan-27E	\$2,196	\$2,120	(\$76)	\$0.88	\$0.82	(\$0.07)				
FY27E	\$8,211	\$8,031	(\$180)	\$3.16	\$2.96	(\$0.21)				
YoY%	14.7%	15.3%	-2.2%	26.4%	28.5%	-6.5%				

Source: BofA Global Research, company reports

BofA GLOBAL RESEARCH

Q4 reported vs. expectations

Exhibit 3: MRVL Q4 reporting earnings vs. our/Street expectations

MRVL reported Q4 sales and EPS in-line with Street expectations

	Jan-23	Oct-23				Jan-24				
			Guidance	Cons	BofA	New BofA	Delta vs. Street (%, bps)	Delta vs. Street (\$)	QoQ (BofA)	YoY (BofA)
Sales (\$mn)	\$1,419	\$1,419	\$1,420 +/- 5%	\$1,419	\$1,421	\$1,427	0.5%	\$7	0.6%	0.6%
QoQ%	-7.7%	5.8%		0.1%	0.2%	0.6%	50			
YoY%	5.6%	-7.7%			0.2%	0.6%	56			
Data Center	498	556		755	751	765	1.4%	\$10	38%	54%
Carrier	275	317		178	179	170	-4.5%	(\$8)	-46%	-38%
Enterprise Networking	366	271		258	260	265	2.9%	\$8	-2%	-28%
Auto and Industrial	99	107		86	85	82	-4.3%	(\$4)	-23%	-17%
Consumer	180	169		144	145	144	-0.1%	(\$0)	-15%	-20%
Gross Margin % (Non-GAAP)	63.5%	60.6%	63.5%-64.5%	64.1%	64.0%	63.9%	(20)		330	38
Gross Profit (Non-GAAP)	901	859			909	911			6.0%	1.2%
R&D (Non-GAAP)	352	366			362	355			-2.9%	0.9%
SG&A (Non-GAAP)	79	71			68	74			2.9%	-6.7%
Opex Total (Non-GAAP)	431	437	\$430		430	429			-2.0%	-0.5%
Operating Income (Non-GAAP)	470	422		\$479	479	483	0.7%	\$4	14.3%	2.7%
Operating Margin % (Non-GAAP)	33.1%	29.8%		33.8%	33.7%	33.8%	8		408	70
Financial Income	(48)	(45)			(50)	(55)				
Pretax Income	422	377			428	427			13.4%	1.4%
Tax expense	25	23			26	26				
Net Income (Non-GAAP)	396	354			403	402			13.4%	1.3%
Diluted EPS (Non-GAAP)	\$0.46	\$0.41	\$0.46 +/- 5c	\$0.46	\$0.46	\$0.46	-0.3%	(\$0.00)	13.2%	-0.4%
Diluted Shares (Non-GAAP)	859	872	874		874	874			0.2%	1.7%

Source: BofA Global Research estimates, Bloomberg, Visible Alpha, company report



Q1 guidance vs. expectations

Exhibit 4: MRVL Q1 outlook vs. our/Street expectations

MRVL outlook below Street expectations

	Jan-24		Apr-24E		
		BofA	Cons	Guidance	New BofA
Sales (\$mn)	\$1,427	\$1,348	\$1,365	\$1,150 +/- 5%	\$1,150
QoQ%	0.6%	-5.1%	-3.8%		-19.4%
YoY%	0.6%	2.0%			-13.0%
Data Center	765	770	789		781
Carrier	170	156	159		85
Enterprise Networking	265	233	236		159
Auto and Industrial	82	89	85		82
Consumer	144	99	108		43
Gross Margin % (Non-GAAP)	63.9%	64.0%	64.1%	62.0%-63.0%	62.5%
Gross Profit (Non-GAAP)	911	862			719
R&D (Non-GAAP)	355	392			379
SG&A (Non-GAAP)	74	71			76
Opex Total (Non-GAAP)	429	462		\$455	455
Operating Income (Non-GAAP)	483	400	\$423		264
Operating Margin % (Non-GAAP)	33.8%	29.7%	31.0%		22.9%
Financial Income	(55)	(50)			(48)
Pretax Income	427	350			216
Tax expense	26	24			15
Net Income (Non-GAAP)	402	325			201
Diluted EPS (Non-GAAP)	\$0.46	\$0.37	\$0.41	\$0.23 +/- 5c	\$0.23
Diluted Shares (Non-GAAP)	874	873		875	876

Source: BofA Global Research estimates, Bloomberg, Visible Alpha, company report

BofA GLOBAL RESEARCH

Balance sheet, cash flow snapshot

Exhibit 5: Summary of MRVL balance sheet and cash flow statement

Net cash/shr increased QoQ; Inventory dollars decreased and days increased QoQ

(FY year end Jan)	4Q23	1Q24	2Q24	3Q24	4Q24
	Jan-23	Apr-23	Jul-23	Oct-23	Jan-24
Total Cash	\$911	\$1,028	\$423	\$726	\$951
Short-term debt	\$584	\$1,518	\$1,019	\$96	\$107
Long-term debt	\$3,908	\$3,155	\$3,135	\$4,090	\$4,059
Total debt	\$4,492	\$4,673	\$4,153	\$4,186	\$4,166
Net Cash	(\$3,581)	(\$3,644)	(\$3,730)	(\$3,460)	(\$3,215)
Net Cash/dil. share	(\$4.19)	(\$4.25)	(\$4.33)	(\$4.01)	(\$3.72)
DSO	76.5	68.9	82.1	77.9	71.5
DPO	56.9	46.2	45.8	44.0	49.1
Inventory (\$)	\$1,068	\$1,026	\$1,016	\$942	\$864
Inv Turns	2.8	3.0	3.2	3.7	3.5
Inv Days	130.8	122.5	113.1	99.0	103.5
Cash Conversion days	150.4	145.1	149.3	133.0	125.9
Cash Flow from Ops	\$352	\$208	\$113	\$503	\$547
Capex	(\$54.0)	(\$99.8)	(\$111.1)	(\$54.4)	(\$71.0)
Free cash flow	\$257	\$59	(\$28)	\$417	\$425
Dividends as % of FCF (ttm)	22.0%	23.3%	33.2%	29.3%	23.7%
Buybacks as % of FCF (ttm)	12.4%	11.4%	8.1%	7.1%	17.2%

Source: BofA Global Research estimates, company report



Exhibit 6: MRVL – Income Statement (\$mn) MRVL is tracking to generated ~\$1.34 in FY25E

	1Q24	2Q24	3Q24	4Q24	1Q25E	2Q25E	3Q25E	4Q25E	1Q26E	2Q26E	3Q26E	4Q26E	FY24	FY25E	FY26E
N-4	Apr-23	Jul-23	Oct-23	Jan-24	Apr-24E	Jul-24E	Oct-24E	Jan-25E	Apr-25E	Jul-25E	Oct-25E	Jan-26E	Jan-24	Jan-25	Jan-26
Net revenue	\$1,321.7	\$1,340.9	\$1,418.6	\$1,426.5	\$1,150.1	\$1,221.9	\$1,395.4	\$1,545.9	\$1,593.9	\$1,723.4	\$1,798.8	\$1,848.7	\$5,507.7	\$5,313.3	\$6,964.9
QoQ	-6.8%	1.5%	5.8%	0.6%	-19.4%	6.2%	14.2%	10.8%	3.1%	8.1%	4.4%	2.8%	7.00/	2.50/	21.10/
YoY	-8.7%	-11.6%	-7.7%	0.6%	-13.0%	-8.9%	-1.6%	8.4%	38.6%	41.0%	28.9%	19.6%	-7.0%	-3.5%	31.1%
Cost of goods	764.5	819.8	867.4	762.4	622.9	649.8	714.9	771.3	802.9	846.4	872.8	889.5	3,214.1	2,758.9	3,411.6
Non-GAAP gross profit	792.5	808.1	859.2	911.1	718.8	763.7	872.1	966.2	994.6	1,080.6	1,129.7	1,162.9	3,370.9	3,320.8	4,367.7
Opex:															
Non-GAAP R&D	380.6	370.3	365.7	355.0	379.3	385.0	392.7	406.5	439.0	439.0	417.0	412.8	1,471.6	1,563.5	1,707.8
Non-GAAP SG&A	78.0	77.7	71.4	73.5	75.7	76.5	77.6	78.4	81.9	81.9	79.5	79.5	300.6	308.2	322.7
Non-GAAP Opex	458.6	448.0	437.1	428.5	455.0	461.5	470.3	484.8	520.9	520.9	496.5	492.3	1,772.2	1,871.6	2,030.5
Non-GAAP Operating income	333.9	360.1	422.1	482.6	263.8	302.2	401.8	481.4	473.7	559.7	633.2	670.6	1,598.7	1,449.2	2,337.1
Interest income (expense)	(49.9)	(45.9)	(41.2)	(54.0)	(46.7)	(46.7)	(46.7)	(46.7)	(46.7)	(46.7)	(46.7)	(46.7)	(191.0)	(186.8)	(186.8)
Non-GAAP Pretax income	284.1	305.7	376.7	427.3	215.8	254.2	353.8	433.4	425.7	511.7	585.2	622.6	1,393.8	1,257.2	2,145.1
Non-GAAP Tax expense, other															
adj.	19.9	15.5	22.6	25.7	15.1	17.8	24.8	30.3	34.1	40.9	46.8	49.8	83.7	88.0	171.6
Non-GAAP Net income	\$264.2	\$290.2	\$354.1	\$401.6	\$200.7	\$236.4	\$329.1	\$403.0	\$391.7	\$470.7	\$538.4	\$572.8	\$1,310.1	\$1,169.2	\$1,973.5
Diluted EPS (Non-GAAP, inc. SBC)	\$0.14	\$0.16	\$0.22	\$0.28	\$0.06	\$0.11	\$0.21	\$0.30	\$0.28	\$0.37	\$0.45	\$0.49	\$0.81	\$0.68	\$1.58
Diluted EPS (Non-GAAP, ex															
SBC)	\$0.31	\$0.33	\$0.41	\$0.46	\$0.23	\$0.27	\$0.38	\$0.46	\$0.45	\$0.55	\$0.63	\$0.67	\$1.51	\$1.34	\$2.30
YoY	-41%	-41%	-29%	0%	-25%	-19%	-7%	1%	98%	102%	66%	45%	-29%	-11%	71%
Non-GAAP Diluted shares	861.2	869.4	872.2	873.9	875.8	873.1	870.0	866.9	863.5	860.0	856.2	852.3	869.2	871.5	858.0
												=			

Source: BofA Global Research, company reports



Fyhihit 7: MRVI – Segment model (\$mn)

	EXHIBIT /: MKVL - 3	segment mo	aeı (əmn)					
111	Data center sales dri	Data center sales driving overall company model over the next several years						
A		1Q24	2Q24	3Q24	4Q24	1Q25E		
	D C	A 22	1.1.22	0-4-22	1 24	A 2 4E		

Business Segment	1Q24 Apr-23	2Q24 Jul-23	3Q24 Oct-23	4Q24 Jan-24	1Q25E Apr-24E	2Q25E Jul-24E	3Q25E Oct-24E	4Q25E Jan-25E	1Q26E Apr-25E	2Q26E Jul-25E	3Q26E Oct-25E	4Q26E Jan-26E	FY24 Jan-24	FY25E Jan-25	FY26E Jan-26
		, ==		,		,		,		,		,	,	,	,
Sales (\$mn)															
Data Center	435.8	459.8	555.8	765.3	780.6	831.3	956.0	1,042.1	1,078.6	1,164.8	1,223.1	1,259.8	2,216.7	3,610.1	4,726.3
Carrier	289.9	275.5	316.5	170.0	85.0	87.6	96.3	110.8	121.8	152.3	156.9	160.0	1,051.9	379.6	590.9
Enterprise Networking	364.6	327.7	271.1	265.0	159.0	167.0	185.3	213.1	217.4	228.2	228.2	232.8	1,228.4	724.4	906.7
Auto and Industrial	89.3	110.2	106.5	82.3	82.3	86.4	90.7	96.2	99.1	97.1	100.0	101.0	388.3	355.6	397.1
Consumer	142.1	167.7	168.7	143.9	43.2	49.6	67.0	83.8	77.1	80.9	90.6	95.2	622.4	243.6	343.8
Total	1,321.7	1,340.9	1,418.6	1,426.5	1,150.1	1,221.9	1,395.4	1,545.9	1,593.9	1,723.4	1,798.8	1,848.7	5,507.7	5,313.3	6,964.9
QoQ (%)	40.44	= ==:				0.50	4= 00/		0.50	0.004	= 0.07				
Data Center	-12.4%	5.5%	20.9%	37.7%	2.0%	6.5%	15.0%	9.0%	3.5%	8.0%	5.0%	3.0%			
Carrier	5.3%	-5.0%	14.9%	-46.3%	-50.0%	3.0%	10.0%	15.0%	10.0%	25.0%	3.0%	2.0%			
Enterprise Networking	-0.5%	-10.1%	-17.3%	-2.3%	-40.0%	5.0%	11.0%	15.0%	2.0%	5.0%	0.0%	2.0%			
Auto & Industrial	-10.2%	23.4%	-3.4%	-22.7%	0.0%	5.0%	5.0%	6.0%	3.0%	-2.0%	3.0%	1.0%			
Consumer	-21.0%	18.0%	0.6%	-14.7%	-70.0%	15.0%	35.0%	25.0%	-8.0%	5.0%	12.0%	5.0%			
Total	-6.8%	1.5%	5.8%	0.6%	-19.4%	6.2%	14.2%	10.8%	3.1%	8.1%	4.4%	2.8%			
YoY (%)															
Data Center	-32.0%	-28.5%	-11.4%	53.8%	79.1%	80.8%	72.0%	36.2%	38.2%	40.1%	27.9%	20.9%	-8.0%	62.9%	30.9%
Carrier	15.0%	-3.4%	16.6%	-38.3%	-70.7%	-68.2%	-69.6%	-34.9%	43.3%	73.9%	62.9%	44.5%	-3.0%	-63.9%	55.7%
Enterprise Networking	27.2%	-3.7%	-27.9%	-27.7%	-56.4%	-49.1%	-31.6%	-19.6%	36.7%	36.7%	23.2%	9.2%	-10.3%	-41.0%	25.2%
Auto & Industrial	0.0%	31.8%	26.5%	-17.2%	-7.8%	-21.6%	-14.8%	16.9%	20.4%	12.3%	10.2%	5.0%	8.9%	-8.4%	11.7%
Consumer	-20.4%	2.0%	-5.4%	-20.0%	-69.6%	-70.4%	-60.3%	-41.8%	78.5%	63.0%	35.2%	13.6%	-11.2%	-60.9%	41.1%
Total	-8.7%	-11.6%	-7.7%	0.6%	-13.0%	-8.9%	-1.6%	8.4%	38.6%	41.0%	28.9%	19.6%	-7.0%	-3.5%	31.1%
0/ -64-4-1															
% of total	22.00/	2420/	20.20/	F2.C0/	67.00/	60.00/	CO F0/	C7 40/	67.70/	C7 C0/	CO 00/	CO 10/	40.20/	C7.00/	67.00/
Data Center	33.0%	34.3%	39.2%	53.6%	67.9%	68.0%	68.5% 6.9%	67.4% 7.2%	67.7% 7.6%	67.6% 8.8%	68.0%	68.1% 8.7%	40.2% 19.1%	67.9% 7.1%	67.9%
Carrier	21.9%	20.5%	22.3% 19.1%	11.9%	7.4%	7.2% 13.7%	13.3%		7.6% 13.6%		8.7%	12.6%			8.5%
Enterprise Networking	27.6%	24.4%		18.6%	13.8%			13.8%		13.2%	12.7%		22.3%	13.6%	13.0%
Auto & Industrial	6.8%	8.2%	7.5% 11.9%	5.8% 10.1%	7.2% 3.8%	7.1% 4.1%	6.5% 4.8%	6.2% 5.4%	6.2% 4.8%	5.6% 4.7%	5.6%	5.5% 5.1%	7.1% 11.3%	6.7% 4.6%	5.7%
Consumer	10.8%	12.5%									5.0%				4.9%
Total Source: RofA Global Researce	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: BofA Global Research, company reports

Exhibit 9: MRVL – Balance Sheet (\$mn)
MRVL should modestly improve its cash position over time

MARVELL BALANCE SHEET															
Balance Sheet	1Q24 Apr-23	2Q24 Jul-23	3Q24 Oct-23	4Q24 Jan-24	1Q25E Apr-24E	2Q25E Jul-24E	3Q25E Oct-24E	4Q25E Jan-25E	1Q26E Apr-25E	2Q26E Jul-25E	3Q26E Oct-25E	4Q26E Jan-26E	FY24 Jan-24	FY25E Jan-25	FY26E Jan-26
ASSETS															
Cash/Equivalents ST Investments	1,028.3	423.4	725.6	950.8	728.0	637.8	531.7	513.2	64.1	114.0	251.4	445.6	950.8	513.2	445.6
Accounts Receivable (net)	1,000.9	1,209.2	1,214.6	1,121.6	904.3	960.7	1,097.2	1,215.5	1,253.2	1,355.0	1,414.3	1,453.6	1,121.6	1,215.5	1,453.6
Inventory	1,026.0	1,015.8	941.5	864.4	706.2	736.8	810.5	874.5	910.3	959.7	989.5	1,008.5	864.4	874.5	1,008.5
Other Current Assets	147.7	118.8	91.5	125.9	125.9	125.9	125.9	125.9	125.9	125.9	125.9	125.9	125.9	125.9	125.9
Total Current Assets	3,202.9	2,767.2	2,973.2	3,062.7	2,464.3	2,461.2	2,565.3	2,729.1	2,353.5	2,554.5	2,781.2	3,033.6	3,062.7	2,729.1	3,033.6
PP&E	636.2	693.8	701.6	756.0	752.5	749.7	748.7	749.1	750.1	752.3	755.3	758.8	756.0	749.1	758.8
Goodwill	11,586.9	11,586.9	11,586.9	11,586.9	11,586.9	11,586.9	11,586.9	11,586.9	11,586.9	11,586.9	11,586.9	11,586.9	11,586.9	11,586.9	11,586.9
Other non-current Assets	2,015.2	2,142.0	2,162.3	1,818.8	1,818.8	1,818.8	1,818.8	1,818.8	1,818.8	1,818.8	1,818.8	1,818.8	1,818.8	1,818.8	1,818.8
Total Assets	22,273.2	21,750.1	21,714.4	21,228.5	20,626.6	20,620.7	20,723.8	20,888.0	20,513.4	20,716.7	20,946.3	21,202.2	21,228.5	20,888.0	21,202.2
LIABILITIES															
Accounts Payable	388.4	412.8	419.1	411.3	336.0	314.9	346.4	373.7	389.0	410.1	422.9	431.0	411.3	373.7	431.0
Accrued Liabilities Deferred Income	970.8	1,068.5	1,119.2	1,032.9	1,032.9	1,032.9	1,032.9	1,032.9	1,032.9	1,032.9	1,032.9	1,032.9	1,032.9	1,032.9	1,032.9
Total Current Liabilities Non-current taxes pay.	3,061.4	2,685.2	1,879.6	1,814.2	1,738.9	1,717.8	1,749.3	1,776.6	1,791.9	1,813.0	1,825.8	1,833.9	1,814.2	1,776.6	1,833.9
Term loan obli., l-t	3,154.9	3,134.5	4,089.6	4,058.6	3,558.6	3,558.6	3,558.6	3,558.6	3,058.6	3,058.6	3,058.6	3,058.6	4,058.6	3,558.6	3,058.6
Other LT liabilities	563.0	540.9	511.8	524.3	524.3	524.3	524.3	524.3	524.3	524.3	524.3	524.3	524.3	524.3	524.3
Total Liabilities	6,779.3	6,360.6	6,481.0	6,397.1	5,821.8	5,800.7	5,832.2	5,859.5	5,374.8	5,395.9	5,408.7	5,416.8	6,397.1	5,859.5	5,416.8
Shareholders' Equity	15,493.9	15,389.5	15,233.4	14,831.4	14,804.8	14,820.0	14,891.6	15,028.5	15,138.6	15,320.7	15,537.6	15,785.4	14,831.4	15,028.5	15,785.4
Total Liabilities & SH' Equity	22,273.2	21,750.1	21,714.4	21,228.5	20,626.6	20,620.7	20,723.8	20,888.0	20,513.4	20,716.7	20,946.3	21,202.2	21,228.5	20,888.0	21,202.2
Total cash (incl. rest. cash)	1,028.3	423.4	725.6	950.8	728.0	637.8	531.7	513.2	64.1	114.0	251.4	445.6	950.8	513.2	445.6
Total debt	4,672.5	4,153.1	4,185.9	4,165.9	3,665.9	3,665.9	3,665.9	3,665.9	3,165.9	3,165.9	3,165.9	3,165.9	4,058.6	3,558.6	3,058.6
Net Cash	(3,644.2)	(3,729.7)	(3,460.3)	(3,215.1)	(2,937.9)	(3,028.1)	(3,134.2)	(3,152.7)	(3,101.8)	(3,051.9)	(2,914.5)	(2,720.3)	(3,107.8)	(3,045.4)	(2,613.0)





Exhibit 9: MRVL – Balance Sheet (\$mn)

MRVL should modestly improve its cash position over time

MARVELL BALANCE SHEET															
Net Cash/dil. share	(4.25)	(4.33)	(4.01)	(3.72)	(3.39)	(3.50)	(3.64)	(3.67)	(3.63)	(3.59)	(3.44)	(3.22)	(3.61)	(3.53)	(3.08)
Days Sales Outstanding (DSO)	68.9	82.1	77.9	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5			
Days Payables Out. (DPO) Cash conv. days (DIO+DSO-	46.2	45.8	44.0	49.1	49.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1			
DPO)	145.1	149.3	133.0	125.9	125.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9			

Source: BofA Global Research, company reports

Exhibit 11: MRVL – Cash Flow (\$mn)
MRVL FCF margins progressing nicely towards mid-20s level

Cash Flow Statement	1Q24 Apr-23	2Q24 Jul-23	3Q24 Oct-23	4Q24 Jan-24	1Q25E Apr-24E	2Q25E Jul-24E	3Q25E Oct-24E	4Q25E Jan-25E	1Q26E Apr-25E	2Q26E Jul-25E	3Q26E Oct-25E	4Q26E Jan-26E	FY24 Jan-24	FY25E Jan-25	FY26E Jan-26
Net Income	(168.9)	(207.5)	(164.3)	(392.7)	(195.5)	(129.6)	(47.4)	18.2	(6.3)	64.7	125.3	156.1	(933.4)	(354.3)	339.9
Depreciation and Amortization	78.4	75.5	72.1	73.8	61.0	63.9	70.8	76.8	78.8	83.9	87.0	88.9	299.8	272.5	338.6
Stock Based Compensation Gain on sale of equity invest. Write-off and disp. of assets	143.2	152.8	158.5	155.3	144.2	144.2	144.2	144.2	154.2	154.2	154.2	154.2	609.8	576.8	616.8
Changes in assets/liabilities	1.9	(122.7)	204.9	(26.3)	300.3	(108.2)	(178.7)	(155.0)	(58.2)	(130.1)	(76.4)	(50.1)	57.8	(141.6)	(314.8)
Accounts Receivable	191.3	(208.2)	(5.5)	93.0	217.3	(56.5)	(136.4)	(118.3)	(37.7)	(101.8)	(59.3)	(39.3)	70.6	(93.9)	(238.1)
Inventory	41.2	11.3	70.6	78.8	158.2	(30.5)	(73.8)	(64.0)	(35.8)	(49.3)	(29.9)	(19.0)	201.9	(10.1)	(134.0)
Prepaid /Other Asset	7.9	(47.2)	53.7	(107.5)									(93.1)		
Accounts Payable	(104.8)	18.0	(0.7)	(61.6)	(75.3)	(21.2)	31.5	27.3	15.3	21.1	12.8	8.1	(149.1)	(37.6)	57.3
Accrued Liabilities and other	(60.1)	102.3	27.1	(46.6)									22.7		
Accrued Employee comp. Deferred income	(73.6)	1.1	59.7	17.6									4.8		
Cash from Op. Activities	208.4	112.5	503.0	546.6	575.6	236.0	254.6	350.0	446.2	450.4	567.7	626.9	1,370.5	1,416.2	2,091.2
Purchases of Investments Sales and maturities of inv.															
Cash paid for acquisition (net)	(2.8)	(5.5)											(8.3)		
Purchase of property and eq.	(99.8)	(111.1)	(54.4)	(71.0)	(57.5)	(61.1)	(69.8)	(77.3)	(79.7)	(86.2)	(89.9)	(92.4)	(336.3)	(265.7)	(348.2)
Purchase of technology licenses	(0.1)	(0.4)	(0.3)	(10.6)	(3.4)	(3.4)	(3.4)	(3.4)	(3.0)	(3.1)	(3.2)	(3.0)	(11.4)	(13.5)	(12.3)
Cash from Investing Activities	(102.7)	(117.0)	(54.6)	(81.7)	(60.9)	(64.4)	(73.1)	(80.7)	(82.7)	(89.3)	(93.1)	(95.5)	(356.0)	(279.2)	(360.5)
Repurchase of common stock Proceeds from stock issuance			(50.0)	(100.0)	(150.0)	(175.0)	(200.0)	(200.0)	(225.0)	(225.0)	(250.0)	(250.0)	(150.0)	(725.0)	(950.0)
Dividend payments	(51.4)	(51.7)	(51.8)	(51.9)	(52.0)	(51.8)	(51.7)	(51.5)	(51.3)	(51.1)	(50.8)	(50.6)	(206.8)	(207.0)	(203.8)
Payment on tech license obl.	(50.0)	(28.6)	(31.6)	(40.1)	(35.6)	(34.9)	(35.9)	(36.3)	(36.3)	(35.2)	(36.3)	(36.6)	(150.3)	(142.7)	(144.5)
Cash from Financing Activities	11.6	(600.4)	(146.2)	(239.7)	(737.6)	(261.7)	(287.5)	(287.8)	(812.6)	(311.3)	(337.2)	(337.3)	(974.7)	(1,574.7)	(1,798.3)
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Net Change in Cash	117.3	(604.9)	302.2	225.2	(222.8)	(90.2)	(106.0)	(18.5)	(449.1)	49.9	137.5	194.2	39.8	(437.6)	(67.6)



Exhibit 11: MRVL – Cash Flow (\$mn)

MRVL FCF margins progressing nicely towards mid-20s level

MARVELL CASH FLOW															
·						-	_			-	_				
Free Cash Flow	\$58.5	(\$27.6)	\$416.7	\$424.9	\$479.2	\$136.7	\$145.6	\$232.9	\$327.2	\$325.9	\$438.3	\$494.8	\$872.5	\$994.4	\$1,586.2
FCF as % of sales	4.4%	-2.1%	29.4%	29.8%	41.7%	11.2%	10.4%	15.1%	20.5%	18.9%	24.4%	26.8%	15.8%	18.7%	22.8%

Source: BofA Global Research, company reports

Price objective basis & risk

Marvell Technology Group Ltd. (MRVL)

Our \$95 PO is based on a 41x FY26E/CY25E pf-EPS, which is well-supported by the 20%-30%+ longer-term compounded annual EPS growth potential, and within the normal 1x-2x range for high growth semi peers.

Downside risks: 1) Integration risks in recent deals, 2) Financial risks related to going to net debt from net cash position, and in achieving expected cost synergies in a timely manner, and 3) Cyclical industry risks including potential slowdown in legacy hard disk drive, infrastructure spending, and storage assets, 4) Competitive risks against larger well resourced rivals.

Analyst Certification

I, Vivek Arya, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

US - Semiconductors and Semiconductor Capital Equipment Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Advanced Micro Devices, Inc	AMD	AMD US	Vivek Arya
	Analog Devices Inc.	ADI	ADI US	Vivek Arya
	Applied Materials, Inc.	AMAT	AMAT US	Vivek Arya
	Arm Holdings	ARM	ARM US	Vivek Arya
	Broadcom Inc	AVGO	AVGO US	Vivek Arya
	Cadence	CDNS	CDNS US	Vivek Arya
	Camtek	CAMT	CAMT US	Vivek Arya
	KLA Corporation	KLAC	KLAC US	Vivek Arya
	Lam Research Corp.	LRCX	LRCX US	Vivek Arya
	M/A-Com	MTSI	MTSI US	Vivek Arya
	Marvell Technology Group Ltd.	MRVL	MRVL US	Vivek Arya
	Microchip	MCHP	MCHP US	Vivek Arya
	Micron Technology, Inc	MU	MU US	Vivek Arya
	Nova	NVMI	NVMI US	Vivek Arya
	NVIDIA Corporation	NVDA	NVDA US	Vivek Arya
	NXP Semiconductors NV	NXPI	NXPI US	Vivek Arya
	onsemi	ON	ON US	Vivek Arya
	Synopsys	SNPS	SNPS US	Vivek Arya
NEUTRAL				
	Advanced Energy Industries	AEIS	AEIS US	Duksan Jang
	Allegro MicroSystems	ALGM	ALGM US	Blake Friedman
	Axcelis Technologies	ACLS	ACLS US	Duksan Jang
	Coherent Corp	COHR	COHR US	Vivek Arya
	GlobalFoundries	GFS	GFS US	Vivek Arya
	Intel	INTC	INTC US	Vivek Arya
	Lattice Semiconductor	LSCC	LSCC US	Blake Friedman
	Texas Instruments Inc.	TXN	TXN US	Vivek Arya
UNDERPERFORM				
	Ambarella	AMBA	AMBA US	Vivek Arya
	Credo Technology	CRDO	CRDO US	Vivek Arya
	Lumentum Holdings	LITE	LITE US	Vivek Arya
	Oorvo Inc.	ORVO	QRVO US	Vivek Arya
	Skyworks Solutions, Inc.	SWKS	SWKS US	Vivek Arya
	Teradyne	TER	TER US	Vivek Arya
	Wolfspeed Inc	WOLF	WOLF US	Vivek Arya

IQmethod[™] Measures Definitions

•		
Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) × (1 - Tax Rate) + Goodwill Amortization	Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill
		Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations — Total Capex	N/A
Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt - Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt +	Sales
,	Other LT Liabilities	

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

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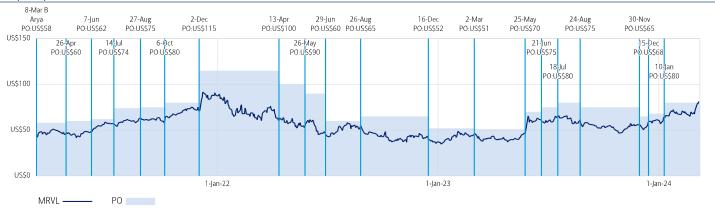
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Marvell (MRVL) Price Chart



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Equity Investment Rating Distribution: Technology Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	215	53.09%	Buy	111	51.63%
Hold	97	23.95%	Hold	45	46.39%
Sell	93	22.96%	Sell	24	25.81%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

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Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R2}

Buy	≥ 10%	≤ /0%
Neutral	≥ 0%	≤ 30%
nderperform	N/A	≥ 20%

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