

NXP Semiconductors NV

Resilient in downturn, well-positioned for upturn

Reiterate Rating: BUY | PO: 270.00 USD | Price: 222.60 USD

Well-managed soft landing; Reit. Buy on top autos pick

Q4 slight beat and modest Q1 miss as NXPI continues to execute on soft landing, in contrast to starker guide-downs at diversified peers. Management guided Q1 sales to \$3.1bn, only modestly below Street estimates (1% below) and down 9% QoQ/flat YoY, vs peers MCHP/TXN guiding Q1 21%/12% below Consensus, as NXPI continues to diligently manage distribution inventory (1.5-1.6 months vs 2.4 months historically). We expect NXPI to see a modest sales decline in CY24E to -2% YoY vs our -5% YoY prior expectations, with sales troughing in Q2 and normalizing in the back-half (+8% vs 1H24E). Overall, we reiterate our Buy as we remain confident in NXPI's strong exposure to high-growth auto end markets (>56% of sales) despite near-term weakness, and see room for a recovery through CY25E. Net-net, we raise CY24E/25E pf-EPS by +9%/+4% to \$13.31/\$15.22 and raise our PO to \$270 from \$255 prior on unchanged 20x CY25E EV/FCF, in line with peers trading 14x-37x.

Likes: Autos content, inventory mgmt, FCF generation

1) Autos remain a key growth area for NXPI, focused on radar, BMS, and ADAS applications where semis content continues to grow despite slower EV adoption. We estimate CY24E auto sales flat to slightly down, better than -1% YoY global vehicle production estimates, after diligently undershipping demand through CY23, with room to the upside as EV volumes recover through 2H24E; 2) Disciplined inventory management (1.6 mth vs 2.4/2.5 mth historically) providing visibility into auto/core industrial demand; 3) FCF margins remain strong, potentially headed to mid-20% range through CY25E.

Risks: Recovery visibility, limited GM headroom

1) The timing and magnitude mismatch in NXP vs peer auto/industrial declines and recovery could remain source of overhang for some investors, despite NXPI's contention of better downcycle management; 2) Recovery visibility remains limited and highly exposed to a turn in macro environment; 3) Auto, especially EV sales continue to decelerate and could remain an overhang on trading multiples with stocks such as NXPI with higher 50%+ autos exposure; and 4) Limited headroom to GM this cycle since at 58% its already at high-end of long-term model (55%-58%).

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	14.40	14.03	13.31	15.22	16.80
GAAP EPS	10.56	10.72	10.79	12.55	13.96
EPS Change (YoY)	34.6%	-2.6%	-5.1%	14.4%	10.4%
Consensus EPS (Bloomberg)			14.39	15.97	18.01
DPS	3.38	3.89	4.33	4.75	5.19
Valuation (Dec)					
P/E	15.5x	15.9x	16.7x	14.6x	13.3x
GAAP P/E	21.1x	20.8x	20.6x	17.7x	15.9x
Dividend Yield	1.5%	1.7%	1.9%	2.1%	2.3%
EV / EBITDA*	13.1x	13.7x	13.8x	12.3x	11.4x
Free Cash Flow Yield*	4.4%	4.2%	4.7%	5.8%	6.0%

* For full definitions of *IQmethod*SM measures, see page 15.

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Timestamp: 06 February 2024 01:16PM EST

06 February 2024

Equity

Key Changes

(US\$)	Previous	Current
Price Obj.	255.00	270.00
2024E Rev (m)	12,543.9	12,974.3
2025E Rev (m)	13,670.2	14,044.6
2026E Rev (m)	14,540.9	15,038.1
2024E EPS	12.19	13.31
2025E EPS	14.65	15.22
2026E EPS	16.17	16.80

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Stock Data

Price	222.60 USD
Price Objective	270.00 USD
Date Established	6-Feb-2024
Investment Opinion	B-1-7
52-Week Range	155.31 USD - 238.27 USD
Mkt Val (mn) / Shares Out (mn)	63,937 USD / 287.2
Free Float	99.9%
Average Daily Value (mn)	477.07 USD
BofA Ticker / Exchange	NXPI / NAS
Bloomberg / Reuters	NXPI US / NXPI.OQ
ROE (2024E)	34.3%
Net Dbt to Eqty (Dec-2023A)	81.6%
ESGMeter TM	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".

xEV: Battery vehicles and hybrids
MSD: Mid-Single Digits
IoT: Internet of Things
GM: Gross Margins
EPS: Earnings Per Share
FCF: Free Cash Flow
NXPI: NXP Semiconductors

iQprofileSM NXP Semiconductors NV

iQmethodSM – Bus Performance*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	21.0%	19.1%	16.8%	17.8%	17.9%
Return on Equity	52.4%	43.8%	34.3%	32.3%	30.1%
Operating Margin	36.3%	35.1%	34.1%	35.4%	35.5%
Free Cash Flow	2,832	2,686	3,035	3,687	3,837

iQmethodSM – Quality of Earnings*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	1.0x	1.0x	1.1x	1.2x	1.2x
Asset Replacement Ratio	0.9x	0.7x	0.9x	0.9x	1.0x
Tax Rate	15.7%	15.6%	16.9%	17.5%	18.0%
Net Debt-to-Equity Ratio	94.6%	81.6%	52.9%	35.5%	21.5%
Interest Cover	12.4x	16.5x	17.5x	19.7x	21.2x

Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	13,205	13,276	12,974	14,045	15,038
% Change	19.4%	0.5%	-2.3%	8.2%	7.1%
Gross Profit	7,643	7,762	7,525	8,249	8,880
% Change	23.2%	1.6%	-3.1%	9.6%	7.7%
EBITDA	5,410	5,168	5,149	5,781	6,235
% Change	28.8%	-4.5%	-0.4%	12.3%	7.9%
Net Interest & Other Income	(386)	(283)	(252)	(252)	(252)
Net Income (Adjusted)	3,801	3,661	3,438	3,868	4,179
% Change	28.9%	-3.7%	-6.1%	12.5%	8.0%

Free Cash Flow Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	2,788	2,804	2,793	3,198	3,479
Depreciation & Amortization	1,250	1,106	1,038	1,124	1,203
Change in Working Capital	(278)	(857)	(313)	(33)	(102)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	135	460	425	452	460
Capital Expenditure	(1,063)	(827)	(908)	(1,053)	(1,203)
Free Cash Flow	2,832	2,686	3,035	3,687	3,837
% Change	22.1%	-5.1%	13.0%	21.5%	4.1%
Share / Issue Repurchase	31	71	0	0	0
Cost of Dividends Paid	(815)	(1,006)	(1,104)	(1,192)	(1,275)
Change in Debt	579	0	(1,000)	(500)	(500)

Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	3,845	3,862	4,312	5,108	5,970
Trade Receivables	960	894	1,037	1,093	1,175
Other Current Assets	2,130	3,108	3,075	3,043	3,106
Property, Plant & Equipment	3,105	3,323	3,712	4,204	4,805
Other Non-Current Assets	13,196	13,166	13,166	13,166	13,166
Total Assets	23,236	24,353	25,302	26,614	28,222
Short-Term Debt	0	1,000	1,000	1,000	1,000
Other Current Liabilities	3,270	3,111	2,939	2,963	3,038
Long-Term Debt	11,165	10,175	9,175	8,675	8,175
Other Non-Current Liabilities	1,061	1,107	1,107	1,107	1,107
Total Liabilities	15,496	15,393	14,221	13,745	13,320
Total Equity	7,740	8,960	11,080	12,868	14,902
Total Equity & Liabilities	23,236	24,353	25,302	26,614	28,222

* For full definitions of iQmethodSM measures, see page 15.

Company Sector

Semiconductors

Company Description

Spun-out from Philips in 2006, NXP is a leading vendor of high-performance mixed-signal semiconductors selling into the automotive, identification, wireless, lighting and industrial end markets.

Investment Rationale

NXPI is a leader in attractive high-performance mixed-signal autos, internet of things, and security semis markets, which we believe positions it well to reaccelerate sales growth. Additionally, we like NXPI's strong balance sheet and 20%+ FCF growth potential, which provides flexibility for continued aggressive buybacks, dividend growth, or future M&A.

Stock Data

Average Daily Volume 2,143,186

Quarterly Earnings Estimates

	2023	2024
Q1	3.19A	3.19E
Q2	3.43A	3.05E
Q3	3.70A	3.42E
Q4	3.71A	3.66E

Key Notes From The Earnings Call

Revenue

- \$3.422bn in revenue, BEAT consensus by 1%, flat QoQ/+3.3% YoY

Margins

- Non-GAAP GM of 58.7%, up 21bps QoQ/72bps YoY and 24 bps above Street
- Non-GAAP OpM of 35.6%, BEAT Street by 8bps and +59bps QoQ/-84bps YoY

EPS

- Non-GAAP EPS of \$3.71 BEAT by 2%, +0.4% QoQ/-0.4% YoY

Cash

- Subsequent to Q3-end, will continue to execute share repurchases program, buying incremental \$124mn or ~658k shares through Friday, Nov 3
- Cash from operation: \$988mn
- Net capex was \$200mn, or 6% of sales
- Non-GAAP FCF of \$788mn or 23% of revenue, up from 17% in Q2
- Still focus on driving non-GAAP FCF margin to 25%+
- Plan to hold more cash on BS to enable greater flexibility
- Plan to retire 41bn in Mar'24E debt tranche when it comes due with cash on hand, which will improve gross debt leverage ratio below current 2.1x

Inventory

- Distribution channel inventory remained lean at 1.5 months, likely going to 1.6 months in CY24E

Automotive

- Revenue of \$1.89bn, FLAT vs Consensus, +0.4% QoQ/+5.2% YoY

Industrial & IoT

- Revenue of \$662mn, BEAT Consensus by 1%, +9% QoQ/9% YoY

Mobile

- Revenue of \$406mn, BEAT Consensus by 5%, +8% QoQ/-1% YoY

Comms Infra & Other

- Revenue of \$455mn, MISSED Consensus by 2%, -19% QoQ/-8% YoY



Outlook

- Q1 sales of \$3.125bn
- Input costs improving vs previous years, assume flat pricing in 2024
- Will hold channel inventory in tight range
- Auto: down LSD YoY and down MSD QoQ
- Industrial and IoT: up mid-teens YoY and down low-DD QoQ
- Mobile: up low-30% range YoY and down mid-teens QoQ
- Comms: down mid-20% range YoY and down low-DD QoQ

Summary of model changes

Exhibit 1: Summary of NXPI estimate changes

We raise FY24# sales 3%

	Sales (\$mn)			EPS (Non-GAAP, ex-options)		
	Old	NEW	delta	Old	NEW	delta
Mar-24E	\$2,907	\$3,125	\$218	\$2.55	\$3.19	\$0.64
Jun-24E	\$3,037	\$3,095	\$58	\$2.86	\$3.05	\$0.18
Sep-24E	\$3,255	\$3,324	\$69	\$3.29	\$3.42	\$0.12
Dec-24E	\$3,345	\$3,430	\$85	\$3.51	\$3.66	\$0.16
FY24E	\$12,544	\$12,974	\$430	\$12.19	\$13.31	\$1.12
YoY %	-4.9%	-2.3%	3.4%	-11.9%	-5.1%	9.2%
Mar-25E	\$3,322	\$3,400	\$79	\$3.51	\$3.61	\$0.10
Jun-25E	\$3,373	\$3,454	\$81	\$3.56	\$3.68	\$0.11
Sep-25E	\$3,466	\$3,573	\$107	\$3.74	\$3.92	\$0.18
Dec-25E	\$3,509	\$3,617	\$108	\$3.84	\$4.01	\$0.18
FY25E	\$13,670	\$14,045	\$374	\$14.65	\$15.22	\$0.57
YoY %	9.0%	8.2%	2.7%	20.1%	14.3%	3.9%

Source: BofA Global Research estimates, company report

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Q4 reported vs expectations

Table 1: Q4 reported vs expectations summary

NXPI reported Q4 sales 1% ahead of street and implied pf-EPS above consensus

	Dec-22	Sep-23	Dec-23						
			Guidance	Cons	BofAe	Reported	Delta	QoQ	YoY
Sales (\$mn)	\$3,312	\$3,434	\$3,400 (\$3,300 - \$3,500)	\$3,389	\$3,338	\$3,422	1.0%	-0.3%	3.3%
QoQ%	-3.9%	4.1%		-1.3%	-2.8%	-0.3%			
Automotive	1,805	1,891		1,893	1,853	1,899	0.3%	0.4%	5.2%
Industrial & IoT	605	607		656	631	662	0.9%	9.1%	9.4%
Mobile	408	377		387	389	406	4.9%	7.7%	-0.5%
Communications Infrastructure & Other	494	559		465	464	455	-2.1%	-18.6%	-7.9%
Gross Margin %	58.0%	58.5%	58.5% (58% - 59%)	58.5%	58.5%	58.7%	24	21	72
Gross Profit	1,922	2,010			1,953	2,010		0.0%	4.6%
R&D	490	550			536	546		-0.7%	11.4%
SG&A	223	253			245	245		-3.2%	9.9%
Opex Total	713	803		778	782	791	1.6%	-1.5%	10.9%
Operating Income	1,208	1,203		1,205	1,167	1,219	1.2%	1.3%	1.0%
Operating Margin %	36.5%	35.0%	35.4% (34.5% - 36.3%)	35.5%	35.0%	35.6%	8	59	(84)
Financial Income	(95)	(65)	(69)		(69)	(69)			
Pretax Income	1,113	1,138			1,098	1,150		1.1%	3.4%
Tax expense	126	168			175	178			
Net Income	975	965			917	966		0.1%	-0.9%
EPS (diluted, ex-options)	\$3.73	\$3.70	\$3.65 (\$3.44 - \$3.86)	\$3.65	\$3.53	\$3.71	1.8%	0.4%	-0.4%
EPS (diluted, w/ options)	\$3.36	\$3.31			\$3.14	\$3.32		0.3%	-1.1%
Diluted Shares	261	261	260		260	260		-0.3%	-0.4%

Source: BofA Global Research estimates, company report, Bloomberg

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Q1 guidance vs expectations

Exhibit 2: Q1 guidance vs expectations summary

NXPI guided Q1 sales below Street

	Dec-23	Mar-24E			
	Reported	BofAe	Cons	Guidance	New BofAe
Sales (\$mn)	\$3,422	\$2,907	\$3,165	\$3,125 (\$3,025 - \$3,225)	\$3,125
QoQ%	-0.3%	-12.9%	-6.6%		-8.7%
Automotive	1,899	1,668	1,838		1,804
Industrial & IoT	662	537	611		583
Mobile	406	331	305		343
Communications Infrastructure & Other	455	371	430		396
Gross Margin %	58.7%	57.5%	58.1%	58% (57.5% - 58.5%)	58.0%
Gross Profit	2,010	1,671			1,813
R&D	546	550			531
SG&A	245	245			225
Opex Total	791	795	773		756
Operating Income	1,219	872	\$1,067		1,066
Operating Margin %	35.6%	30.0%	33.7%	33.9% (32.9% - 34.8%)	34.1%
Financial Income	(69)	(69)		(66)	(63)
Pretax Income	1,150	803			1,003
Tax expense	178	137			169
Net Income	966	657			827
EPS (diluted, ex-options)	\$3.71	\$2.55	\$3.17	\$3.17 (\$2.97 - \$3.38)	\$3.19
EPS (diluted, w/ options)	\$3.32	\$2.15			\$2.80
Diluted Shares	260	258		259	259

Source: BofA Global Research estimates, company report, Bloomberg

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Balance sheet, cash flow snapshot

Exhibit 3: NXPI balance sheet summary

Net cash per share increased in DecQ

	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	QoQ	YoY
Total Cash	\$3,845	\$3,930	\$3,863	\$4,042	\$3,862	-4.5%	0.4%
ST Debt	\$0	\$998	\$999	\$999	\$1,000		
LT Debt	\$11,165	\$10,169	\$10,171	\$10,173	\$10,175		
Total Debt	\$11,165	\$11,167	\$11,170	\$11,172	\$11,175	0.0%	0.1%
Net Cash	(\$7,320)	(\$7,237)	(\$7,307)	(\$7,130)	(\$7,313)		
Net Cash/Share	(\$28.00)	(\$27.71)	(\$27.96)	(\$27.31)	(\$28.09)		
DSO	26.4	31.1	29.3	25.0	25.0	6	
DPO	102.4	66.8	61.4	58.8	58.8		19.8
Inventory \$	1,782	1,977	2,107	2,140	2,134	-0.3%	%
Inventory Turns	3.2	2.8	2.7	2.8	2.8		16.2
Inventory Days	112.8	131.7	133.7	131.1	131.1	0.0	%
Cash Conversion days	36.9	96.0	101.7	97.3	97.3		
Cash Flow from Ops	1075.5	632.0	756.0	988.0	1137.0		
Capex	(233.0)	(251.0)	(201.0)	(200.0)	(175.0)		
Free cash flow	\$843	\$381	\$555	\$788	\$962		
Adjusted EBITDA	\$1,379	\$1,206	\$1,318	\$1,366	\$1,278	-6.4%	-7.3%
Net Debt/TTM Adj EBITDA	1.4x	1.4x	1.4x	1.4x	1.4x		
Net Debt/Adj EBITDA (ann. Q)	1.3x	1.5x	1.4x	1.3x	1.4x		

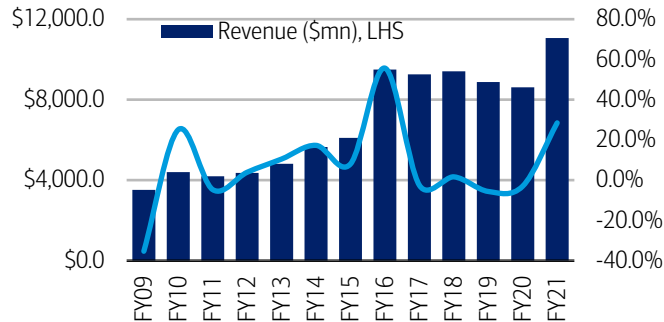
Source: BofA Global Research estimates, company report, Bloomberg

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Key Charts

Chart 1: NXPI – annual revenue and YoY growth

FY24E sales estimated to fall YoY

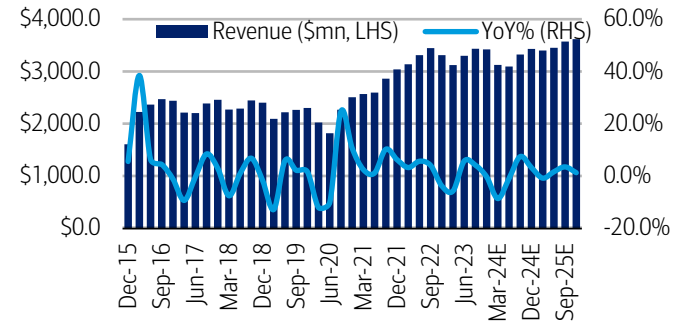


Source: BofA Global Research estimates, company report

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Chart 2: NXPI – qtrly revenue and YoY growth

Quarterly revenues to expand post Q2 trough

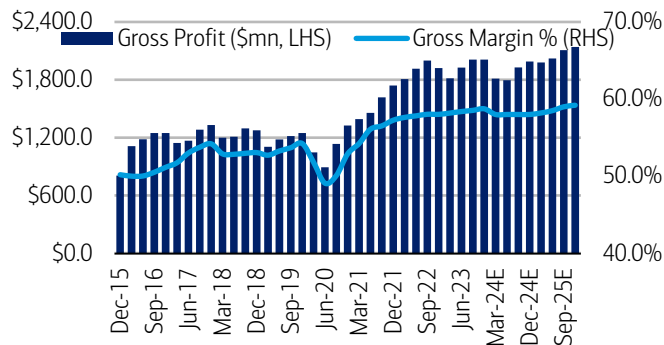


Source: BofA Global Research estimates, company report

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Chart 3: NXPI – Gross Profit \$ and Gross Margin %

GMs are at high levels

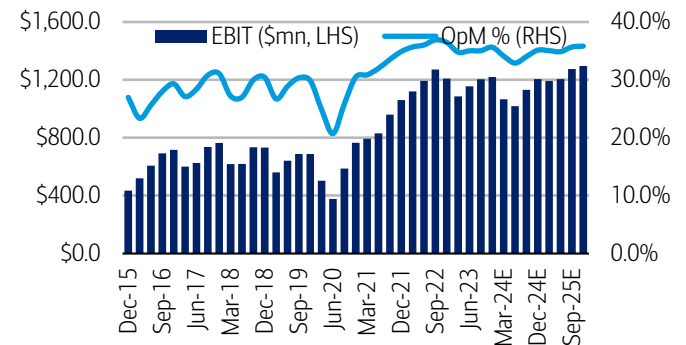


Source: BofA Global Research estimates, company report

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Chart 4: NXPI – EBIT and OpM%

EBIT and OpM are also at record levels

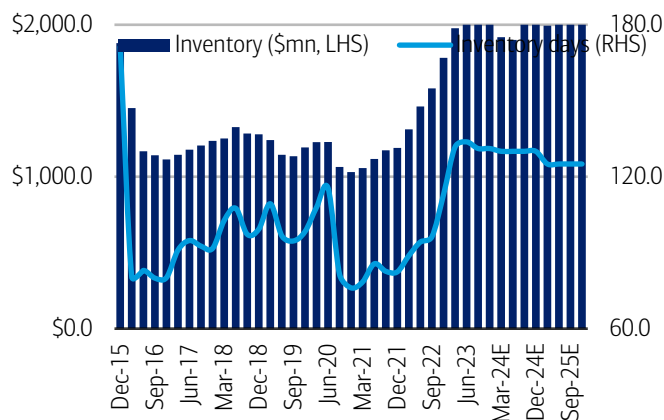


Source: BofA Global Research estimates, company report

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Chart 5: NXPI – qtrly inventory \$ and days

Inventory days at about 131 days

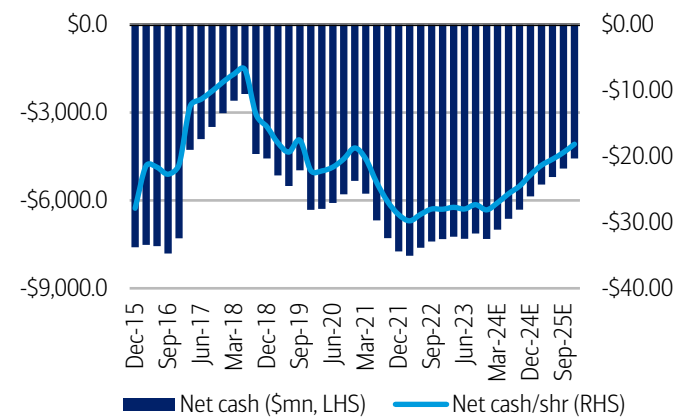


Source: BofA Global Research estimates, company report

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Chart 6: NXPI – qtrly net cash and net cash per share

Quarterly net cash remains negative

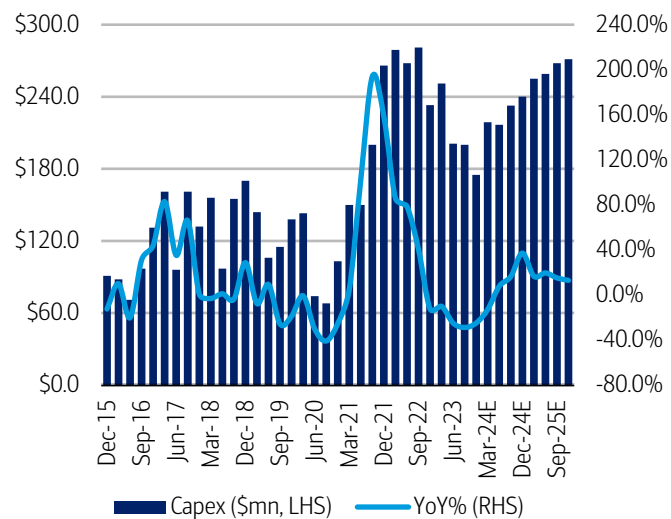


Source: BofA Global Research estimates, company report

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Chart 7: NXPI – quarterly capex and YoY growth

Capex remains steady over time

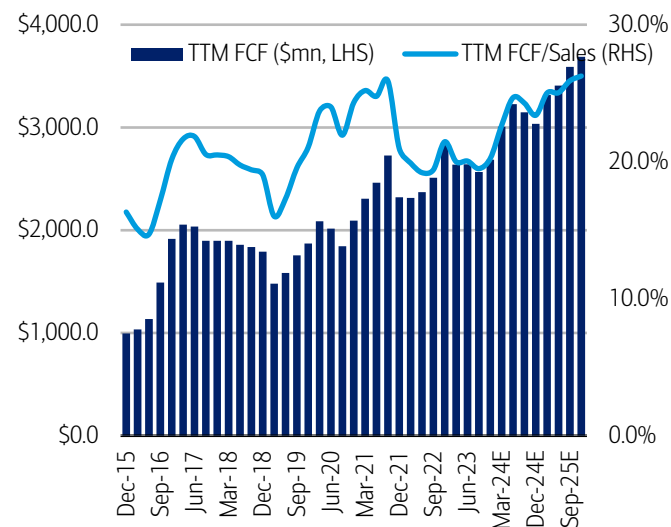


Source: BofA Global Research estimates, company report

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Chart 8: NXPI – TTM FCF and TTM FCF as a % of sales

TTM FCF growth to accelerate beyond CY23



Source: BofA Global Research estimates, company report

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**Exhibit 4: NXPI - Income statement**

NXP will likely generate revenue of \$13.0bn and EPS of \$13.31 in FY24

\$mn	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1E	Q2E	Q3E	Q4E	FY22	FY23	FY24E
FY (Dec)	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24E	Jun-24E	Sep-24E	Dec-24E	Dec-22	Dec-23	Dec-24E
Revenues	\$3,136	\$3,312	\$3,445	\$3,312	\$3,121	\$3,299	\$3,434	\$3,422	\$3,125	\$3,095	\$3,324	\$3,430	\$13,205	\$13,276	\$12,974
QoQ	3%	6%	4%	(4%)	(6%)	6%	4%	(0%)	(9%)	(1%)	7%	3%			
YoY	22%	28%	20%	9%	(0%)	(0%)	(0%)	3%	0%	(6%)	(3%)	0%	19%	1%	(2%)
Gross Profit (Non-GAAP, ex-options)	1807	1915	1999	1922	1816	1926	2010	2010	1813	1795	1928	1989	7643	7762	7525
R&D Expense (Non-GAAP, ex-options)	474	495	502	490	510	537	550	546	531	552	563	557	1961	2143	2203
SG&A Expense (Non-GAAP, ex-options)	214	229	228	223	218	234	253	245	225	234	244	236	894	950	939
Opex (Non-GAAP, ex-options)	688	724	730	713	728	771	803	791	756	786	807	794	2855	3093	3142
Other Income (Non-GAAP, ex-options)	0	2	2	(1)	(3)	0	(4)	0	9	9	9	9	3	(7)	36
Operating Income (Non-GAAP, ex-options)	1119	1193	1271	1208	1085	1155	1203	1219	1066	1018	1131	1205	4791	4662	4419
Financial Income (Non-GAAP, ex-options)	(103)	(97)	(91)	(95)	(76)	(73)	(65)	(69)	(63)	(63)	(63)	(63)	(386)	(283)	(252)
Pretax Income (Non-GAAP, ex-options)	1016	1096	1180	1113	1009	1082	1138	1150	1003	955	1068	1142	4405	4379	4167
Non-GAAP Tax benefit (expense)	(122)	(150)	(160)	(126)	(167)	(180)	(168)	(178)	(169)	(161)	(180)	(193)	(558)	(693)	(704)
GAAP Net Income	666	683	750	734	623	704	792	703	670	630	724	786	2833	2822	2810
Non-GAAP Net Income (ex-options)	885	933	1008	975	834	896	965	966	827	787	881	943	3801	3661	3438
Diluted EPS (GAAP)	\$2.48	\$2.53	\$2.79	\$2.76	\$2.35	\$2.67	\$3.01	\$2.68	\$2.56	\$2.41	\$2.78	\$3.03	\$10.56	\$10.72	\$10.79
Diluted EPS (Non-GAAP, ex-options)	\$3.34	\$3.52	\$3.81	\$3.73	\$3.19	\$3.43	\$3.70	\$3.71	\$3.19	\$3.05	\$3.42	\$3.66	\$14.40	\$14.03	\$13.31
Diluted EPS (Non-GAAP, with options)	\$3.01	\$3.19	\$3.47	\$3.36	\$2.82	\$3.05	\$3.31	\$3.32	\$2.80	\$2.65	\$3.02	\$3.27	\$13.02	\$12.49	\$11.73
Diluted Share Count	265	265	265	261	261	261	261	260	259	258	258	257	264	261	258
Adjusted EBITDA	\$1,271	\$1,349	\$1,411	\$1,379	\$1,206	\$1,318	\$1,366	\$1,278	\$1,239	\$1,189	\$1,320	\$1,402	\$5,410	\$5,168	\$5,149
Net-debt/TTM EBITDA	1.7x	1.5x	1.4x	1.4x	1.4x	1.4x	1.4x	1.4x	1.3x	1.3x	1.3x	1.1x	1.4x	1.4x	1.1x
Net-debt/annualized EBITDA	1.6x	1.4x	1.3x	1.3x	1.5x	1.4x	1.3x	1.4x	1.4x	1.4x	1.2x	1.0x			
Margin Trends (pf, ex-options)															
Gross margins	57.6%	57.8%	58.0%	58.0%	58.2%	58.4%	58.5%	58.7%	58.0%	58.0%	58.0%	58.0%	57.9%	58.5%	58.0%
R&D %	15.1%	14.9%	14.6%	14.8%	16.3%	16.3%	16.0%	16.0%	17.0%	17.8%	16.9%	16.2%	14.9%	16.1%	17.0%
SG&A %	6.8%	6.9%	6.6%	6.7%	7.0%	7.1%	7.4%	7.2%	7.2%	7.6%	7.3%	6.9%	6.8%	7.2%	7.2%
Opex	21.9%	21.9%	21.2%	21.5%	23.3%	23.4%	23.4%	23.1%	24.2%	25.4%	24.3%	23.1%	21.6%	23.3%	24.2%
Operating margin	35.7%	36.0%	36.9%	36.5%	34.8%	35.0%	35.0%	35.6%	34.1%	32.9%	34.0%	35.1%	36.3%	35.1%	34.1%
Pre-Tax margin	32.4%	33.1%	34.3%	33.6%	32.3%	32.8%	33.1%	33.6%	32.1%	30.9%	32.1%	33.3%	33.4%	33.0%	32.1%
Tax-rate	12.0%	13.7%	13.5%	11.3%	16.6%	16.6%	14.8%	15.5%	16.9%	16.9%	16.9%	16.9%	12.7%	15.8%	16.9%
Net Income	28.2%	28.2%	29.3%	29.4%	26.7%	27.2%	28.1%	28.2%	26.5%	25.4%	26.5%	27.5%	28.8%	27.6%	26.5%
Stock comp as % of sales	2.8%	2.7%	2.6%	2.9%	3.1%	3.0%	2.9%	3.0%	3.3%	3.3%	3.1%	3.0%	2.7%	3.0%	3.1%

Source: BofA Global Research estimates, company reports

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Exhibit 5: NXPI – Segment Model

Autos/Comms remains the fastest growing end markets YoY

\$mn	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1E	Q2E	Q3E	Q4E	FY22	FY23	FY24E
FY (Dec)	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24E	Jun-24E	Sep-24E	Dec-24E	Dec-22	Dec-23	Dec-24E
Automotive	1,557	1,713	1,804	1,805	1,828	1,866	1,891	1,899	1,804	1,786	1,911	1,968	6,879	7,484	7,469
Industrial & IoT	682	713	713	605	504	578	607	662	583	577	611	624	2,713	2,351	2,394
Mobile	401	388	410	408	260	284	377	406	343	332	382	401	1,607	1,327	1,459
Communications Infrastructure & Other	496	498	518	494	529	571	559	455	396	400	420	437	2,006	2,114	1,652
Total	\$3,136	\$3,312	\$3,445	\$3,312	\$3,121	\$3,299	\$3,434	\$3,422	\$3,125	\$3,095	\$3,324	\$3,430	\$13,205	\$13,276	\$12,974
QoQ% Change															
Automotive	1%	10%	5%	0%	1%	2%	1%	0%	-5%	-1%	7%	3%			
Industrial & IoT	3%	5%	0%	-15%	-17%	15%	5%	9%	-12%	-1%	6%	2%			
Mobile	7%	-3%	6%	0%	-36%	9%	33%	8%	-16%	-3%	15%	5%			
Communications Infrastructure & Other	9%	0%	4%	-5%	7%	8%	-2%	-19%	-13%	1%	5%	4%			
Total	3%	6%	4%	-4%	-6%	6%	4%	0%	-9%	-1%	7%	3%			
YoY% Change															
Automotive	27%	36%	24%	17%	17%	9%	5%	5%	-1%	-4%	1%	4%	25%	9%	0%
Industrial & IoT	19%	25%	17%	-8%	-26%	-19%	-15%	9%	16%	0%	1%	-6%	13%	-13%	2%
Mobile	16%	12%	19%	9%	-35%	-27%	-8%	0%	32%	17%	1%	-1%	14%	-17%	10%
Communications Infrastructure & Other	18%	20%	14%	8%	7%	15%	8%	-8%	-25%	-30%	-25%	-4%	15%	5%	-22%
Total	22%	28%	20%	9%	0%	0%	0%	3%	0%	-6%	-3%	0%	19%	1%	-2%
% of Revenues															
Automotive	50%	52%	52%	54%	59%	57%	55%	55%	58%	58%	57%	57%	52%	56%	58%
Industrial & IoT	22%	22%	21%	18%	16%	18%	18%	19%	19%	19%	18%	18%	21%	18%	18%
Mobile	13%	12%	12%	12%	8%	9%	11%	12%	11%	11%	11%	12%	12%	10%	11%
Communications Infrastructure & Other	16%	15%	15%	15%	17%	17%	16%	13%	13%	13%	13%	13%	15%	16%	13%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: BofA Global Research estimates, company reports

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Exhibit 6: NXPI - Balance sheet

Net cash per share is on track to increase in FY24E

\$mn FY (Dec)	Q1 Mar-22	Q2 Jun-22	Q3 Sep-22	Q4 Dec-22	Q1 Mar-23	Q2 Jun-23	Q3 Sep-23	Q4 Dec-23	Q1E Mar-24E	Q2E Jun-24E	Q3E Sep-24E	Q4E Dec-24E	FY22 Dec-22	FY23 Dec-23	FY24E Dec-24E
Assets															
Cash and equivalents	2683	3545	3759	3845	3930	3863	4042	3862	3177	3546	3859	4312	3845	3862	4312
Total receivables	925	996	1012	960	1063	1061	939	894	945	936	1005	1037	960	894	1037
Inventories	1311	1462	1581	1782	1977	2107	2140	2134	1918	1900	2038	2101	1782	2134	2101
Total current assets	5275	6320	6703	6935	7357	7447	7616	7864	7014	7356	7876	8424	6935	7864	8424
Property, plant and equipment	2814	2914	2971	3105	3123	3152	3197	3323	3417	3510	3609	3712	3105	3323	3712
Intangible assets excluding goodwill	1577	1527	1417	1311	1208	1110	1010	922	922	922	922	922	1311	922	922
Goodwill	9954	9930	9909	9943	9949	9950	9937	9955	9955	9955	9955	9955	9943	9955	9955
Total Assets	21,321	22,539	22,940	23,236	23,732	23,795	23,996	24,353	23,597	24,032	24,651	25,302	23,236	24,353	25,302
Liabilities and Equity															
Accounts payable	1369	1462	1534	1617	1002	967	959	1164	906	898	963	992	1617	1164	992
Total Current Liabilities	2845	2941	3219	3270	4213	4085	3964	4111	3853	3845	3910	3939	3270	4111	3939
Long-term debt	10573	11160	11162	11165	10169	10171	10173	10175	9175	9175	9175	9175	11165	10175	9175
Long-term provisions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other non-current liabilities	1076	1159	1123	1015	1057	1014	1014	1054	1054	1054	1054	1054	1015	1054	1054
Total non-current liabilities	11716	12372	12336	12226	11271	11233	11234	11282	10282	10282	10282	10282	12226	11282	10282
Shareholders' Equity	6760	7226	7385	7740	8248	8477	8798	8960	9462	9905	10460	11080	7740	8960	11080
Total Liabilities and Equity	21,321	22,539	22,940	23,236	23,732	23,795	23,996	24,353	23,597	24,032	24,651	25,302	23,236	24,353	25,302
Cash and Liquidity Ratios															
Total cash (included restricted cash)	2683	3545	3759	3845	3930	3863	4042	3862	3177	3546	3859	4312	3845	3862	4312
Short-term debt	0	0	0	0	998	999	999	1000	1000	1000	1000	1000	0	1000	1000
Long-term debt	10573	11160	11162	11165	10169	10171	10173	10175	9175	9175	9175	9175	11165	10175	9175
Total debt	10573	11160	11162	11165	11167	11170	11172	11175	10175	10175	10175	10175	11165	11175	10175
Net Cash	-7890	-7615	-7403	-7320	-7237	-7307	-7130	-7313	-6998	-6629	-6316	-5863	-7320	-7313	-5863
Net Cash/dil. share	(\$29.76)	(\$28.77)	(\$27.97)	(\$28.00)	(\$27.71)	(\$27.96)	(\$27.31)	(\$28.09)	(\$27.02)	(\$25.65)	(\$24.49)	(\$22.78)	(\$28.00)	(\$28.09)	(\$22.78)
Days Sales Outstanding (DSO)															
Days Payables Outstanding (DPO)	27	27	27	26	31	29	25	25	28	28	28	28			
Days of Inventory (DIO)	93	94	93	102	67	61	59	59	61	61	61	61			
Inventory Turns	89	94	96	113	132	134	131	131	130	130	130	130			
Cash conversion days (DIO+DSO-DPO)	4	4	4	3	3	3	3	3	3	3	3	3			
	23	27	30	37	96	102	97	97	96	96	96	96			

Source: BofA Global Research estimates, Company report

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Exhibit 7: NXPI – Statement of Cash Flows

We expect FCF margin growth in CY24E

\$mn FY (Dec)	Q1 Mar-22	Q2 Jun-22	Q3 Sep-22	Q4 Dec-22	Q1 Mar-23	Q2 Jun-23	Q3 Sep-23	Q4 Dec-23	Q1E Mar-24E	Q2E Jun-24E	Q3E Sep-24E	Q4E Dec-24E	FY22 Dec-22	FY23 Dec-23	FY24E Dec-24E
Net income	666	683	750	734	623	704	792	703	670	630	724	786	2,833	2,822	2,810
Depreciation and amortization	310	317	321	302	283	281	273	269	250	248	266	274	1,250	1,106	1,038
Stock based compensation	89	89	89	97	99	102	103	107	102	102	102	102	364	411	408
Net loss on sale of assets	(1)	0	(1)	2	0	(1)	0	0	0	0	0	0	0	(1)	0
Gain on extinguishment of debt	0	18	0	0	0	0	0	0	0	0	0	0	18	0	0
Results relating to equity accounted investees	(12)	3	4	6	2	1	2	2	0	0	0	0	1	7	0
Trade receivables	(61)	(50)	(54)	59	(138)	(20)	40	(20)	(51)	9	(69)	(32)	(106)	(138)	(143)
Inventories	(122)	(151)	(119)	(201)	(196)	(129)	(34)	6	216	18	(137)	(63)	(593)	(353)	33
Trade payables	266	4	275	88	52	(144)	(128)	101	(258)	(9)	65	30	633	(119)	(172)
Other receivables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other payables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Provisions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deferred taxes	(33)	(65)	(98)	(40)	(62)	(75)	(33)	(97)	0	0	0	0	(236)	(267)	0
Exchange differences	0	(3)	1	19	5	5	5	7	0	0	0	0	17	22	0
Other items	2	6	8	(9)	(7)	3	10	(8)	(8)	(8)	(8)	(8)	7	(2)	(32)
Operating Cash Flow	856	819	1,144	1,076	632	756	988	1,137	921	991	942	1,089	3,895	3,513	3,943
Purchase of intangible assets	(43)	(29)	(50)	(37)	(42)	(51)	(42)	(44)	0	0	0	0	(159)	(179)	0
Capex on PP&E purchases	(280)	(268)	(282)	(233)	(251)	(201)	(200)	(175)	(219)	(217)	(233)	(240)	(1,063)	(827)	(908)
Sale of PP&E	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Business interest purchases	(4)	(1)	(22)	0	0	0	0	(1)	0	0	0	0	(27)	(1)	0
Business interest sales	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0
Investing Cash Flow	(329)	(288)	(360)	(272)	(351)	(255)	(273)	(629)	(219)	(217)	(233)	(240)	(1,249)	(1,508)	(908)
Net (repayments) borrowings of short-term debt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amounts drawn under the revolving credit facility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Repayments of credit facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Repurchase of long-term debt	0	(917)	0	0	0	0	0	0	0	0	0	0	(917)	0	0
Long-term debt issuance	0	1,496	0	0	0	0	0	0	(1,000)	0	0	0	1,496	0	(1,000)
Principal payments on long-term debt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dividends paid	(149)	(222)	(223)	(221)	(219)	(264)	(262)	(261)	(260)	(282)	(281)	(281)	(815)	(1,006)	(1,104)
Dividends paid to non-controlling interests	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Common stock issuance	0	0	30	1	33	1	36	1	0	0	0	0	31	71	0
Stock repurchases	(552)	(2)	(366)	(506)	(11)	(302)	(306)	(434)	(127)	(123)	(115)	(115)	(1,426)	(1,053)	(480)
	(1)	(13)	0	(2)	(1)	0	(1)	0	0	0	0	0	(16)	(2)	0
Financing Cash Flow	(674)	342	(559)	(728)	(198)	(565)	(533)	(694)	(1,387)	(405)	(396)	(396)	(1,619)	(1,990)	(2,584)
Cash from Continuing Ops	(147)	873	225	76	83	(64)	182	(186)	(684)	369	313	453	1,027	15	451
Change in exchange rates	0	-11	-11	10	2	-3	-3	6	0	0	0	0	-12	2	0
Cash & equivalents at beginning	2830	2683	3545	3759	3845	3930	3863	4042	3862	3177	3546	3859	2830	3845	3862
Cash & equivalents at end	2683	3545	3759	3845	3930	3863	4042	3862	3177	3546	3859	4312	3845	3862	4312
Cash & equivalents from continuing ops	2683	3545	3759	3845	3930	3863	4042	3862	3177	3546	3859	4312	3845	3862	4312
Free Cash Flow	577	551	863	843	381	555	788	962	702	774	709	849	2832	2686	3035

Source: BofA Global Research estimates, Company report

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Price objective basis & risk

NXP Semiconductors NV (NXPI)

Our PO of \$270 is based on 20x 2025E EV/FCF, in line with median diversified auto/industrial compares which trade in a range of 14x-37x CY24E EV/FCF.

Downside risks: 1) Semiconductor cycle risks, 2) Lumpy nature of projects in key identification segment, 3) Some exposure to and growth driven by Apple, which could add volatility, 4) Execution risk surrounding management's capability to reengage following two-year hiatus, 5) Macroeconomic supply/demand disruption.

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
	Qorvo Inc.	QRVO	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

iQmethodSM Measures Definitions

Business Performance

Return On Capital Employed

Return On Equity

Operating Margin

Earnings Growth

Free Cash Flow

Quality of Earnings

Cash Realization Ratio

Asset Replacement Ratio

Tax Rate

Net Debt-To-Equity Ratio

Interest Cover

Valuation Toolkit

Price / Earnings Ratio

Price / Book Value

Dividend Yield

Free Cash Flow Yield

Enterprise Value / Sales

EV / EBITDA

Numerator

$\text{NOPAT} = (\text{EBIT} + \text{Interest Income}) \times (1 - \text{Tax Rate}) + \text{Goodwill Amortization}$

Net Income

Operating Profit

Expected 5 Year CAGR From Latest Actual

Cash Flow From Operations – Total Capex

Numerator

Cash Flow From Operations

Capex

Tax Charge

Net Debt = Total Debt – Cash & Equivalents

EBIT

Numerator

Current Share Price

Current Share Price

Annualised Declared Cash Dividend

Cash Flow From Operations – Total Capex

$\text{EV} = \text{Current Share Price} \times \text{Current Shares} + \text{Minority Equity} + \text{Net Debt} +$

Other LT Liabilities

Enterprise Value

Denominator

$\text{Total Assets} - \text{Current Liabilities} + \text{ST Debt} + \text{Accumulated Goodwill}$

Amortization

Shareholders' Equity

Sales

N/A

N/A

Denominator

Net Income

Depreciation

Pre-Tax Income

Total Equity

Interest Expense

Denominator

Diluted Earnings Per Share (Basis As Specified)

Shareholders' Equity / Current Basic Shares

Current Share Price

$\text{Market Cap} = \text{Current Share Price} \times \text{Current Basic Shares}$

Sales

Basic EBIT + Depreciation + Amortization

iQmethodSM is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

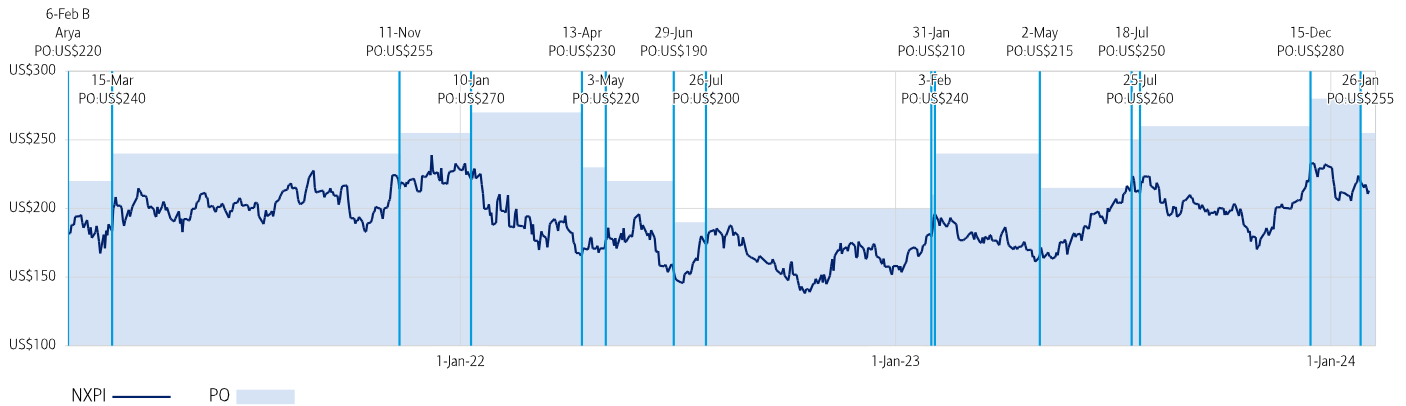
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NXP Semiconductors (NXPI) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

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%

^{R1} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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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%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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