

Intel

Foundry event: impressive start, interesting Arm partnership, scale key

Maintain Rating: NEUTRAL | PO: 50.00 USD | Price: 43.16 USD

Expected still impressive foundry updates, scale key

We virtually attended INTC's flagship Foundry Connect event where management: 1) updated its foundry roadmap out to 2027, 2) announced deeper partnerships with Arm, 3) announced Microsoft as potential customer for 18A process, and 4) raised lifetime value of foundry wins to \$15bn from \$10bn given at the last earnings call. No CHIPS Act grant update was given, though media reports suggest it could be around Mar 7/next US state of union address. Maintain Neutral as we believe INTC has tremendous capability, opportunity and financial support (CHIPS Act) in establishing a leading-edge US-based foundry, yet faces a tough competitive environment (TSMC, Samsung) and inevitable conflicts of interest in its current company (IDM) structure that maintains competition against potential foundry customers (such as AMD, NVDA etc.).

Intel foundry embraces Arm; Microsoft confirmed 18A

As scheduled, Arm CEO Rene Haas stepped on stage to discuss a new foundry partner relationship with Intel. Though no specific products were confirmed, we expect Arm-based consumer and data center CPU products to start rolling out of IFS lines by CY25E when Intel 18A node starts ramping. Potential candidates include Microsoft's unspecified but likely derivative Maia/Cobalt CPU/accelerator products for CY26E (the current versions at TSMC) and MediaTek's upcoming consumer offerings. Importantly, MSFT is one of the first IFS customers to confirm using Intel 18A node. INTC also introduced speakers from Broadcom and MediaTek who were alluded to as customers.

Intel adds 14A node for CY27E, P/E/T variants announced

Following its "five nodes in four years" plan, INTC's next step in process node is Intel 14A slated for CY27E. Intel 14A supposedly competes against TSMC's A14 and Samsung's SF1.4 process nodes which are expected to ramp around the same time, though exact PPA (performance, power, area) metrics of each are unknown. Intel also announced new "P" variants for performance improvement, "E" variants for feature extension, and "T" variants for through-silicon via (TSV) and 3D stacking. These include Intel 16, 16-E mature nodes, Intel 3-T, 3-E, 3-PT, Intel 18A-P, and Intel 14A-E nodes.

No CHIPS Act grants announced, likely March 7

While US Secretary of Commerce Gina Raimondo appeared on stage virtually, there were no direct CHIPS Act grants announced today. We now point to the State of the Union on March 7, where President Biden could announce specific details around INTC's grants. As reference we model about \$12bn in CY24 capital offsets/grants to INTC's \$30.7bn in gross capex, part of which could come from the \$10bn in expected (multi-year) CHIPS Act grants, with remainder from subsidies in Europe (Germany) and other finance arrangements with Brookfield.

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Stock Data

Price	43.16 USD
Price Objective	50.00 USD
Date Established	15-Dec-2023
Investment Opinion	B-2-8
52-Week Range	24.73 USD - 51.28 USD
Mkt Val (mn) / Shares Out (mn)	182,480 USD / 4,228.0
Free Float	100.0%
Average Daily Value (mn)	1974.60 USD
BofA Ticker / Exchange	INTC / NAS
Bloomberg / Reuters	INTC.US / INTC.OQ
ROE (2024E)	4.0%
Net Dbt to Eqty (Dec-2023A)	38.4%
ESGMeter™	High

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Glossary:

INTC: Intel
AMD: Advanced Micro Devices
AVGO: Broadcom
NVDA: Nvidia
TSMC: Taiwan Semiconductor Manufacturing Company
PC: Personal Computer
CPU: Central Processing Unit
GPU: Graphics Processing Unit
IFS: Intel Foundry Services
CSS: Compute Subsystem
nm = nanometer

Exhibit 1: Intel vs. TSMC vs. Samsung Foundry Roadmaps

We expect Intel to ramp Intel 14A process node by CY27E

BoFA Securities		2023		2024		2025		2026		2027		2028	
Process	TSMC	N4P	N3		N3E	N3P/N3X	N2	N2P/N2X		A14			
	INTC	I-7	I-4	I-3	I-20A (PowerVia, RibbonFET)		I-18A	I-18A-P		I-14A (High NA)		I-14A-E	
	Samsung	3GAE			3GAP		SF2	SF2P		SF1.4			
Transistor	TSMC												
	INTC	FinFET			Gate-All-Around								
	Samsung												
Lithography	TSMC												
	INTC	DUV	EUV				High-NA EUV						
	Samsung						?						

Source: BofA Global Research estimates

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Price objective basis & risk

Intel (INTC)

Our \$50 price objective is based on 26x our 2025E pf-EPS ex-stock comp expense, in the middle of compute peers (15x-40x), which we view as appropriate given manufacturing uncertainties and risks of new foundry strategy.

Upside risks to our price objective are 1) clarity or breakthrough on yields for 7nm process technology, 2) new products allowing Intel to limit share loss, 3) improving product mix which can drive upside to gross margins, 4) manufacturing slip up at key foundry competitors.

Downside risks to our price objective are 1) weaker-than-expected trends in a mature PC market, which is largest revenue generator for Intel, 2) further delays in 7nm process technology and roadmap, 3) accelerated share loss to AMD, 4) more competition in profitable data center market.

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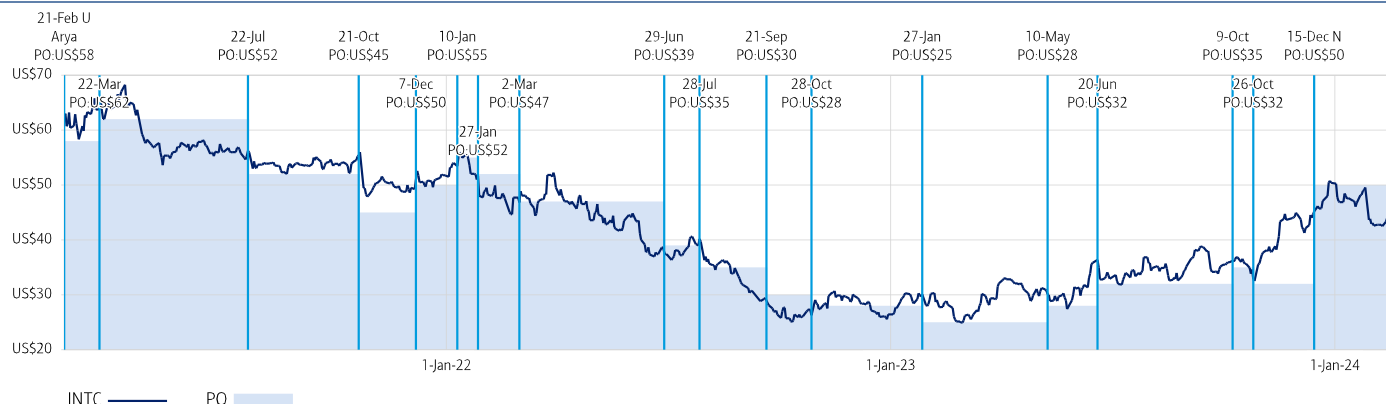
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Important Disclosures

Intel (INTC) Price Chart



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

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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%
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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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