

Intel

FPGA webcast: incrementally positive but overall limited impact

Maintain Rating: NEUTRAL | PO: 50.00 USD | Price: 41.99 USD

Altera back to life; FPGA share loss could stabilize

On Thursday, we virtually attended INTC's FPGA Vision Webcast. INTC is officially rebranding its FPGA business (currently PSG) as Altera, going back to its roots when Altera was first acquired by Intel in 2015. Importantly, we expect the new standalone company led by former DCAI segment head Sandra Rivera to have greater product execution, speed, and agility in competing against AMD's Xilinx and Lattice, though no timeline on the anticipated breakup was announced. INTC has consistently lost FPGA market share over the last five years (from high-30% pre-2019 to just ~20% today; see chart on pg. 2), and we expect this increased management focus as the first major step in stabilizing shares going forward. However, we highlight the core design/manufacturing businesses of INTC (the other 97-98% of sales) remain unchanged. While an incremental positive longer-term to INTC's sum-of-the-parts argument, we maintain Neutral and \$50 PO given limited impact to overall fundamental outlook near-term.

Core INTC thesis remains unchanged

The anticipated spinoff of PSG/Altera represents INTC's next step in separating segments into 1) core x86 CPU design; 2) manufacturing/foundry; and 3) non-core businesses. While the spinoff could help allocate appropriate resources in building product competency and potentially gain share, we highlight FPGAs represent only 2-3% of INTC's total sales (before even foundry business ramps). The core x86 design and manufacturing businesses remain pressured on increasing competition (Arm CPUs), shifting wallet share to accelerators, and very-high capital intensity of foundry business.

Expanding FPGA portfolio, accelerating time to market

Now with increased mgmt focus on FPGAs, INTC looks to ramp its latest Agilex lineup in all major end markets. Its highest-end Agilex 9 and Agilex 7 products are now shipping in production, while its new Agilex 5 mid-range offering and Agilex 3 low-end FPGAs should follow soon. Importantly, Agilex 5 is the only FPGA in the market with a dedicated AI-infused hardware (DSP with AI tensor blocks) and can deliver up to 20% power savings vs. Xilinx's Zynq US+ MPSoC offering (though no comparison to LSCC's Avant). Given the upcoming Agilex 5 and Agilex 3 directly tackle LSCC's Avant/Nexus portfolios, we see INTC as taking a more serious approach in gaining share back in the mid-range/low-end.

\$13bn+ TAM by CY28E, 10-15c EPS contributor

INTC believes FPGA market TAM could grow to \$13bn+ by CY28E from ~\$10bn in CY23, or at +5.4% CAGR. While generally slower than our global semis outlook of mid-/high-single digit CAGR, we highlight this assumption includes a material step-down (-23% YoY) of FPGA market in CY24E on normalization of elevated inventories. Using CY24E as base, the market could grow at +14% CAGR. Overall, the FPGA market remains an incremental source of growth with high margins (typically 70%+ gross margins) and represents 10-15c of EPS for INTC at the current PSG run-rate of ~\$1.5-2.5bn (~20% market share per our estimates; see chart on pg. 2 of the report).

29 February 2024

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Stock Data

| | |
|--------------------------------|-----------------------|
| Price | 41.99 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) | 177,534 USD / 4,228.0 |
| Free Float | 100.0% |
| Average Daily Value (mn) | 1981.94 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 on pg. 2

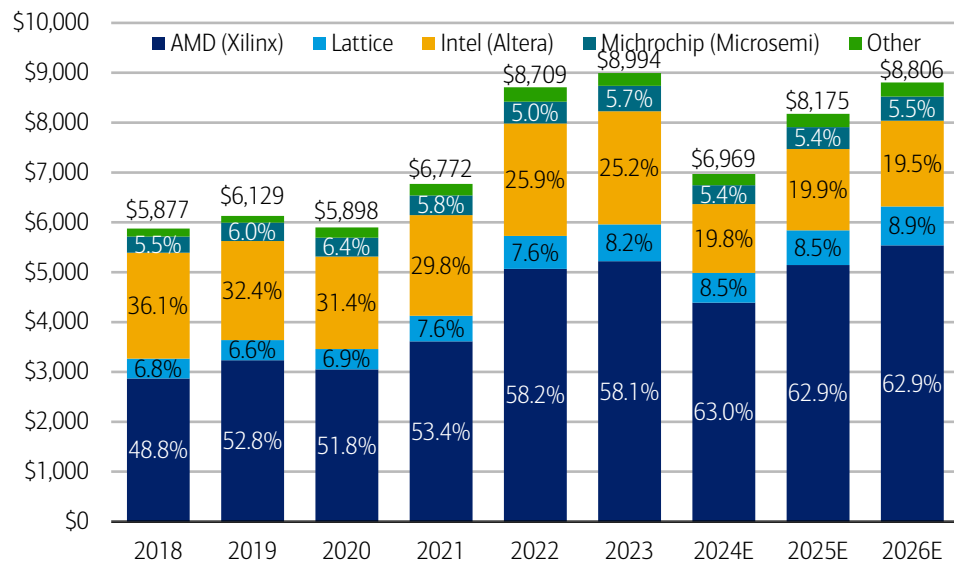
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Timestamp: 29 February 2024 02:59PM EST

Exhibit 1: FPGA Market Share

INTC had ~25% FPGA market share in CY23



Source: BofA Global Research estimates, Omdia

BofA GLOBAL RESEARCH

INTC: Intel

AMD: Advanced Micro Devices

LSCC: Lattice

XLNX: Xilinx

FPGA: Field-Programmable Gate Array

CAGR: Compounded Annual Growth Rate

DCAI: Data Center and AI

PSG: Programmable Solutions Group

DSP: Digital Signal Processor

AI: Artificial Intelligence

MPSoC: Multi-Processing System on Chip

TAM: Total Addressable Market

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.

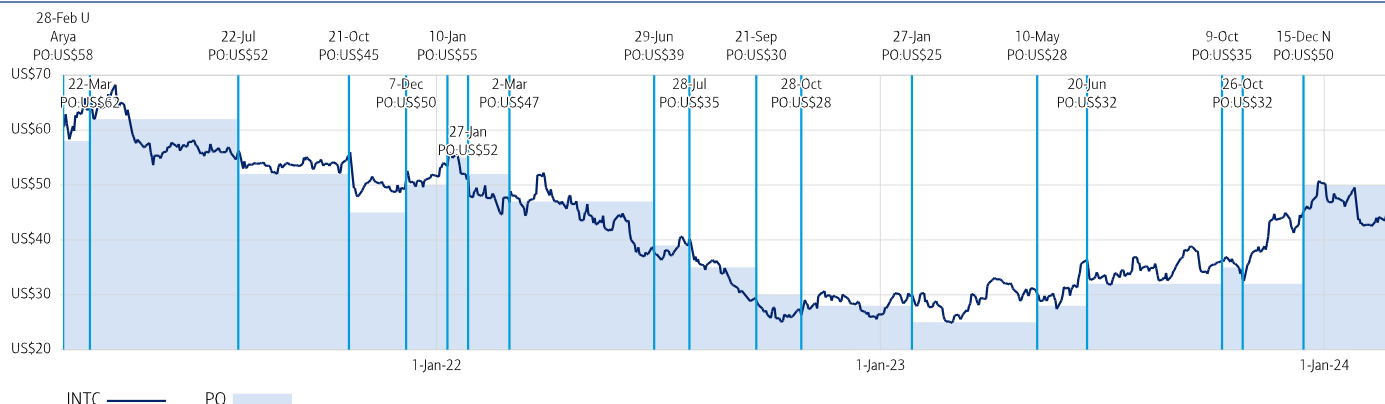
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Disclosures

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% |
| Hold | 832 | 23.54% | Hold | 454 | 54.57% |
| Sell | 807 | 22.84% | Sell | 383 | 47.46% |

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|-------------------|---|--|
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| Neutral | ≥ 0% | ≤ 30% |
| Underperform | N/A | ≥ 20% |

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