



Comments from CEO Pat Gelsinger and CFO Dave Zinsner

Intel's chief executive officer and chief financial officer offer comments after the company released its third-quarter 2022 earnings.

Oct. 27, 2022 — Pat Gelsinger, Intel chief executive officer ([bio](#)):

Despite growing economic headwinds, Q3 revenue was flat sequentially and only modestly below the midpoint of our guidance. In June, we were one of the first companies to highlight an abrupt and pronounced slowdown in demand, which has broadened beyond initial expectations and is now having an industrywide impact across the electronics supply chain. We are adjusting our Q4 outlook, and we are planning for the economic uncertainty to persist into 2023.

While we are not satisfied with our results, we remain laser-focused on controlling what we can and we are pleased that our PC share stabilized in Q2 and is now showing meaningful improvement in Q3. Our server share, while not where we want it to be, is tracking inline with our expectations and we are encouraged by good execution in the quarter against our product roadmap. In addition, we are intensifying our cost-reduction and efficiency efforts, and we are aggressively moving into the next phase of IDM 2.0 geared to unlocking the full potential of the IDM advantage.

This afternoon, I will focus my comments in three areas: (1) the key trends and dynamics that shaped Q3 and are informing our outlook; (2) the progress we are making on IDM 2.0 including our momentum on process and product roadmaps, and our recent announcement that we are implementing an internal foundry model; and (3) the actions underway to drive cost savings and efficiency gains aimed at accelerating our transformation.

Specific to trends we are seeing, along with further deterioration in consumer PC demand in Q3, enterprise demand has begun to slow. We expect PC units to decline mid-to-high teens to approximately 295 million units in calendar year 2022. Our own Q3 results reflect a strong product portfolio with Raptor Lake building on Alder Lake's momentum, as well as working closely with customers to optimize their inventory, our market share and our business objectives. We are still shipping below PC consumption and the inventory correction continued in Q3, but not as quickly as we forecasted. Importantly, however, PC usage remains strong, demonstrating the increased utility and value of the PC and ultimately supporting a TAM well above pre-pandemic levels. We are targeting a calendar year 2023 PC unit TAM of between 270 and 295 million units with a strong brand and product line driving additional share especially at premium ASPs.

The data center TAM is holding up better, although enterprise and China continue to show signs of weakness, as do some, but not all cloud customers. Across our infrastructure and industrial-exposed businesses, NEX demand was very solid, though not immune from the weakening economy. PSG continues to be a true standout with record Q3 revenue, up over 25% year-over-year. PSG backlog is robust and it continues to be an area where we are supply-chain limited.

Despite the challenging business environment, we made solid progress toward our long-term transformation in Q3, and we remain fully committed to using the macro uncertainty to accelerate



our efforts. Each quarter, our confidence grows in achieving our goal of five nodes in four years. On Intel 4, we are progressing towards high-volume-manufacturing and will tape out the production stepping of Meteor Lake in Q4. The first stepping of Granite Rapids is out of the fab, yielding well, with Intel 3 continuing to progress on schedule. Intel 4 and Intel 3 are our first nodes deploying EUV and will represent a major step forward in terms of transistor performance per watt and density. On Intel 20A and Intel 18A, the first nodes to benefit from RibbonFet and PowerVia, our first internal test chips and those of a major potential foundry customer have taped out with silicon running in the fab. We continue to be on track to regain transistor performance and power performance leadership by 2025.

IFS is a major beneficiary of our TD progress, and we are excited to welcome NVIDIA to the RAMP-C program, which enables both commercial foundry customers and the U.S. Department of Defense to take advantage of Intel's at-scale investments in leading-edge technologies. Since Q2, IFS has expanded engagements to seven out of the 10 largest foundry customers coupled with consistent pipeline growth to include 35 customer test chips. In addition, IFS increased qualified opportunities by \$1 billion to over \$7 billion in deal value, all before we welcome the Tower team with the expected completion of the merger in Q1 of 2023.

On the product front, we had a busy quarter. Within client, as mentioned earlier, we added to the strong Alder Lake momentum with the launch of Raptor Lake DT in Q3, driving a more than 40% improvement in multithread performance, unquestioned leadership in gaming, with 6 gigahertz out of the box and record-setting overclocking. We currently have over 500 OEM design wins. We launched Intel Unison to deliver best-in-industry multidevice UX. In addition, we saw meaningful development progress across multiple OEM designs on Intel 4-based Meteor Lake, with volume ramps in 2023.

We now have all elements of the AXG portfolio in production with A770 giving our discrete graphics efforts a strong boost. The Flex family is building a strong pipeline of data center use cases and Ponte Vecchio is now in production for HPC offerings and production blades deployed for lead customers. Combined with Sapphire Rapids and Sapphire Rapids-HBM, Ponte Vecchio is the basis for strong traction with HPC customers like Argonne National Laboratory and Germany's Leibniz Supercomputing Center.

CSPs and Telcos alike continue to move to software-based 5G, VRAN and ORAN deployments. We announced Sapphire Rapids-EE with VRAN boost for inline acceleration of 5G and network workloads. Edge and AI are proving a powerful combination for us as OpenVINO momentum is building with customers like Chipotle, and we launched the Intel Geti computer vision software platform for rapid AI training with early adopters, such as Bravent, and Royal Brompton and Harefield hospitals. Further evidence of our AI portfolio taking shape was seen by Redhat announcing support for Gaudi, cnvrg.io and OpenVino. Inspur announced Gaudi2 with SPR for advanced AI use cases. Amazon will be accelerating large transform models with Gaudi instances in EC2.

This was also a very strong quarter for DCAI execution. Sapphire Rapids volume SKUs have now PRQ'ed with a high-quality leadership product and a very strong volume ramp expected. Google gave the first private preview of its C3 instance showing Sapphire Rapids capabilities as well as our leadership IPU, the E3200 (or Mount Evans). We also saw strong milestones on the next three generations of server products. EMR is showing good progress and is on track for complete year 2023, Granite Rapids is very healthy running multiple OSs across many configurations, and with Sierra Forest, our first E-core product providing world-class performance per watt, are both solidly on track for 2024.



It's obvious, but worth stating: Our strategy is only as good as our execution. We have been taking aggressive action to rebuild our execution engine -- driving execution excellence across our people, design and development, and operations. In Q1, I discussed our return to OKRs and their importance to our culture. Last quarter, I touched upon the next evolution of our tick-tock model -- ticktock 2 -- as a disciplined approach to consistent, predictable product execution. This quarter, I wanted to spend a bit of time on operational excellence and discuss our recently announced IDM 2.0 Acceleration Office, or IAO, ushering in the next phase of our IDM 2.0 strategy.

During the first phase of IDM 2.0, we aggressively focused on making the needed investments to improve our TD roadmap to regain transistor leadership and to ensure we have at-scale manufacturing capacity by building ahead on shells. Improvements in both areas now enable us to move forward with our next set of priorities: evolving our systems, business practices and culture to embrace an internal foundry model and establish a leadership cost structure.

This means we will create what I like to call a new and clean API for the company by establishing consistent processes, systems and guardrails between our manufacturing teams and our business units. This will place our BUs on the same economic footing as external IFS customers and will allow our manufacturing group and BUs to be more agile, make better decisions, and uncover efficiency and cost savings. We have already identified nine different subcategories for operational improvement that our teams will aggressively pursue.

For example, product teams will be heavily incentivized to drive to high-quality A0 steppings as they see the full costs of steppings, validation cycles, hot lots and capacity changes. Factories will move to rigorous capacity loading cycles, transparency of costs for loading changes, and efficiency of capital utilization, and structural and variable wafer costs. In addition to establishing better incentives, this new approach will provide transparency on our financial execution, allowing us to better benchmark ourselves against other foundries and drive to best-in-class performance. It will also provide improved transparency to our owners as we expect to share full internal foundry P&L in calendar year 2024 -- ultimately allowing you to better judge how we are creating value and allocating your capital.

A key benefit of IDM 2.0 is to unlock our full financial potential by capturing multiple profit pools not available to any one of our peers across architecture, design, wafer manufacturing, advanced packaging, supply chain and software. These pools were only partially reflected in the long-term margin targets we established at Investor Day in February. Simple math would suggest there is meaningful upside to those targets as we execute and exploit the margin stacking potential IDM 2.0 provides. Best-in-class semiconductor companies achieve gross margin in the 60s and operating margins in the 40s, and we aim to be best in class. This next phase of IDM 2.0 is a significant evolution in how we think and operate as a company, but just as we optimized to drive outsized returns in the IDM 1.0 era, we will optimize to achieve best-in-class returns in the IDM 2.0 era. It's what engineers do, and we have the best engineers on the planet.

Complementing and augmenting these efforts, will be an intensified focus to reduce costs and drive efficiency in everything we do. As we stated during Q2 earnings, we have an obligation to our owners to be good stewards of your capital. We are responding to the current environment by taking aggressive actions to reduce costs across cost of goods sold and operating expenses while mindfully protecting the investments needed to accelerate our transformation and ensure we are well positioned for long-term market growth. In addition to reducing near-term costs, we have also identified structural cost reductions and efficiency drivers, which Dave will outline a bit later. In aggregate our efforts should drive \$3 billion in annual savings in the near-term and \$8 billion to



\$10 billion by the end of 2025. Not captured in these estimates are the startup costs to support five nodes in four years, which will begin to subside beyond calendar year 2026 – adding an additional about \$2 billion in cost of goods savings. Inclusive in our efforts will be steps to optimize our headcount. These are difficult decisions affecting our loyal Intel family, but we need to balance increased investment in areas like leadership in TD, product and capacity in Ohio and Germany with efficiency measures elsewhere as we drive to have a best-in-class structure.

We will also continue to use our Smart Capital approach to support and inform our capital spending aspirations – aggressively building ahead on shells while aligning equipment purchases and installs with customer demand. We continue to see Semiconductor Co-Investment Programs, like our partnership with Brookfield, as an innovative financial structure to more closely align fab buildout costs with fab output returns. Likewise, we see U.S. and EU CHIPS as vital to enable us to establish a geographically diverse and secure supply chain for the semiconductor industry. We are confident in re-accelerating free cash flow growth and driving industry-leading free cash flow margins, once we get thru this period of economic uncertainty affecting the entire industry and our own elevated investments to accelerate our transformation.

Lastly, I was particularly pleased to join the Mobileye team earlier this week in New York to witness first-hand the successful completion of their IPO, especially in a difficult market. We believe that this will help unlock Mobileye's full operational and financial potential and is an additional avenue to create value for our owners. We remain committed to optimizing our value creation efforts thru portfolio honing; re-allocation of resources to higher return, higher growth businesses; M&A; and, where applicable, divestitures.

Before turning it over to Dave, I want to close by saying I continue to be heartened and impressed by the dedication and commitment of all of our employees, by far the most important owners of this great company. They are passionately committed, like me, to re-establish Intel as a dominate driver of innovation and by the opportunity to improve the lives of everyone on the planet. It was also rewarding to see that same drive and dedication in the faces of our broader developer community at Intel Innovation, the rebirth of Intel IDF, in September. We are the building blocks and enabler of their vision and aspirations. And it is our commitment to them to be great partners and collaborators. Our ambitions are equaled by our passions. And our efforts across manufacturing, design, products and foundry are well on their way to driving our transformation and creating the flywheel, which is IDM 2.0.

Dave Zinsner, Intel chief financial officer ([bio](#)):

We had a solid third quarter despite the macroeconomic headwinds impacting the semiconductor industry. We expect these headwinds to persist and, as a result, we are lowering our expectations for the fourth quarter. We will continue to be laser-focused on the things that we can control and use economic uncertainty to accelerate our transformation and drive cost-cutting and efficiency gains.

Moving to Q3 results. Revenue was \$15.3 billion, flat sequentially and only modestly below the midpoint of our guide. Q3 revenue benefited from CCG strength, offset by declining TAMs in DCAI and NEX.

Gross margin for the quarter was 46%, below our guide, but largely inline relative to lower Q3 revenue. Q3 gross margin increased 100 basis points sequentially on lower inventory reserves.



EPS was 59 cents, 24 cents above our guide, largely on lower than forecasted taxes. Adjusting for the lower tax rate, EPS would have been 37 cents, 2 cents above our guide on better expense management.

Operational cash flow for the quarter was \$1 billion. Net capex for the quarter was \$7.3 billion, resulting in adjusted free cash flow of negative \$6.3 billion, and we paid dividends of \$1.5 billion.

Our balance sheet remains strong with cash balances of \$23 billion, modest leverage and a strong investment-grade credit profile.

Turning to our business unit results.

CCG revenue was \$8.1 billion, up 6% sequentially driven by higher ASPs on better mix and also benefitting from our efforts to work with customers to maximize our share position ahead of Q4 price increases. CCG revenue was down 17% year over year as customers continue to reduce inventory and we continue to under-ship demand. Demand weakness year over year was most pronounced in the consumer, education and small/medium business markets. Operating profit was \$1.7 billion, up \$570 million sequentially and down 54% year over year on lower revenue, increased 10 nanometer and Intel 7 mix, and increased spending to further strengthen our product roadmap.

DCAI revenue was \$4.2 billion, down 27% year over year on TAM reductions and continued competitive pressures, even as market share continues to track inline with our expectations. Operating profit was \$17 million, below expectations and down significantly year over year. Profitability was impacted by lower revenue, higher advanced node startup costs and higher product costs on transition to 10 nanometer. We also continue to invest aggressively in the product roadmap.

NEX revenue was \$2.3 billion, up 14% year over year on increased demand for 5G, Ethernet and edge products, partially offset by lower network Xeon demand. In Q3, we started to see macro-driven demand softness and customer inventory management impact NEX. Operating profit was \$75 million, down 85% year-over-year due to the impact of softer demand on inventory valuation and increased roadmap investment.

AXG revenue was \$185 million, up 8% year over year on the ramp of our Blockscales products. Operating loss was \$378 million, \$129 million better sequentially, but \$156 million worse than year over year due to softer demand and product readiness impacting inventory valuation, as well as increased investment to deliver the visual, super compute and custom accelerated graphics roadmaps.

Mobileye revenue was \$450 million, up \$124 million from Q3 2021, primarily driven by higher demand for EyeQ products. Operating income was \$142 million, up \$15 million from Q3 2021, primarily due to higher revenue.

IFS revenue was \$171 million, down 2% year-over-year, driven by automotive weakness with customers citing third-party component shortages, partially offset by growth in core foundry and IMS businesses. Operating loss was \$103 million versus an operating loss of \$44 million in Q3 2021 on increased spending to enable our foundry growth strategy.

Turning to Q4 guidance.



Given the deteriorating macro environment and based on input from our customers, we are now guiding Q4 revenue in a range of \$14 billion to \$15 billion, with the sequential decline driven by lower CCG revenue as customers reduce inventory, lower NEX TAM and continued DCAI headwinds.

We are forecasting gross margin of 45%, a tax rate of 14% and EPS of 20 cents, at the midpoint of revenue guidance.

For Q4 adjusted free cash flow, we expect to see a meaningful sequential increase driven by working capital improvements and a \$2 billion reduction in net capex, adjusting for a lower demand environment. These benefits will be partially offset by lower revenue, and as a result we are reducing our full-year adjusted free cash flow guidance to negative \$2 billion to negative \$4 billion dollars. There is also a possibility that a portion of expected capital offsets could move from Q4 to Q1, shifting the cashflow benefit into next year.

Consistent with our short-term financial model discussed at our Investor Day in February, our continued intent is to manage adjusted free cash flow at approximately breakeven as we go through this period of accelerated and elevated investments supported by our Smart Capital approach and the multiple pools of capital available to finance our strategy.

Now turning to our long-term outlook and the changes we are making to transform the business.

Beyond Q4, there is a high degree of macroeconomic uncertainty, and it appears that the current challenging market environment will extend well into 2023, with the potential for a global recession. Further, as I discussed in Q2 earnings, it is imperative that we drive to world-class product cost and operational efficiency to achieve our long-term financial model. As Pat detailed earlier, to accelerate this transformation, we are forming the IDM 2.0 Acceleration Office and doubling down on our efforts to reduce costs and find efficiencies across the organization.

We will start with a focus on driving \$3 billion of cost reduction in 2023 – one-third in cost of sales and two-thirds in operating expenses. Note that our Q3 results include GAAP restructuring charges of \$664 million that reflect initial efforts to right-size our business and deliver these savings. In Q4, we expect to have additional restructuring charges of similar magnitude as we further rationalize our 2023 financial plan.

Longer term, we will execute on continued structural cost savings and efficiency gains, which we expect to drive \$8 billion to \$10 billion in annual savings by the end of 2025, split roughly two-thirds in cost of sales and one-third in operating expense. These savings will be realized through multiple initiatives to optimize the business, including portfolio cuts, right-sizing of our support organizations, more stringent cost controls in all aspects of our spending, and improved sales and marketing efficiency. As Pat outlined, also critical to driving this transformation is the implementation of our internal foundry operating model, dramatically increasing financial accountability and transparency, enabling all organizations to drive to world-class product cost and efficiency benchmarks. In addition, as we emerge from five nodes in four years and slow our technology development cadence, we expect an additional approximately 200 basis points of gross margin after 2026. We expect these efforts to provide potential upside to the financial targets we provided at February's Investor Day. This will be a multiyear journey, but as Pat said earlier – best-in-class semiconductor companies have a financial profile that includes gross margins in the 60s and operating margins in the 40s – and we aim to be best in class.



In the short term, we will continue to manage to the operating expenses, net capital intensity and adjusted free cash flow guardrails established and drive back to a gross margin range of 51% to 53%, once economic conditions improve and revenue growth returns.

In closing, we remain committed to the strategy and financial model communicated at Investor Day. The compelling long-term financial opportunity of strong revenue growth across our six business units and free cash flow at 20% of revenue remains, and I believe this downturn represents an opportunity to more quickly make the transformations necessary to achieve these goals.

Closing – Pat Gelsinger, Intel chief executive officer:

Let me wrap up by saying the following: Against a worsening macro, we were happy but not satisfied to report results that matched our guidance, show strong execution against our TD and product roadmaps, and successfully complete the Mobileye IPO. We are prepared for economic headwinds to persist, with cost reductions and efficiency efforts well under way and the introduction of the next phase of IDM 2.0 with the IAO. We remain committed to driving the full advantage of the IDM model – and the outsized returns our strategy will ultimately provide to you, our owners. With that, we look forward to updating you again next quarter. Thank you.

About Intel

Intel (Nasdaq: INTC) is an industry leader, creating world-changing technology that enables global progress and enriches lives. Inspired by Moore's Law, we continuously work to advance the design and manufacturing of semiconductors to help address our customers' greatest challenges. By embedding intelligence in the cloud, network, edge and every kind of computing device, we unleash the potential of data to transform business and society for the better. To learn more about Intel's innovations, go to newsroom.intel.com and intel.com.

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