Oct. 26, 2023 – Pat Gelsinger, Intel chief executive officer (bio):

Before we begin, given our significant and now almost 50-year presence in Israel, we are deeply saddened by the recent attacks and their impact on the region. Our utmost priority is the safety and welfare of our people in Israel and their families, but I also want to recognize the resilience of our teams as they have kept our operations running and our factory expansion progressing. Our thoughts are with all of those affected by the war, and I am praying for a swift return to peace.

Turning to our results, we delivered an outstanding Q3, beating expectations for the third consecutive quarter. Revenue was above the high end of our guidance and EPS (earnings per share) benefitted from both strong operating leverage and expense discipline. More important than our stand-out financial performance, were the key operational milestones we achieved in the quarter across process and products, Intel Foundry Services, and our strategy to bring AI everywhere. Simply put, this quarter demonstrates the meaningful progress we have made towards our IDM 2.0 transformation.

The foundation of our strategy is re-establishing transistor power and performance leadership. While many thought our ambitions were a bit audacious when we began our five-nodes-in-four-years journey roughly two-and-a-half years ago, we have increasing line of sight towards achieving our goal. Intel 7 is done with nearly 150 million units in aggregate of Alder Lake, Raptor Lake and Sapphire Rapids already in the market. In addition, Emerald Rapids has achieved product release, and began shipping this month.

In Q3, we began initial shipments of Meteor Lake on Intel 4, which we are now aggressively ramping on the most productive fleet of EUV tools in the industry, providing us with a greater than 20% capital efficiency advantage compared to when EUV tools were first launched. High-volume EUV manufacturing is well underway in Oregon and, more recently, in Ireland. Our Fab 34 in Ireland represents the first high-volume EUV production in Europe, underscoring our commitment to establish geographically diverse and resilient supply. We are the only leading-edge semiconductor manufacturer at scale in every major region of the globe.

Our Intel 3 process is tracking to be manufacturing-ready by year-end, supporting our first two Intel 3 products, Sierra Forest and Granite Rapids. In fact, our production stepping of Sierra Forest is already out of fab, and what we expect to be the production stepping of Granite Rapids has already taped-in and is in the fab now.
We are particularly excited by our move into the angstrom era with Intel 20A and Intel 18A. Adding to our accelerating adoption of EUV are two key new innovations, RibbonFET and PowerVia, representing the first fundamental change to the transistor and process architecture since we commercialized FinFET in 2012. I have been studying SEM diagrams for almost 40 years, RibbonFET and PowerVia are true works of art, the most exquisite transistors ever created.

We expect to achieve manufacturing readiness on Intel 20A in the first half of 2024. Arrow Lake, our lead product on 20A, is already running Windows and demonstrating excellent functionality. Even more significant, we hit a critical milestone on Intel 18A with the 0.9 release of the PDK with imminent availability to external customers. In simple terms, the invention phase of RibbonFET and PowerVia is now complete and we are racing towards production-ready, industry-leading process technology. Our first products on Intel 18A will go into fab on schedule in the first quarter of 2024 with Clearwater Forest for servers, Panther Lake for client and, of course, a growing number of IFS test chips. We expect to achieve manufacturing readiness for Intel 18A in the second half of 2024, completing our incredible five-nodes-in-four-years journey on or ahead of schedule.

While Intel 18A re-establishes transistor leadership, we are racing to increase that lead. We announced at Innovation our plans to lead the industry in a move to glass substrate for density, performance and unique optical capabilities. We also announced our plans to begin installation of the world’s first High-NA EUV tool for commercial use by the end of the year to continue our modernizations and infrastructure expansions of our Gordon Moore Park in Oregon, home of our Technology Development team. Moore’s Law continues to be the foundational driver of semiconductor technology and economics, which in turn fuels broader innovation in every industry across the globe. We remain committed to be good stewards of Moore’s Law and drive advancements until we have exhausted every element on the periodic table.

Importantly, our progress on process technology is now being well-validated by third parties. We have made great progress with early IFS customers this quarter, which we expect to only accelerate with the release of the 0.9 PDK for Intel 18A. A major customer committed to Intel 18A and Intel 3, which includes a meaningful pre-payment that expedites and expands our capacity corridor for this customer. The customer is seeing particularly good power, performance and area efficiency in their design. This opportunity is very significant and highlights our full system foundry capabilities in high-performance computing, big die designs, leadership performance and area-efficient transistors, advanced packaging, and systems expertise.

In addition, we are extremely pleased to announce today that we have signed with two additional 18A customers. Both are particularly focused in areas of high-performance compute and benefitting from power performance per unit silicon area. We have also made substantial progress with our next major customer and are expecting to conclude commercial contract negotiations before year-end. Finally, we were also very happy to expand our growing foundry ecosystem by completing our strategic partnership with Synopsys in Q3, to include IP (intellectual property) for Intel 3 and Intel 18A for both Intel internal and external foundry customers.

With the rise of AI and high-performance computing applications, our advanced packaging business is proving to be yet another unique advantage. We have seen a surge of interest in our advanced packaging from most leading AI chip companies. With capacity corridors quickly available, this is proving to be a significant accelerator and on-ramp for Intel foundry customers. During the quarter we were awarded two customer AI designs for our advanced packaging. And, with an additional six customers in active negotiations, we expect several more awards by year-end.
We have also established an important business relationship with Tower Semiconductor, utilizing our manufacturing assets in New Mexico, along with Tower investing capital expenditures of roughly $300 million for its use in this facility. This represents an important step in our foundry strategy – improving cash flows by utilizing our manufacturing assets over a significantly longer period of time.

Finally, we have submitted all four of our major project proposals in Arizona, New Mexico, Ohio and Oregon, representing over $100 billion of U.S. manufacturing and research investments, to the CHIPS Program Office and are working closely with them as they review these proposals. We look forward to providing a deeper update on our foundry business during our planned IFS industry event in Q1 of 2024.

We are on a mission to bring AI everywhere. We see the AI workload as a key driver of the $1 trillion semiconductor TAM (total addressable market) by 2030. We are empowering the market to seamlessly integrate and effectively run AI in all their applications. For the developer working with multi-trillion parameter frontier models in the cloud, Gaudi® and our suite of AI accelerators provides a powerful combination of performance, competitive MLPerf benchmarks and a very cost-efficient TCO (total cost of ownership).

However, as the world moves towards more AI-integrated applications, there’s a marked shift towards local inferencing. It’s a nod to both the necessity of data privacy and an answer to cloud-based inference costs. With AI-accelerated Xeon® for enterprise, Core Ultra™ launching the AI PC generation and OpenVino enabling developers seamless and versatile support for a range of client and edge silicon, we are bringing AI to where the data is being generated and used, rather than forcing it into the cloud. Our expansive footprint, spanning cloud and enterprise servers to volume clients and ubiquitous edge devices, positions us well to enable the AI continuum across all our market segments. The AI continuum enables AI everywhere.

DCAI (Data Center and AI Group) exceeded our forecasts this quarter with server revenue up modestly sequentially. We continue to see a strong ramp of our 4th Gen Intel® Xeon® processor, with the world’s top-10 CSPs (cloud service providers) now in general availability and improving strength from MNCs (multinational corporations). During the quarter, we shipped our 1 millionth 4th Gen Xeon unit and are on track to surpass 2 million units next month. 4th Gen Xeon includes powerful accelerators, demonstrating best-in-class CPU performance for AI, security and networking workloads.

Our AI-enhanced Xeons are primed for model inferencing enabling seamless infusion of AI intro existing workloads. This was visible this quarter with over one-third of 4th Gen shipments directly related to AI applications. We are the clear leader in AI CPU results, as seen in MLCommons benchmarks today, and our roadmap provides significant further improvements, with Granite Rapids expected to deliver an additional 2 to 3x AI performance on top of our industry leading 4th Gen Xeon.

We continue to make excellent progress with our Xeon roadmap. Our 5th Gen Intel® Xeon® processor, code-named Emerald Rapids, is in production and ramping to customers, and will officially launch on Dec. 14 in New York City. Sierra Forest, our first E-core (Efficient Core) Xeon, is on track for the first half of 2024, with customers well into their validation process. Sierra Forest will feature up to 288 E-cores targeting next-generation cloud-native workloads, delivering even more price performance and power efficiency for our customers. Granite Rapids, which will shortly follow Sierra Forest, is also well into our validation cycle with customers.
While the industry has seen some wallet-share shifts between CPU and accelerators over the last several quarters, as well as some inventory burn in the server market, we see signs of normalization as we enter Q4, driving modest sequential TAM growth. Across most customers, we expect to exit the year at healthy inventory levels, and we see growth in compute cores returning to more normal historical rates off a depressed 2023. More importantly, our successful roadmap execution is strengthening our product portfolio with Gen 4 and Gen 5 Xeon, Sierra Forest and Granite Rapids positioning us well to win back share in the data center.

In addition, we expect to capture a growing portion of the accelerator market in 2024 with our suite of AI accelerators, led by Gaudi, which is setting leadership benchmark results with third parties like MLCommons and Hugging Face. We are pleased with the customer momentum we are seeing from our accelerator portfolio and Gaudi, in particular, and we have nearly doubled our pipeline over the last 90 days. As we look out to 2024, like many others, we now are focused on having enough available supply to meet our growing demand.

Dell is partnering with us to deliver Gaudi for cloud and enterprise customers, with its next-generation PowerEdge systems, featuring Xeon and Gaudi AI accelerators, to support AI workloads ranging from large-scale training to inferencing at the edge. Together with Stability.ai, we are building one of the world’s largest AI supercomputers entirely on 4th Gen Xeon processors and 4,000 Intel® Gaudi®2 AI accelerators. Our Gaudi roadmap remains on track, with Gaudi®3 out of the fab, now in packaging and expected to launch next year. And in 2025, Falcon Shores brings our GPU and Gaudi capabilities into a single product.

Moving to the client: CCG (Client Computing Group) delivered another strong quarter, exceeding expectations for the third consecutive quarter, driven by strength in commercial and consumer gaming SKUs, where we are delivering leadership performance. As we expected, customers completed their inventory burn in the first half of the year, driving solid sequential growth, which we expect will continue into Q4. We expect full-year 2023 PC consumption to be in line with our Q1 expectations of approximately 270 million units. In the near-term, we expect Windows 10 end-of-service to be a tailwind, and we remain positive on the long-term outlook for PC TAM returning to plus-or-minus 300 million units.

Intel continues to be a pioneer in the industry, as we ushered in the era of the AI PC in Q3, when we released the Intel® Core™ Ultra processor, code-named Meteor Lake. Built on Intel 4, the Intel Core Ultra has been shipping to customers for several weeks and will officially launch on Dec. 14, alongside our 5th Gen Xeon. The Ultra represents the first client chiplet design enabled by Foveros advanced 3D packaging technology, delivering improved power efficiency and graphics performance. It is also the first Intel client processor to feature our integrated neural processing unit, or NPU, that enables dedicated low-power compute for AI workloads. Next year, we will deliver Arrow Lake as well as Lunar Lake, which offers our next-gen NPU, ultra-low power mobility and breakthrough performance per watt. Panther Lake, our 2025 client offering, heads into the fab in the first quarter of 2024 on Intel 18A.

The arrival of the AI PC represents an inflection point in the PC industry not seen since we first introduced Centrino in 2003. Centrino was so successful because of our time-to-market advantage, our embrace of an open ecosystem, strong OEM (original equipment manufacturers) partnerships, our performant silicon and our developer scale. Not only are these same advantages in place today, they are even stronger as we enter the age of the AI PC. We are catalyzing this moment with our AI PC Acceleration program with over 100 ISVs (independent software vendors) already participating, providing access to Intel’s deep bench of engineering talent for targeted software optimization, core development tools and go-to-market opportunities. We are
encouraged and motivated by our partners and competitors who see the tremendous growth potential of the PC market.

NEX (Network and Edge Group) is also seeing early signs of the benefits from growing AI use cases. Our FNIC (fiber channel network interface controller) and IPU (infrastructure processing unit) businesses are well suited to support the high I/O bandwidth required by AI workloads in the data center, with growth expected to accelerate for both in 2024. Additionally at the edge, as part of Intel’s focus on every aspect of the AI continuum, NEX launched OpenVINO 2023.1, the latest version of the AI inferencing and deployment runtime of choice for developers on client and edge platforms – with ai.io and Fit:match demonstrating how they use OpenVINO to accelerate their applications at our Innovation conference. We have leadership developer-software toolchains that have seen a doubling of developer engagement this year. While NEX entered their inventory correction after client and DCAI, Q3 results beat our internal forecasts and grew sequentially. We see continued signs of stabilization heading into Q4.

Finally, our Smart Capital strategy underpins our relentless drive for efficiency and our commitment to be great allocators of our owner’s capital, while consistently looking for innovative ways to unlock value for all our stakeholders. We remain on track to reducing costs by $3 billion in 2023, and we continue to see significant incremental opportunities for operational improvement, as we execute on our internal foundry model. In addition, in Q3, we made the decision to divest the pluggable module portion of our silicon photonics business, allowing us to focus on the higher-value component business and optical I/O solutions to enable AI infrastructure scaling. This marks the 10th business we have exited in the last two-and-a-half years, generating $1.8 billion in annual savings and a testament to our efforts to optimize our portfolio and drive long-term value creation.

Mobileye’s solid Q3 and Q4 outlook continue to underscore the benefits of increased autonomy afforded by our initial public offering last year. In addition, we added TSMC as a minority investor in our IMS Nanofabrication business in Q3, and earlier this month we announced our plans to operate PSG (Programmable Solutions Group) as a standalone business beginning Jan. 1. Similar to MBLY and IMS, this decision gives PSG the mandate, focus and resources to better capitalize on their growth opportunities. We plan to report PSG results as a stand-alone segment in Q1, to bring in private investors in 2024 and to create a path to an initial public offering over the next two to three years.

In summary, we continue to deliver tangible progress two-and-a-half years into our transformation journey. We are on track with five nodes in four years. We are hitting or beating all our product roadmap milestones. We are establishing ourselves as a global at-scale system foundry for both wafer processing and advanced packaging. We are unlocking new growth opportunities fueled by AI. And we are driving financial discipline and operational efficiencies as we continue to unlock value for our shareholders. While we are encouraged by our progress to date, we know we have much more work in front of us as we continue to relentlessly drive forward with our strategy, maintain our execution momentum and deliver our commitments to our customers. I’d like to personally thank the Intel family for all their efforts.

Dave Zinsner, Intel chief financial officer (bio):

We delivered another strong quarter financially on top of outstanding execution on our product and process roadmaps as we continue to drive our IDM2.0 transformation. We beat our guidance across revenue, gross margin and EPS. While we continue to monitor economic indicators and geo-political risks, we are pleased with the momentum and health of our business and will
continue to focus on prioritizing our investments, prudently and aggressively managing near-term expenses, and driving fundamental improvements to our cost structure longer term.

Third quarter revenue was $14.2 billion, up 9% sequentially and $750 million above the midpoint of our guidance. Revenue exceeded our expectations across all major lines of business. Gross margin was 45.8%, 280 basis points better than our guidance, driven by higher revenue and ASPs (average selling prices) and better sell-through of previously reserved inventory.

EPS (earnings per share) for the quarter was $0.41, beating guidance by $0.21, as our revenue strength, improving gross margins and disciplined OpEx management resulted in sequential EPS growth of $0.28.

Q3 operating cash flow was $5.8 billion, up $3 billion sequentially. Net inventory was down $500 million, or seven days in the quarter. We also significantly improved the linearity of our shipments, which brought DSO (days sales outstanding) down by five days. In total, our working capital improvement initiatives have yielded more than $2 billion of cash year to date.

Net CapEx (capital expenditures) was $4.9 billion, resulting in positive adjusted free cash flow of approximately $950 million, and we paid dividends of a half-billion dollars in the quarter.

In Q3 we announced the sale of 10% of our IMS Nanofabrication business to TSMC, following the investment from Bain Capital in June. When combined with the Mobileye IPO, these transactions have unlocked more than $30 billion of value. Earlier this month, we signaled our intent to pursue private investment and ultimately an IPO for our PSG business, as we continue to pursue opportunities to increase value for our shareholders.

Moving to third-quarter business unit results. CCG delivered revenue of $7.9 billion, up 16% sequentially and ahead of our expectations for the third consecutive quarter. Customer inventory levels are healthy, and the market remains on track to our January consumption TAM signal of roughly 270 million units for 2023. CCG’s operating profit doubled sequentially to $2.1 billion on higher revenue, sell-through of reserved inventory and stronger ASPs driven by strength in our commercial and gaming products in the quarter.

DCAI revenue was $3.8 billion, ahead of our internal forecast. Despite continued unit TAM softness, the Xeon business was up sequentially, with MNC customers showing a better-than-seasonal recovery in the quarter. Favorable customer mix, along with strong adoption of newer products with higher core density, led to record Xeon ASPs in Q3. Despite sequential revenue decline, DCAI returned to profitability and contributed operating profit of $71 million, improving sequentially on better ASPs, reduced factory underload charges and continued spending discipline.

Within DCAI, revenue for the Programmable Solutions Group declined mid-teens percent sequentially. As we discussed earlier this month, after a period of strong growth and tight supply, the FPGA business is entering a period of inventory burn. We expect PSG to decline in Q4 and be depressed for the next few quarters, as customers work through inventory, before returning to a more normalized run rate and growth.

NEX revenue was $1.5 billion, up 6% sequentially. Edge markets showed signs of recovery in Q3, leading NEX revenue to exceed our expectations. Network and telco markets continue to work through elevated inventory and weak demand, which we expect to persist through the end of the year. NEX also returned to profitability in Q3 with operating profit of $17 million, up $200 million sequentially, on stronger revenue and reduced operating expenses.
Intel Foundry Services revenue was $311 million, growing 4x year over year and 34% sequentially on increased packaging revenue and higher sales of IMS tools. IFS operating loss was $86 million, as ramping factory and operating expenses offset stronger revenue in the period.

Mobileye continues to perform well. Q3 revenue was $530 million, up 18% year over year and 17% sequentially, with operating profit of $170 million on a consolidated basis, up 32% sequentially. This morning, Mobileye increased their fiscal-year 2023 outlook for adjusted operating income by 7% at the midpoint.

Q3 represented another outstanding quarter of cross-company spending discipline and focused portfolio management, with operating expenses down 15% year over year. While we are on track to achieve $3 billion of total spending reductions in 2023, we expect sequentially higher OpEx (operating expenses) in Q4 due to seasonal marketing activities, higher profit dependent compensation and the end of some temporary austerity measures taken earlier in the year. We also had a one-time credit in Q3 associated with an asset sale, which will impact the sequential comparison in Q4.

Now turning to Q4 guidance. We expect fourth quarter revenue of $14.6 billion to $15.6 billion, delivering on our January commitment to grow revenue sequentially throughout 2023. In the client business, we are encouraged by the return of historical purchasing cycles, as our channel checks, partner feedback and ASPs all point to healthy inventory levels and growing demand. We expect moderate sequential growth from DCAI, with Xeon strength more than offsetting a decline in PSG, and continued recovery in edge markets roughly offsetting persistent network weakness.

At the revenue midpoint of $15.1 billion, we expect gross margin to flow through at approximately 60% of revenue growth, resulting in Q4 gross margin of approximately 46.5% with a tax rate of 13% and EPS of $0.44.

We continue to operate under our Smart Capital framework. In Q3 we received a capital grant from the State of Ohio and our first foundry pre-pay. In addition, we continue to work with the U.S. CHIPS office on their review of our four U.S. applications, and we continue to work with Germany, Poland and the European Commission on our planned expansions in Europe. There are no changes to our prior forecast of mid-30s percent net capital intensity across 2023 and 2024 in aggregate. Capital offsets will trend towards the higher end of our 20% to 30% range in that timeframe, though we do expect the vast majority of those offsets to land in 2024.

In closing, Q3 was Intel’s strongest quarter since we began our transformation. We achieved significant milestones toward regaining process leadership on Intel 18A, delivered Meteor Lake and Emerald Rapids on time, secured multiple wafer and advanced packaging foundry customers, and delivered another quarter of financial results that exceeded our expectations on both the top and bottom lines. We will continue to make significant investments as we execute the IDM2.0 strategy, and we remain confident and committed to our long-term financial targets. We are participating in a large and growing semiconductor TAM, our foundry and AI assets are showing great momentum in the market, we are steadily closing structural cost gaps, and we continue to make progress toward delivering the financial returns that we, and our owners, expect.

Closing – Pat Gelsinger, Intel chief executive officer:

I wanted to reiterate that our thoughts continue to be with our resilient Intel team in Israel and with everyone in the region impacted by recent events. I also want to thank everyone who joined us today. We always appreciate the opportunity to update you on our progress and to answer your questions. We are excited about the momentum we are seeing across our business and,
especially, the strong confirmation our foundry strategy received this quarter from our growing external customer base.

We look forward to seeing many of you in New York in December as we celebrate the launch of both the Emerald Rapids and Meteor Lake families of processors, and hope all of you plan to join us in Q1 at our IFS Day.

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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