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Intel Wins US Government Project to Develop Leading-Edge Foundry Ecosystem

Intel Foundry Services will lead the first phase of the U.S. Department of Defense's RAMP-C program to establish a domestic commercial foundry infrastructure.

SANTA CLARA, Calif.--(BUSINESS WIRE)-- **What's New:** The U.S. Department of Defense, through the NSTXL consortium-based S2MARTS OTA, has awarded Intel an agreement to provide commercial foundry services in the first phase of its multi-phase Rapid Assured Microelectronics Prototypes - Commercial (RAMP-C) program. The RAMP-C program was created to facilitate the use of a U.S.-based commercial semiconductor foundry ecosystem to fabricate the assured leading-edge custom and integrated circuits and commercial products required for critical Department of Defense systems. Intel Foundry Services, Intel's dedicated foundry business launched this year, will lead the work.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20210823005117/en/

Intel's newest factory, Fab 42, became fully operational in 2020 on the company's Ocotillo campus in Chandler, Arizona. Fab 42 produces microprocessors using the company's 10nm manufacturing processes. In March 2021, Intel announced a $20 billion investment to build out two new factories (or "fabs") on the Ocotillo campus. The company expects to begin planning and construction activities this year. (Credit: Intel Corporation)

"One of the most profound lessons of the past year is the strategic importance of semiconductors, and the value to the United States of having a strong domestic semiconductor industry. Intel is the sole American company both designing and manufacturing logic semiconductors at the leading edge of technology. When we launched Intel Foundry Services earlier this year, we were excited to have the opportunity to make our capabilities available to a wider range of partners, including in the U.S. government, and it is great to see that potential being fulfilled through programs like RAMP-C."
– Pat Gelsinger, Intel CEO

How It Works: Intel Foundry Services will partner with industry leaders, including IBM, Cadence, Synopsys and others, to support the U.S. government's needs for designing and manufacturing assured integrated circuits by establishing and demonstrating a semiconductor IP ecosystem to develop and fabricate test chips on Intel 18A, Intel's most advanced process technology.

"The RAMP-C program will enable both commercial foundry customers and the Department of Defense to take advantage of Intel's significant investments in leading-edge process technologies," said Randhir Thakur, Intel Foundry Services president. "Along with our

customers and ecosystem partners, including IBM, Cadence, Synopsys and others, we will help bolster the domestic semiconductor supply chain and ensure the United States maintains leadership in both R&D and advanced manufacturing. We look forward to a long-term collaboration with the U.S. government as we deliver RAMP-C program milestones."

Intel recently announced plans to become a major provider of U.S.-based capacity for foundry customers, including an investment of approximately $20 billion to build two new factories in Arizona. These fabs will provide committed capacity for foundry customers and support expanding requirements for Intel products.

Why It's Important: The U.S. Department of Defense (DOD) has recently sought to diversify its approach to securing advanced microprocessors by leveraging commercially available technologies developed by U.S. companies. Other than Intel, the majority of U.S.-based chip designers are fabless, which means they design and sell integrated circuits that are fabricated by contract manufacturers called foundries. Today, more than 80 percent of leading-edge manufacturing capacity is concentrated in Asia[1], leaving the DOD with limited onshore access to foundry technology capable of meeting the country's long-term needs for secure microelectronics. The RAMP-C program was created to facilitate the use of a commercially viable onshore foundry ecosystem that will ensure DOD access to leading-edge technology, while allowing the defense industrial base to leverage the benefits of high-volume semiconductor manufacturing and design infrastructure of commercial partners like Intel.

About the Broader Efforts: The RAMP-C program is part of a larger initiative to strengthen government supply chain security and accelerate U.S. leadership across the full spectrum of integrated circuit design, manufacturing and packaging. In October 2020, DOD launched the RAMP program using the Advanced Commercial Capabilities Project Phase 1 Other Transaction Authority. RAMP advances and demonstrates commercial leading-edge physical "back-end" assured design methods that transform a high-level chip design into the complex, technology-specific polygon form that is required as input for the wafer fabrication process. Intel is a participant in this project.

Last year, DOD also awarded Intel the second phase of its State-of-the-Art Heterogeneous Integration Prototype (SHIP) program. The SHIP program enables the U.S. government to access Intel's U.S. advanced semiconductor packaging capabilities with the goal of developing new approaches toward measurably secure, heterogeneous integration and test of advanced packaging solutions. SHIP will develop the capability to use advanced commercial technology to package and test the integrated circuits designed in RAMP and fabricated through RAMP-C.

More Context: Manufacturing at Intel News | Intel Wins US Government Advanced Packaging Project | Intel Foundry Services Fact Sheet

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.

[1] SEMI World Fab Forecast, December 2020.

Statements in this document that refer to future plans or expectations, including with respect to the RAMP-C program and its anticipated benefits, are forward-looking statements. These statements are based on current expectations and involve many risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statements. For more information on the factors that could cause actual results to differ materially, see Intel's most recent earnings release and SEC filings at intc.com.

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