April 12, 2023

Intel Foundry and Arm Announce Multigeneration Collaboration on Leading-Edge SoC Design

Collaboration to bring chip designers a powerful combination of Arm core and Intel angstrom-era process technology advancements.

SANTA CLARA, Calif. & CAMBRIDGE, England--(BUSINESS WIRE)-- Intel Foundry Services (IFS) and Arm today announced a multigeneration agreement to enable chip designers to build low-power compute system-on-chips (SoCs) on the Intel 18A process. The collaboration will focus on mobile SoC designs first, but allow for potential design expansion into automotive, Internet of Things (IoT), data center, aerospace and government applications. Arm® customers designing their next-generation mobile SoCs will benefit from leading-edge Intel 18A process technology, which delivers new breakthrough transistor technologies for improved power and performance, and from IFS's robust manufacturing footprint that includes U.S.- and EU-based capacity.

"There is growing demand for computing power driven by the digitization of everything, but until now fabless customers have had limited options for designing around the most advanced mobile technology," said Pat Gelsinger, CEO of Intel Corporation. "Intel's collaboration with Arm will expand the market opportunity for IFS and open up new options and approaches for any fabless company that wants to access best-in-class CPU IP and the power of an open system foundry with leading-edge process technology."

"Arm's secure, energy-efficient processors are at the heart of hundreds of billions of devices and the planet's digital experiences," said Rene Haas, CEO of Arm. "As the demands for compute and efficiency become increasingly complex, our industry must innovate on many new levels. Arm's collaboration with Intel enables IFS as a critical foundry partner for our customers as we deliver the next generation of world-changing products built on Arm."

As part of its IDM 2.0 strategy, Intel is investing in leading-edge manufacturing capacity around the world, including significant expansions in the U.S. and the EU, to serve sustained long-term demand for chips. This collaboration will enable a more balanced global supply chain for foundry customers working in mobile SoC design on Arm-based CPU cores. By unlocking Arm's leading-edge compute portfolio and world-class IP on Intel process technology, Arm partners will be able to take full advantage of Intel's open system foundry model, which goes beyond traditional wafer fabrication to include packaging, software and chiplets.

IFS and Arm will undertake design technology co-optimization (DTCO), in which chip design and process technologies are optimized together to improve power, performance, area and cost (PPAC) for Arm cores targeting Intel 18A process technology. Intel 18A delivers two breakthrough technologies, PowerVia for optimal power delivery and RibbonFET gate all

around (GAA) transistor architecture for optimal performance and power. IFS and Arm will develop a mobile reference design, allowing demonstration of the software and system knowledge for foundry customers. With the industry's evolution from DTCO to system technology co-optimization (STCO), Arm and IFS will work together to optimize the platforms from applications and software through package and silicon, leveraging Intel's unique open system foundry model.

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.

About Arm

Arm technology is defining the future of computing. Our energy-efficient processor designs and software platforms have enabled advanced computing in more than 250 billion chips and our technologies securely power products from the sensor to the smartphone and the supercomputer. Together with 1,000+ technology partners, we are enabling artificial intelligence to work everywhere, and in cybersecurity, we are delivering the foundation for trust in the digital world – from chip to cloud. The future is being built on Arm.

All information is provided "as is" and without warranty or representation. This document may be shared freely, attributed and unmodified. Arm is a registered trademark of Arm Limited (or its subsidiaries). All brands or product names are the property of their respective holders. © 1995-2023 Arm Group.

© Intel Corporation. Intel, the Intel logo and other Intel marks are trademarks of Intel Corporation or its subsidiaries. Other names and brands may be claimed as the property of others.

View source version on businesswire.com:
https://www.businesswire.com/news/home/20230412005250/en/

William Moss
Intel PR
1-650-521-1754
william.moss@intel.com

Kristen Ray
Arm PR
1-512-939-9877
kristen.ray@arm.com

Source: Intel Corporation