

## The MMEC Announces Award of Cross Hub Enablement Solution for Six Microelectronics Commons Hubs

FOR IMMEDIATE RELEASE – Beaver Creek, Ohio November 4, 2024

The Midwest Microelectronics Consortium (MMEC) is excited to announce the award of funding to execute one year of the Cross Hub Enablement Solutions (CHES), created by the CHES Working Group, chaired by the National Security Technology Accelerator (NSTXL) and includes Commons Hub Board representation from six participating Hubs: MMEC, CA DREAMS, NEMC, NORDTECH, NW-AI, and SWAP. Access to Electronic Design Automation (EDA) tools and Intellectual Property (IP) libraries, Process Design Kits (PDKs) and multi-process wafer (MPW) runs is essential to the development of microelectronics devices. The cost efficiency of these items can be a significant barrier to successful lab-to-fab transition success and often unobtainable for smaller organizations on the cutting edge of technology development. CHES intends to provide a cost-effective solution and manage a secure and scalable platform supported by a varied implementation of on-premises and candidate pilots employing cloud-based digital engineering infrastructure. As the projects evolve, technology changes, or new requirements arise, new EDA tools and IP will be added and provisioned. "We are very excited about the capabilities that CHES will provide to organizations in the Commons ecosystem," stated Paul Colestock, MMEC Director of Commercial Innovation, "The CHES program aims to significantly enhance access, cost efficiency, accelerate project timelines and provide a basis for cross-hub collaboration." The MMEC will work with 6 of the 8 designated hubs under the Microelectronics Commons program to provide cost-effective digital engineering access for the hubs and their members.

CHES will be a coordinated effort with government and industry partners playing key roles with distributed functions. The CHES WG will develop an overarching framework of needs and objectives, manage information, and provide coordination between the hubs. The MMEC will manage the effort, establish contracts, and acquire products and services. Hub Leads will represent their hubs and provide requirements for their individual needs. Partners involved in this program include a variety of leading vendors and service providers including:

- 1) **Nimbis:** Design infrastructure for cloud, on-premises, and hybrid cross-Hub EDA, compute and information management
- 2) **Microsoft:** Modeling and Simulation Workbench, a collaborative engineering and simulation cloud environment
- 3) **Synopsys:** Systems and semiconductor design, verification, security, IP, packaging and technology CAD solutions
- 4) **Cadence:** Silicon design creation, simulation, implementation, signoff, IP, and microwave, PCB and packaging design
- 5) **Ansys:** Full range of multi-physics design and analysis engineering solutions supporting all major EDA platforms
- 6) **Siemens:** IC design, verification, packaging (including 3D IC) and printed circuit board design
- 7) **Keysight:** RF and microwave system, circuit, and physical design, device modeling, multiphysics and data/IP management

"The framework we have established will provide a host of benefits to hub members by reducing costs, providing access to critical tools and services, and most importantly, shorten the pathway to innovation and project success," said Paul Colestock. "We are excited to implement this program for the benefit of the Commons hubs and their members." The CHES program builds on the efforts of the Microelectronics Commons program to

accelerate domestic prototyping and grow a pipeline of US-based semiconductor talent – expanding the nation’s global leadership in microelectronics.

“Almost every facet of our modern economy and infrastructure relies on chips,” said MMEC CEO Jackie Janning-Lask. “If we truly want to position the US as the center of semiconductor development and innovation, we have to simplify efforts to create inventive solutions. CHES will provide the tools and access to fulfill the goals of creating a balanced and resilient semiconductor supply chain for the warfighter and commercial use.”

### **About the Microelectronics Commons Program**

Funded by the CHIPS and Science Act, the Microelectronics Commons program is a network of regional technology hubs focused on expanding the nation’s global leadership in microelectronics. This program accelerates domestic prototyping and grows a pipeline of US-based semiconductor talent. The Microelectronics Commons program is led by the Office of the Undersecretary of Defense for Research and Engineering (OUSD(R&E)), executed through the Strategic & Spectrum Missions Advanced Resilient Trusted Systems (S<sup>2</sup>MARTS) Other Transaction Agreement (OTA) established by the Naval Surface Warfare Center (NSWC), Crane Division and is managed by the National Security Technology Accelerator (NSTXL).

### **About the MMEC**

The Midwest Microelectronics Consortium (MMEC) leads the acceleration of microelectronic technologies and delivers solutions to establish a trusted and resilient domestic supply chain. The MMEC is the premier collaborative, public-private ecosystem that engages broadly across innovative partners in industry, academia, and government to rapidly advance defense and commercial applications. This unique environment empowers members to discover new technologies, share capabilities, develop a skilled workforce, and launch groundbreaking innovation into scalable commercial production for the benefit of National Security and economic dominance.

For more information, contact: Karsten Olson, MMEC (509) 869-2846 [kolson@mmeconsortium.org](mailto:kolson@mmeconsortium.org)