



For media inquiries contact:
Sydney Marsman
sydney@nstxl.org

Microelectronics Commons Hubs Build Partnerships to Advance Semiconductor Re-Onshoring Efforts

July 30, 2024 - The [Microelectronics Commons](#), a regional network of prototyping hubs, is responding to the call for an infrastructure that will enable a sustainable domestic innovation pipeline. A critical piece of the Microelectronics Commons ecosystem is the strategic partnerships that are developed to share capabilities and promote economic development. All eight Hubs of the Commons have developed strategic partnerships in their communities and beyond, below are a few highlights of these collaborative initiatives.

SWAP Hub Partners with Deca Technologies Through ASU

The partnership established through the [Southwest Advanced Prototyping](#) (SWAP) Hub brought together ASU and Deca Technologies and will subsequently involve collaboration with other private and public sector partners within the Microelectronics Commons. ASU and Deca are collaborating to create a new Fan-Out Wafer-Level Packaging (FOWLP) research and development capability. The center will combine state-of-the-art advanced packaging technology, equipment, processes, materials, expertise and training to foster the development of new capabilities from proof of concept to pilot scale. The center will include integration with the university's [MacroTechnology Works](#) center at ASU and will be an enhanced capability that will advance projects within the SWAP Hub.

"This is at the heart of the next generation of innovation in microelectronics and everything it enables," said Zak Holman, Vice Dean for Research and Innovation in ASU's [Ira A. Fulton Schools of Engineering](#). "Deca has developed a unique technology and ASU brings extraordinary capacity that will provide the resources to leverage Deca's technology in ways that will be a differentiator for the work we are doing together through the SWAP Hub."

NEMC Hub Supports Startups with Funding Programs

The [Northeast Microelectronics Coalition](#) (NEMC) Hub [announced](#) the launch of its first Powering Regional Opportunities for Prototyping Microelectronics (PROPEL) initiative, a series of grant funding programs that will provide resources and services to address the needs of startups and small businesses in the microelectronics industry. PROPEL will allocate up to \$1 million in grant funding for the manufacture of cutting-edge microelectronics proof-of-concepts, prototypes, and device samples.

"Commercializing promising semiconductor technologies requires significant time and capital investment, and we're excited to offer a pathway to reduce the cost of lab-to-fab development," said Mark Halfman, Director, NEMC Hub. "This program demonstrates our



commitment to leveraging federal CHIPS and Science Act funding to further the commercialization of microelectronics in our region.”

The PROPEL Manufacturing Program will provide grant awards to NEMC Hub members, particularly startups and small companies, to offset costs associated with hardware lab-to-fab development. By reducing the capital needed to advance novel microelectronics technologies, this program aims to advance their progress from early concepts to validated devices. This program includes access to a network of leading laboratory and prototyping fabrication facilities within the NEMC Hub ecosystem.

MMEC Hub Connects with JobsOhio for Workforce Development

The [Midwest Microelectronics Consortium](#) (MMEC) is currently working on a wide range of efforts to implement strategic partnerships and regional economic development. The MMEC has been closely involved with economic development partners even before hub designation and is working with JobsOhio, Ohio EDCs, the Air Force Research Laboratory (AFRL), and member colleges/universities to assess and implement a robust Workforce Development strategy. The MMEC mission to engage and build relationships with Air Force senior leaders help to advance the DoD mission while ensuring our efforts deliver solutions that are needed for the warfighter.

Through partnerships and programs such as the Deca Technology collaboration, the PROPEL program, and local partnerships with JobsOhio, the Commons Hubs are fostering collaboration within their communities, leading to a more robust ecosystem of semiconductor manufacturing capabilities. [Connect with a Hub](#) today to contribute to the effort to re-onshore microelectronics manufacturing capabilities and protect U.S. independence.

###

About S²MARTS

The Strategic & Spectrum Missions Advanced Resilient Trusted Systems (S²MARTS), managed by NSTXL, is the premier rapid OT contracting vehicle for the Department of Defense (DoD) in trusted microelectronics, strategic & spectrum mission, and other critical mission areas. The Naval Surface Warfare Center (NSWC), Crane Division created S²MARTS to grow and engage an elite network of innovators, shorten the path to defense prototype development, and advance national security efforts.