

April xx, 2024

The Honorable Ken Calvert
Chair
Subcommittee on Defense
House Committee on Appropriations
Washington, DC 20515

The Honorable Jon Tester
Chair
Subcommittee on Defense
Senate Committee on Appropriations
Washington, DC 20510

The Honorable Betty McCollum
Ranking Member
Subcommittee on Defense
House Committee on Appropriations
Washington, DC 20515

The Honorable Susan Collins
Ranking Member
Subcommittee on Defense
Senate Committee on Appropriations
Washington, DC 20510

Dear Chair Calvert, Chair Tester, Ranking Member McCollum, and Ranking Member Collins:

As the chief executives of leading U.S. electronics manufacturers, we are writing to inform your committees that the United States faces serious risks in the electronics supply chain for defense systems, and that risk could grow worse under the administration's FY2025 budget request.

The FY2025 budget request for the Defense Production Act Purchases (DPAP) program does not request any FY25 funding to address the critical industrial base shortfall identified by Presidential Determination 2023-06 on Printed Circuit Boards (PCBs) and advanced packaging. **We urge you to appropriate at least \$479.135 million for DPAP and include language directing the Secretary of Defense to prioritize printed circuit board investments in FY2025.**

This figure would be \$85.758 million over the President's budget request – the same amount budgeted for FY24 investments in *Advanced Packaging and Printed Circuit Boards*. The increase represents just 0.01% of the total defense budget request. However, it is a critically important investment in a technology at the heart of virtually all electronics in the defense budget. Defense technologies ranging from sensors to satellites to the proximity fuses in every shell fired, requires a printed circuit board.

Even though technological superiority is a core strategic principle underlying U.S. national security the electronics manufacturing industry has been offshored over the last 30 years to the point that, today, the U.S. industrial base is unable to manufacture the quantity and quality of electronics needed for U.S. defense technologies.

As a result, U.S. industry today lacks not just the capacity, but also the know-how and the capability to manufacture the most cutting-edge PCBs to enable the use of the most advanced semiconductors and technology designs.

President Biden's March 2023 Presidential Determination naming PCBs and advanced packaging as a critical industrial base shortfall, was badly needed recognition that the supply chain for U.S. defense electronics is on a risky foundation. Any disruption in trade or supply chain disruption would limit the

ability to source advanced PCBs from abroad and would ripple across the entire national security ecosystem with catastrophic effects.

The Defense Production Act can provide critically needed investments to bring the U.S. industry in line with the current state-of-practice across the globe. These investments will fund research and development as well as retooling of facilities to enable more advanced manufacturing processes. To be clear, the DPA investments are not only related to R&D; rather, they would fund a triage effort to build minimally viable capability for defense-only needs. A much greater complementary effort will be if the U.S. is going to manufacture electronic systems based on the leading-edge semiconductors being fabbed in Arizona, New York, and Ohio courtesy of the CHIPS and Science Act. On its current course, the CHIPS Program will produce leading-edge chips that must still be shipped overseas to be placed on PCBs and interconnected with other components to create usable systems.

While we understand the effort to exercise restraint in the overall defense budget number, a decision to forgo FY25 funding for PCBs would generate miniscule savings, forestall efforts to build an industrial base capable of supplying critical electronics, and do so at the same time adversaries are ahead and will continue to push.

The Department of Defense is currently faced with a requirement to wean itself off PCBs from China, Iran, North Korea, and Russia by 2027. It is unclear how they plan to meet this requirement, given the current industrial base shortfall. Today the U.S. produces only 4% of the global supply of printed circuit boards, and less than 1% of IC substrates. Of the 4% made in the U.S., they are not the most advanced PCBs needed to accommodate the most cutting-edge semiconductors and system designs. As a result, systems must be designed to work with older technology.

The DPAP showed progress in 2023, making two awards for printed circuit boards and substrates. Two projects cannot reverse more than 20 years of technology loss. Sustained investment must continue to create a secure and resilient supply chain for defense technologies. It is both cost-effective to do so and essential in the event of any disruption of trade. The Committee can protect taxpayers' investments across all defense systems by helping to reinforce and upgrade the domestic PCB manufacturing industry.

We urge you to carry forward funding for "*Advanced Packaging and Printed Circuit Boards*" by increasing overall funding to the Defense Production Act Purchases account and by including report language directing the Secretary of Defense to prioritize investments in support of printed circuit board fabrication.

Sincerely,

CC:

The Honorable Tom Cole
Chair
House Committee on Appropriations
Washington, DC 20515

The Honorable Patty Murray
Chair
Senate Committee on Appropriations
Washington, DC 20510

The Honorable Rosa DeLauro
Ranking Member
House Committee on Appropriations
Washington, DC 20515