



## April 30, 2024

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

The Honorable Betty McCollum Ranking Member 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 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 manufacturing companies, we are writing to inform your committees that the United States faces serious risks in the electronics supply chain for defense systems, and those risks 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 continue addressing 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*. This increase would represent just 0.01% of the total defense budget request. However, it would continue to be a critically important investment in a technology that is at the heart of virtually all electronics in the defense budget. Defense technologies ranging from sensors to satellites to the fuses in every shell fired require a PCB.

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 the supply chain 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 needed if the U.S. is going to manufacture electronic systems based on the leading-edge semiconductors being fabricated 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 will still need to 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 that U.S. adversaries are continuing to charge ahead.

The Department of Defense is currently faced with a requirement to wean itself off of 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.

The DPAP showed progress in 2023, making two awards for PCBs and substrates. However, a few projects cannot reverse more than 30 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 to guard against any disruption of global trade. Your committees 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,

Steven Lach

President

AGC Multi Material America Inc.

Kim Klatt

Executive Vice President

American Chemet Corporation

**Michael Goeringer** 

President

ARC-Tronics Inc.

**Richard Lies** 

CEO

Chemcut

**Enrique Sanchez** 

Process Engineer

Cirexx International

**Michael Coll** 

COO

Denkai America

**David Reichert** 

Business Development Leader

DuPont Specialty Products USA, LLC

**James McNeal** 

Vice President

Electro Plate Circuitry, Inc.

**Doug Mann** 

**EVP Production Technology** 

AGY

Anaya Vardya

CEO

American Standard Circuits, LLC.

Christopher E. Kalmus, Ph.D.

CEO

**Aurora Circuits** 

**Bradley Kurrell** 

President

Circuit Technology Services Inc.

**Humberto Murillo Jr.** 

Account Manager

Data Electronic Systems

**Edward Knutson** 

CEO/ Founder

Dimation Inc.

**Nilesh Naik** 

Owner and President

**Eagle Circuits** 

**Ernest Legiehn** 

President

EMX US Inc.

**Edward McMahon** 

CEO

**Epec Engineered Solutions** 

**Hershel Petty** 

CEO

**Gorilla Circuits** 

**Patrick Redfern** 

President & CEO

Insulectro

**Sean Kincaid** 

President

**K & F Electronics** 

Jeff Cassell

**VP Sales** 

Matrix Circuit Board Materials

Nicole Russo

CEO and Owner

Microboard Processing, Inc.

Irka Zazulak

President

Modular Components National, Inc.

**Zachariah Peterson** 

Owner

Northwest Engineering Solutions, LLC

**Jerry Huang** 

CEO

PPSI

**Brian Buyea** 

CFO

Remtec Inc.

Hari Pillai

President, Technology Components

Sanmina Corporation

**Dennis Fritz** 

Owner

Fritz Technology Consulting

Joe Hughes

Vice President

**Hughes Circuits** 

**Travis Kelly** 

CEO

Isola Group

Joseph J. D'Ambrisi

**EVP and Head of Electronics** 

MacDermid Alpha Electronics Solutions

**Elias Malfavon** 

President

Metal Etch Services, Inc.

**Matthew Fehsenfeld** 

President & CEO

Midwest Printed Circuit Service, Inc.

**Albert Block** 

Chief Manufacturing Strategist

NI.

**Robert Lee** 

President & CEO

Pioneer Circuits, Inc.

**Melanie Bera Anderson** 

CEO

**Pro-Tech Interconnect Solutions** 

**Steven Roy** 

Managing Member

Roy Design and Manufacturing Services, LLC

Michael Kuczynski

Sr. Librarian/Sr. Designer

Siemens Healthineers

**David Raby** 

President & CEO

STI Electronics, Inc

John Hauschild

**Managing Director** 

TCLAD Inc.

**David Griesel** 

CEO

The Sunrise Group (a dvision of INTERBIZ LLC)

**Mark Eonta** 

President & CEO

**Uyemura International Corporation** 

**Mary Johnson** 

CEO

Wavelength Electronics

Michael Seltzer

Chief Commercial Officer Zentech Manufacturing

**Shane Whiteside** 

President & CEO

Summit Interconnect

**Ian Hemmings** 

President

TCT Circuit Supply, Inc.

**Thomas T. Edman** 

President & CEO

**TTM Technologies** 

**John Shepard** 

CEO

**Veterans Assembled Electronics** 

d/b/a STRAC Institute

**Dennis Brown** 

CEO

Winonics

CC:

The Honorable Tom Cole

Chair

**House Committee on Appropriations** 

Washington, DC 20515

The Honorable Rosa DeLauro

Ranking Member

**House Committee on Appropriations** 

Washington, DC 20515

The Honorable Patty Murray Chair

Senate Committee on Appropriations

Washington, DC 20510