**Roadmap to Resilience**

*How to Rebuild Electronics Manufacturing and*

*Secure Supply Chains for National Defense and Critical Infrastructure*

In today’s world, our lives are increasingly dependent on electronics. Electronics are at the heart of virtually every economic activity, making the electronics supply chain vital to our economies, governments, and daily lives.

But when it comes to securing the electronics supply chain, no single company or country can stand alone. Electronics have the most globally integrated supply chain of any industry, surpassing even the automotive sector in cross-border complexity. That degree of interdependence challenges the notion that any one nation can build a complete domestic ecosystem for electronics manufacturing.

Yes, every nation has an interest in creating a more robust domestic industrial base – including the skilled workers needed to build and utilize it – but they must also have more secure and resilient international supply chains.

**The U.S. Policy Agenda**

Well-documented supply chain gaps in the U.S. electronics industry pose a threat to U.S. national and economic security. On behalf of our members, the Global Electronics Association calls on the U.S. Administration and Congress to adopt the following actions to build real resilience “from silicon to systems.”

# **Develop a Proactive National Electronics Strategy**

* The U.S. Government has identified mission-critical gaps in its electronics supply chain in more than a half-dozen major reports over the last 20 years.
* The U.S. Government should convene the entire ecosystem—semiconductors, packaging & testing, substrates, printed circuit boards (PCBs), and electronics manufacturing service (EMS) providers—to define a national strategy for securing the United States’ ability to build and procure the electronic systems it needs for its national defense and critical infrastructure.

# **Unleash Investment in the Electronics Industry**

* Enable investment through grants, loans, loan guarantees, and investment tax credits for electronics manufacturing, including PCBs, electronics assemblies, wire harness manufacturing, and advanced packaging.
* Pass H.R. 3597, the Protecting Circuit Boards and Substrates Act, which would authorize federal investment in domestic PCB and IC substrate production and establish a 25% tax credit for companies that source U.S.-made PCBs and substrates.

# **Secure the National Defense Supply Chain**

* Restore and boost funding under the Defense Production Act for PCB and advanced packaging manufacturing in the United States.
* Specify PCB and PCB assembly manufacturing as categories to be prioritized by supply chain investments, including through the Office of Strategic Capital.
* Boost the demand signal for domestic substrates by authorizing the stockpiling of U.S.-made substrates.
* Adopt industry-backed “trusted sourcing” standards in federal procurement for defense and critical infrastructure systems.

**Fast Facts on U.S. Electronics**

* Electronics is a major vertical industry on its own, and it’s at the heart of other sectors including information technology (IT), transportation, aerospace, defense, retail, manufacturing, finance, and health care.
* The electronics manufacturing industry adds $484 billion a year in direct and indirect value to the economy of the United States.
* The industry directly employs 1.3 million U.S. workers.
* The top producing states are California, Texas, Massachusetts, New York, Oregon, Minnesota, North Carolina, Florida, Pennsylvania, Illinois, Arizona, Ohio, Wisconsin, Michigan, Colorado, and New Jersey.

*Source:* [*Interconnecting America’s Economy: The Economic Impacts of the U.S. Electronics Manufacturing Sector*](https://www.electronics.org/media/3457/download)*, IPC, 2020*

# **Build Talent Pipelines and Career Pathways**

* Ensure the electronics industry is supported in any sector-based strategy or partnerships at the federal and state level.
* Enact Workforce Pell Grants and build more career pathways through work-based learning and industry-backed, portable, stackable credentials.
* Fully fund and promote the widespread adoption of apprenticeships for electronics manufacturing careers.

## **Reduce or Remove Trade Barriers While We Rebuild**

* Work to reduce or eliminate tariffs, which tend to negatively impact domestic electronics manufacturers, through bilateral and multilateral trade deals.
* While tariffs continue, exempt U.S. electronics manufacturers from tariffs on critical inputs.
* Enable downstream, high-tech production by giving refunds and/or rebates on tariffed imports that are used to manufacture goods in the United States.
* Allow duty-free import of manufacturing equipment used to build or modernize U.S. electronics factories.

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