

U.S. Senate Committee on Finance  
219 Dirksen Senate Office Building  
Washington, DC 20510

**Re: Senate Finance Committee Hearing, “Made in America: Effect of the U.S. Tax Code on Domestic Manufacturing”**

Dear Members of the Committee on Finance:

Headquartered in Bannockburn, Illinois, IPC is the global trade association for electronics manufacturing. IPC represents more than 3,000 member-companies in all segments of the industry including designers, printed circuit board (PCB) manufacturers, contract and assembly companies, suppliers, and original equipment manufacturers in aerospace, defense, medical, automotive, and other industrial sectors reliant on electronics. Our industry supports more than 5 million U.S. jobs and drives more than \$700 billion in U.S. GDP.

The last 25 years have been a turbulent period for U.S. electronics manufacturers, marked by significant contraction and financial instability. Thousands of electronics manufacturers have closed their doors, and the number of U.S. PCB manufacturers and assemblers has ebbed. Asia now produces more than 70 percent of all electronics manufactured globally. The U.S. printed circuit board industry, which once accounted for more than 30 percent of total global production, today accounts for less than 5 percent. Furthermore, all electronics and products with electronics in them are reliant upon electronics manufacturing services (EMS), but only four of the top 20 EMS companies are based in the United States. The upshot is a dramatic weakening of the nation’s industrial base.

The erosion of the domestic industrial base for electronics did not come without warnings. A slew of industry reports and government studies have tracked the decline of the industry, even as policymakers during this period prioritized the growth of the global marketplace over the strength and resiliency of the domestic industrial base. Segments of the electronics industry were viewed as expendable so long as U.S. companies led the innovation and owned the intellectual property.

The electronics manufacturing industry is at the heart of the modern economy. It is a large, vertical industry in its own right, but it is also a horizontal industry that cuts across every sector of the economy. Electronics are critical in the performance of automobiles, aircraft, medical equipment, retail, industrial operations, IT and telecom, consumer technologies, and more. And yet, government initiatives often focus on bolstering competitiveness in certain components, such as semiconductors, or verticals, such as autos, without appreciating that electronics manufacturing is an essential driver for innovation and growth across the economy.

The U.S. Government needs to move beyond rhetorical support and provide meaningful and tangible programs that collectively constitute a coordinated, bipartisan vision for the future of manufacturing, and leveraging the U.S. Tax Code can be a critical part of that.

We strongly urge Congress to consider several areas of tax policy that would be very useful for the industry.

**Investing in Factories of the Future.** Electronics manufacturing is a thin-margin business, making it difficult to upgrade costly manufacturing equipment. And yet, such upgrades will be necessary to perform the sophisticated work expected of U.S. manufacturers by their customers.

New tax incentives, including an extension of the bonus depreciation tax credit expiring in 2023, will help U.S. manufacturers revitalize manufacturing facilities. This effort aligns with IPC's [Factory of the Future](#) initiative and is vital to build the kind of manufacturing facilities that will propel the U.S. electronics manufacturing industry.

**Invest in R&D for the Entire Electronics Ecosystem.** Industry funds for research and development (R&D) are also constrained by the industry's thin profit margins. Companies in Asia and Europe—with the support of national governments—are undertaking research that will enable them to lead the world in PCB fabrication and assembly. Meanwhile, in the United States, the focus is almost singularly on one or two segments of the electronics industry to the exclusion of others. For example, the United States is rightly investing billions of dollars in microelectronics and semiconductors, but those sectors and others would also benefit from sizable investments in PCB fabrication and assembly.

The Tax Cuts and Jobs Act (TCJA) changed the treatment of R&D tax costs. Currently, companies can fully deduct R&D costs from taxable income in the year that those costs occur, but starting in 2022, companies will be required to amortize their R&D costs over five years. IPC supports maintaining full expensing to avoid discouraging investment and economic growth.

Furthermore, IPC supports the current corporate income tax rate as it levels the playing field with other countries and provides greater opportunities for companies to invest in R&D and in their workforce. We urge that the current rate be maintained.

**Building a Workforce for Tomorrow.** The pressure is on our industry to tap the institutional and technical knowledge of the aging workforce to train the next generation of workers, even as they also learn the skills required for the factories of the future. IPC's credentialing programs are built around industry-driven standards, ensuring their real-world relevance. In 2020, IPC awarded 50,000 certifications in the United States, and IPC is growing its training and credentialing programs for the industry through in-person and online platforms.

Tax credits and incentives can be a key tool for building and retraining a workforce. IPC supports business tax credits for expenditures on training and certification offered by industry associations. Additionally, providing tax incentives for training and certification at the individual level, focused on post-secondary education expenditures, would ensure a workforce that is prepared to lead the electronics manufacturing industry in 2021 and beyond.

IPC looks forward to working with the Senate Committee on Finance to grow the electronics manufacturing industry. Through the tax code, we can invest in growing this industry and creating a skilled workforce for years to come.