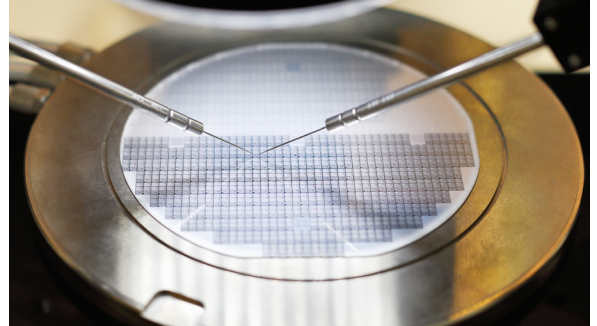


## The U.S. is On Track to Triple its Semiconductor Manufacturing Capacity



**A new report from the Semiconductor Industry Association says the U.S. will triple its domestic chip manufacturing over the next eight years.**

**W**hether its lobbying in favor in the industry it represents, ensuring that public policies are promoting innovation or helping to unite all players in the space, the [Semiconductor Industry Association \(SIA\)](#) works tirelessly to support the U.S. semiconductor industry. The group also has its finger on the pulse of the domestic chip manufacturing sector, which it now says is on track to triple in size by 2032.

In their new *Emerging Resilience in the Semiconductor Supply Chain* report, SIA and Boston Consulting Group paint the picture of a sector that's shaken off the negative impacts of the global pandemic and great chip shortage, and that's well positioned to thrive and expand over the next eight years.

Government funding will play a key role in that expansion. The US CHIPS Act, signed into law in August 2022, committed \$39 billion in grants and loans for semiconductor manufacturing. Likewise, the European Union unveiled the European CHIPS Act, Mainland China initiated the third vintage of its IC Industry Investment Fund, and various other incentive programs emerged across Asia and other regions.

"In parallel, over 100 new semiconductor manufacturing investments have been announced to meet increased market demand, dispersed worldwide across every major region," SIA points out in the report, which was last published in 2021. Since that time, global governments have made "substantial" efforts to increase their support for the semiconductor industry.

### 80 New Projects Underway

Between 2020 and year-end 2023, 80 new semiconductor manufacturing projects were announced across the U.S. alone. These facilities are expected to create 50,000 direct new jobs. "A portion of these investments is going to areas with a mature semiconductor footprint, such as Texas, Arizona, New York, and California," says SIA. "But there have also been substantial investments in Greenfields and capacity expansions in newer regions, such as New Albany, Ohio."

As technology continues to advance, semiconductors will play a critical role in the global economy in everything from everyday products to cutting-edge defense and AI products. For the semiconductor industry to thrive, SIA says these four things have to happen:

- 1. Foster talent at all levels, from cutting-edge research to technicians on the factory floor** and welders on construction sites, through effective partnering with educational institutions, workforce training and industry-tailored migration policies.
- 2. Provide sustained policy support to address remaining supply chain vulnerabilities**, anticipate the expiration of current incentive programs and "stay the course" through business cycles
- 3. Help new markets develop the right conditions to attract semiconductor investment**, including targeted and sustained use of incentives, workforce training, infrastructure buildout and improvements in the regulatory environment

**4. Maintain open trade and diversify end markets** by enacting trade measures that are well-defined, consistently applied and aligned across likeminded partners, and negotiating effective trade agreements in the face of geopolitical uncertainty.

#### **Expansion is in the Cards**

With the U.S. expanding its capacity at the rate of 203%, the country is expected to grow capacity at a faster rate than other regions and much faster than in the preceding decade. In terms of thousands of wafer starts per month (300 mm equivalents), SIA says this represents an increase from 1,121 kwspm (thousands of wafer starts per month) in 2022 to 3,393 kwspm (203% increase) in 2032.

In order to maintain this momentum, SIA says U.S. policy-makers must continue demonstrating a steadfast commitment to supply chain resilience. “In the United States, the government can accelerate implementation of existing CHIPS Act programs,” it says. “It can also consider the need for future tax incentives; for example, if the current ITC were to be made permanent and broadened to cover semiconductor design, it would make future incentives more predictable, thus helping companies make better investment decisions.”