

# **Tim Cook and President Biden came to Arizona to announce plans for American-made chips**

Apple plans to start using processors made in America following the opening of an advanced new chip factory in Phoenix, Arizona.

For the plant's customers, which also includes AMD and NVIDIA, the new facility means a more secure supply of chips and quicker production timelines. The chip fabricator, TSMC, also said today that it would start construction on a second factory in Phoenix next year, increasing the site's annual output.

"These chips will power iPhones and MacBooks, as Tim Cook can attest," President Joe Biden said at an event outside the Arizona factory on Tuesday. "Apple had to buy all the advanced chips from overseas. Now we're going to do more of their supply chain here at home."

Biden and Apple CEO Tim Cook were on hand in north Phoenix for TSMC's "tool-in" ceremony, marking the arrival of production equipment to the first facility.

"A masterstroke and a game changing development for the industry"

The factory is a large, modern building surrounded by newly paved roads and cacti that survived the desert bulldozing. In its first public event, TSMC welcomed customers, employees, local leaders, and journalists to see its new factory, or at least the outside of it.

TSMC is a dedicated foundry, meaning it builds the chips designed by other companies. Apple, AMD and NVIDIA are among

its largest customers, and even Intel relies on TSMC to make the most advanced processors.

The first Phoenix fab will make 4nm processors (improved from the originally disclosed 5nm), with production slated to begin in 2024. The second fab will come online in 2026 and produce 3nm chips, which are the smallest and most complex processors in production today.

All told, TSMC said it will invest \$40 billion in its Arizona capacity, which is among the largest foreign direct investments ever made in US manufacturing. The two fabs will produce more than 600,000 wafers annually by 2026, which White House officials said will be enough to meet the entire US demand for advanced chips.

Top leadership from Apple, AMD, and NVIDIA confirmed on Tuesday that they would be among the first customers to buy chips from the new Arizona fabs.

“TSMC has become a global platform on which the world’s tech industry is built,” NVIDIA CEO Jensen Huang said. “Bringing TSMC investment to the United States is a masterstroke and a game changing development for the industry.”

[Biden came to Phoenix to tout US manufacturing and the CHIPS and Science Act.](#)

Even without CHIPS funding, there are several major semiconductor projects underway.

Intel, America’s biggest chipmaker, has its largest

manufacturing site in Chandler, a major suburb of Phoenix. The company is making progress on a \$20 billion expansion at its Chandler campus, which will be fully operational in 2024.

Intel is also planning to build “the largest silicon manufacturing location on the planet” in Ohio, starting with a \$20 billion investment. Intel has yet to disclose exactly what it will build in Ohio, but production is expected to begin in 2025.

Micron, which makes memory and storage chips, said in October that it will spend up to \$100 billion to build a “megafab” in New York. In Texas, Samsung is investing \$17 billion to expand its facilities in Austin in hopes of rivaling TSMC.

Chang, TSMC’s founder, said during his remarks that he had long dreamed of building in America and that TSMC’s current chairman, Mark Liu, is finally bringing that dream to life.

“My dream of 25 years ago will now be fulfilled by Mark.”

*Photography by Andy Blye.*

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