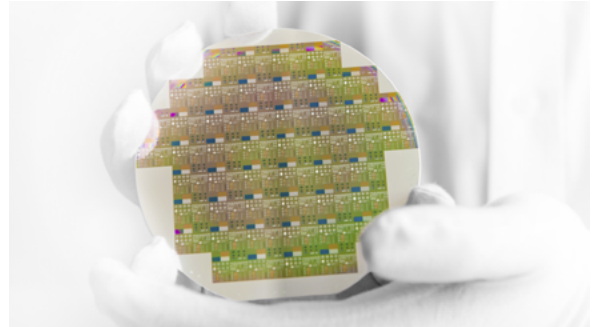


Can India Become the World's Next Chip Manufacturing Hub?



Introduced in December, the Semicon India Programme has become the foundation for expansion of the country's semiconductor manufacturing goals.

As governments and organizations around the globe come up with new ways to address the ongoing semiconductor shortage, India is throwing its hat into the ring. The country's minister of state for electronics and IT recently announced plans to establish a semiconductor ecosystem there.

"Demand for digital devices and electronics products is only going up. If you have seen our electronics vision document, we have announced a target of \$300 billion in electronic manufacturing, with \$120 billion in exports," Rajeev Chandrasekhar announced, *News On Dot* reports. "Our consumption, based on [a] \$300 billion electronics production target by 2026, will be almost \$70-80 billion [worth] of semiconductors."

Semicon India Programme

Under the Semicon India Programme, the Indian government has received proposals from five companies to set up the electronic chip and display manufacturing plants, the publication adds. Introduced in December, the [Semicon India Program's](#) key objectives include:

- Setting up greenfield semiconductor fabs and display fabs
- Developing R&D and design capabilities
- Being able to compete with other bases in Asia to reduce India's import dependencies

Vedanta-Foxconn JV, IGSS Ventures and ISMC have all expressed interest in setting up electronic chip manufacturing plants that will require a \$13.6 billion investment. Also, Indian

conglomerate Vedanta is partnering with Hon Hai Technology Group (aka, Foxconn) to form a joint venture to manufacture semiconductors in India.

This will be the first joint venture in the electronics manufacturing space after the announcement of the policy, *News On Dot* reports, and Vedanta's second attempt to enter the semiconductor market in India. The company previously attempted to set up a chip and glass manufacturing ecosystem in India, it adds, but the project "failed to take off."

There's Work to be Done

In [India Semiconductor Ambitions Are a Heavy Lift](#), the Wall Street Journal highlighted the opportunities and challenges that the country—which lacks a robust domestic market for chips—will face in its quest to become a semiconductor hub. It says that the Indian semiconductor market was an estimated \$15 billion in 2020 and could reach \$63 billion by 2026.

"By global standards that is small," WSJ points out. "Some industry executives expect the global market to hit \$1 trillion by 2030. Currently, India relies on overseas manufacturers for almost all of its semiconductor requirements despite several earlier failed government attempts to cultivate an industry at home."

So far, WSJ says the country has received proposals worth \$20.5 billion from five companies, noting it has already proven itself in smartphone assembly and is currently the second-largest smartphone assembler after China.

“It understandably wants to move up the value chain—but cheap labor won’t be nearly enough,” WSJ cautions. “Chip making is a technology- and capital-intensive industry and needs, at a minimum, reliable access to power and water, things that Indian governments have often struggled to supply in the past.”

Taking the Lead

In assessing whether India can “take the lead” in the chip manufacturing sector, *India Today* acknowledges that some experts are questioning its ability to do so, but is bullish on the country’s prospects in this regard. “Our country has the potential to leapfrog into a place that can become the new global manufacturing hub for the world,” it says. “A hub that is rooted in democratic stability, skilled talent, and a good infrastructure ecosystem.”

India Today outlines the country’s overall mission as a “long-term vision of establishing the semiconductor and display manufacturing facilities along with the semiconductor design ecosystem.” It says the Semicon India Programme will help spur both semiconductor and display manufacturing by helping to raise capital and support new industrial collaborations.

“Our efforts got a huge impetus last year in December, when the Union Cabinet approved a 76,000 crore (\$9.8 billion USD) [plan] to boost semiconductor and display manufacturing in the country,” *India Today* points out. “With this, the current shortage of semiconductors across the country is set to dissipate soon, and India will also achieve self-reliance in semiconductor development.”