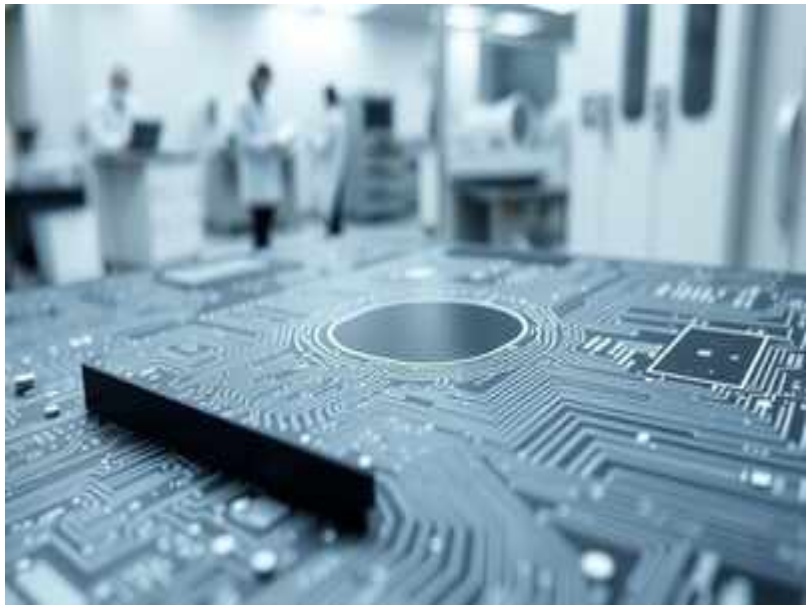
Printed from
THE TIMES OF INDIA

India bets on semiconductors: Aim for big share in $1 trillion global market by 2030, says government; investments, infrastructure drive momentum

TIMESOFINDIA.COM | Aug 4, 2025, 09.15 AM IST



India is rapidly emerging as a major force in the global semiconductor landscape, with its domestic market aimed to grow from $38 billion in 2023 to between $100 and $110 billion by 2030. This projection comes as the global semiconductor industry is set to touch the $1 trillion mark by the end of the decade, according to a government statement cited by ANI on Sunday. The government noted that India is transitioning swiftly from policy formulation to tangible production in the semiconductor space, with fabrication, assembly, and design centres being set up across the country. "The global semiconductor market is expected to reach USD 1 Trillion by 2030 with India's market occupying a substantial portion of it," it said, quoted by ANI.

Several large-scale investments have been committed to semiconductor manufacturing in recent years, reinforcing India’s ambitions. In June 2023, Micron Technology announced a Rs 22,516 crore investment in an ATMP (Assembly, Testing, Marking and Packaging) facility in Sanand, Gujarat. In February 2024, Tata Electronics, in partnership with Taiwan's Powerchip Semiconductor Manufacturing Corporation, committed Rs 91,000 crore to a wafer fabrication plant in Dholera, Gujarat, with a planned capacity of 50,000 wafers per month.

Also in February, CG Power & Industrial Solutions, along with Renesas and Stars, proposed a Rs 7,600 crore chip-making facility in Sanand, aiming to produce 15 million chips daily. Tata Semiconductor Assembly and Test Pvt Ltd (TSAT) is setting up a Rs 27,000 crore facility in Morigaon, Assam, with a production target of 48 million chips daily. In September 2024, Kaynes Semicon Pvt Ltd is set to launch operations in Sanand with a Rs 3,307 crore investment and a daily output of 6.33 million chips. By May 2025, a joint venture between HCL and Foxconn will begin operations in Jewar, Uttar Pradesh, with a Rs 3,700 crore facility producing 20,000 wafers monthly—equivalent to 36 million units annually.

The government also outlined how India is poised to contribute to three critical pillars of the semiconductor supply chain. In equipment, India is leveraging its robust MSME ecosystem to scale up the production of essential semiconductor equipment components. In materials, India's reserves of chemicals, minerals, and industrial gases position it well to support raw material needs for chip production. In services, the country boasts a large talent pool skilled in R&D, logistics, and next-generation technologies such as AI, big data, cloud computing, and IoT, strengthening its backend and design capabilities.

To support this transformation, the India Semiconductor Mission (ISM) was launched in December 2021, with an outlay of Rs 76,000 crore. The initiative aims to incentivise investments in chip fabrication, display manufacturing, and design infrastructure. Guided by global experts, ISM serves as the central agency for implementing semiconductor-related schemes and policies. Alongside ISM, initiatives like the SEMICON India Programme and India-US Initiative on Critical and Emerging Technology (iCET) are helping deepen India's global integration in the electronics value chain.

Semiconductors form the backbone of all modern electronics—from smartphones to satellites. India's push into this domain is expected to fuel the digital economy, enhance national security, reduce dependency on imports, and increase technological self-reliance. A recent example of domestic capability was seen during the Chandrayaan-3 mission, where the Vikram lander used Indian-built chips and AI to autonomously identify a safe landing site—showcasing homegrown semiconductor applications in space and defence.

As approved facilities begin operations and new projects gather momentum, India is steadily evolving from a chip consumer into a critical global contributor to semiconductor manufacturing.