



Research Unit
Press Information Bureau
Government of India

Assam's Semiconductor Plant: A Game-Changer for India's Semiconductor Ecosystem

November 17, 2024

India's ambitious strides in the semiconductor industry are best exemplified by the development of a semiconductor unit in Morigaon, Assam, spearheaded by Tata Semiconductor Assembly and Test Pvt Ltd (TSAT). This project, set to become one of the country's premier manufacturing sites, aligns with the nation's broader goal of establishing a self-sufficient semiconductor ecosystem. **With an investment of Rs. 27,000 crore, the Morigaon facility is expected to produce up to 48 million semiconductor chips per day**, employing advanced packaging technologies like flip chip and Integrated System in Package (ISIP). Designed to cater to essential sectors such as automotive, electric vehicles, telecommunications, and consumer electronics, **this facility is projected for completion by mid-2025.**

The Morigaon unit goes beyond technological development, it brings significant socio-economic benefits by generating **15,000 direct and 11,000-13,000 indirect jobs**, contributing to regional economic growth in Assam and nearby areas. As a high-capacity production site, the facility's daily output will serve both domestic and international markets, positioning India as a competitive force in the global semiconductor supply chain.

India Semiconductor Mission: Fostering a Self-Reliant Semiconductor Industry

Industry estimates place the Indian semiconductor market at approximately \$38 billion in 2023, with projections indicating growth to \$109 billion by 2030. To support this rapid expansion and reduce reliance on imports, the Indian government has implemented several initiatives aimed at promoting domestic semiconductor manufacturing. The India Semiconductor Mission (ISM) aims to build a sustainable semiconductor and display ecosystem that will position India as a leader in electronics manufacturing and design. Guided by international semiconductor experts, ISM coordinates efforts across government ministries, industry, and academic institutions to ensure efficient deployment of resources and support.

Launched in 2021 with a financial outlay of ₹76,000 crore, the Semicon India program is structured to promote the domestic semiconductor industry through incentives and strategic partnerships. This initiative supports various sectors of the semiconductor industry, extending beyond just fabrication facilities (fabs) to include packaging, display wires, Outsourced Semiconductor Assembly and Testing (OSATs), sensors, and other critical components, creating a comprehensive ecosystem. Under the program, four schemes have been introduced namely Modified Scheme for setting up of Semiconductor Fabs in India, Modified Scheme for setting up of Display Fabs in India, Modified Scheme for setting up of Compound Semiconductors/ Silicon Photonics/

Sensors Fab/ Discrete Semiconductors Fab and Semiconductor ATMP/ OSAT facilities in India, and Design Linked Incentive (DLI) Scheme.

The Morigaon semiconductor facility is part of a wider network of government-backed projects aimed at bolstering India's semiconductor production capabilities. The Union Cabinet has approved the establishment of multiple semiconductor units across the nation, including new facilities by Tata Electronics in Dholera, Gujarat, and CG Power in Sanand, Gujarat. Additionally, Kaynes Semicon Pvt Ltd was approved to set up a unit in Sanand as well. This expansion signifies India's commitment to reducing reliance on semiconductor imports and fortifying its position in the global semiconductor value chain.

The government has also focused on modernizing the Semi-Conductor Laboratory in Mohali and implementing the Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECES) and the Production Linked Incentive (PLI) Scheme for Large-Scale Electronics. These efforts ensure support for every segment of semiconductor production, fostering an ecosystem that encompasses chip design, fabrication, testing, and assembly.

The establishment of the semiconductor unit in Morigaon, Assam, marks a pivotal step toward achieving India's semiconductor ambitions. This project, along with others approved under the Semicon India program, strengthens India's technological foundation and supports the nation's vision for economic resilience and self-reliance. As the demand for semiconductors surges worldwide, India's burgeoning semiconductor infrastructure is set to drive innovation, create jobs, and secure the country's position as a significant player in the global digital economy.

References

<https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2041162>

<https://static.pib.gov.in/WriteReadData/specificdocs/documents/2024/sep/doc2024911392101.pdf>

<https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2050859>

<https://ism.gov.in/>

https://x.com/PIB_India/status/1833088957275672602/photo/1

* Assam Industrial Development Corporation (AIDC)

<https://pib.gov.in/PressReleasePage.aspx?PRID=2039638>

Santosh Kumar/ Sheetal Angral/ Aswathy Nair