

India Semiconductor Mission

India is focusing on its main goal of developing the whole semiconductor ecosystem, which will help to catalyse India's fast-growing electronics manufacturing and research environment. The program's goal is to help firms invest in semiconductors, display production, and the design ecosystem. This would help pave the road for India's increasing involvement in global electronics value chains.

About India Semiconductor Mission

The India Semiconductor Mission (ISM) was established as an autonomous business division in under Digital India Corporation with financial and administrative independence to create and push India's long-term plans for developing semiconductor and screen manufacturing units, as well as the semiconductor design environment. ISM will act as the nodal agency for effective, coherent, and easy implementation of the programs, and will be directed by worldwide professionals in the Semiconductor and Display sector.

The below mentioned four schemes are all a part of the ISM:

1. The **Scheme for the Establishment of Semiconductor Fabs in India** gives financial assistance to approved applicants for the establishment of Semiconductor Fabs, with the goal of encouraging major investments in semiconductor wafer production facilities in India.
2. The **Scheme for Establishing Display Fabs in India** offers financial assistance to suitable applicants for the establishment of Display Fabs, with the goal of attracting major investments for the establishment of TFT LCD/AMOLED-based display manufacturing facilities in India. The Scheme offers financial assistance of up to 50% of cost of the project, up to a maximum of INR 12,000 crore each Fab.
3. **Scheme for setting up of Compound Semiconductors / Silicon Photonics / Sensors Fab and Semiconductor Assembly, Testing, Marking and Packaging (ATMP) / OSAT facilities in India:** The Scheme offers qualifying applicants with financial assistance of up to 30% of the Capital Spending for the establishment of Compound Semiconductors, Silicon Photonics (SiPh), Sensors (including MEMS) Fabs, and Semiconductor ATMP / OSAT establishments in India.
4. **The Design Linked Incentive (DLI) Scheme** provides financial incentives and design infrastructure assistance for Integrated Circuits (ICs), Chipsets, System on Chips (SoCs), Systems & IP Cores, and semiconductors linked design at various phases of development and rollout. The plan offers a "Product Design Linked Incentive" of up to 50% of qualifying expenditure up to a maximum of Rs. 15 crore per entry, as well as a "Deployment Linked Incentive" of 6% to 4% of net revenue turnover over 5 years up to a maximum of Rs. 30 crore per application.

Importance of ISM

ISM's goal is to create a thriving semiconductor as well as display design and innovation ecosystem that will help India become a worldwide powerhouse for electronics manufacture and design. The India Semiconductor Mission (ISM) is critical in coordinating efforts to promote the semiconductor and display industries in a more organised, targeted, and comprehensive way. In collaboration with government ministries, agencies, and departments, industry, as well as academia, it will establish a long-term plan for growing semiconductor and display production facilities and the semiconductor design environment in the nation.

Secure semiconductors as well as display supply chains, including raw materials, specialised chemicals, gases, and production equipment, will help to accelerate the acceptance of trusted electronics. It will help the Indian semiconductor design sector flourish in several ways by providing necessary assistance in the form of EDA tools, foundry solutions, and other appropriate methods for early-stage businesses. It will also stimulate, enable, and incentivise indigenous Intellectual Property (IP) creation, as well as promote, facilitate, and incentivise technology transfer (ToT). ISM will also allow domestic and global collaborations and partnership activities to catalyse joint research, commercialisation, and skills enhancement.

Semicon India Conference

Semicon India 2022, conducted by the Ministry of Electronics and Information Technology, is looking for ways to collaborate to promote the semiconductor and electronics industries. The conference is intended to serve as a springboard for the country's aspiration to become a worldwide semiconductor hub and to develop the chip design and production environment. The three day event aims to further India's objective of being a global leader in semiconductor production, semiconductor design, and research. This conference will include eminent specialists from industry bodies, research organisations, and academia. They will discuss policy, skills, and the government's role and initiatives in fostering a favourable growth atmosphere for the nation's semiconductor sector.