

GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO. 256
TO BE ANSWERED ON: 03.02.2023

INDIAN SEMICONDUCTOR MISSION

256. SHRI RAVICHANDRA VADDIRAJU:

Will the Minister of Electronics and Information Technology be pleased to state:

- (a) whether Government has established Indian Semiconductor Mission (ISM) and if so, the details thereof along with its aims and objectives;
- (b) whether ISM has been able to achieve the objective for which it was established and if so, the details thereof, the amount released by Government for ISM;
- (c) the steps taken by Government to make India a global leader in the manufacturing, innovation and design of semiconductors;
- (d) whether Government has invited foreign companies to start production of Microchips and semiconductor in the country; and
- (e) if so, the details thereof along with the outcome thereto?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY
(SHRI RAJEEV CHANDRASEKHAR)

(a): Yes, Sir. India Semiconductor Mission (ISM) has been setup as an Independent Business Division within Digital India Corporation having administrative and financial autonomy to formulate and drive India's long-term strategies for developing semiconductors and display manufacturing facilities and semiconductor design ecosystem. Envisioned to be led by global experts in the Semiconductor and Display industry, ISM is serving as the nodal agency for efficient, coherent and smooth implementation of the programme for development of semiconductor and manufacturing ecosystem in India.

Objectives of ISM are as under:

- i. Formulate a comprehensive long-term strategy for developing sustainable semiconductors and display manufacturing facilities and semiconductor design ecosystem in the country in consultation with the Government ministries / departments / agencies, industry, and academia.
- ii. Facilitate the adoption of secure microelectronics and developing trusted semiconductor supply chain, including raw materials, specialty chemicals, gases, and manufacturing equipment.
- iii. Enable a multi-fold growth of Indian semiconductor design industry by providing requisite support in the form of Electronic Design Automation (EDA) tools, foundry services and other suitable mechanisms for early-stage start-ups.
- iv. Promote and facilitate indigenous Intellectual Property (IP) generation.
- v. Encourage, enable and incentivize Transfer of Technologies (ToT).
- vi. Establish suitable mechanisms to harness economies of scale in Indian semiconductor and display industry.
- vii. Enable cutting-edge research in semiconductors and display industry including evolutionary and revolutionary technologies through grants, global collaborations and other mechanisms in academia / research institutions, industry, and through establishing Centres of Excellence (CoEs).
- viii. Enable collaborations and partnership programs with national and international agencies, industries and institutions for catalysing collaborative research, commercialization and skill development.

(b): ISM has been working as nodal agency for the Schemes approved under Semicon India Programme. The applications were received by ISM and are being appraised by ISM. ISM has also been engaging with various stakeholders of Semiconductors and Display ecosystem to attract the investments in India. So far INR 13 crore has been released to ISM.

(c): Government is very focused on its important objective of building the overall semiconductor ecosystem and ensure that, it in-turn catalyses India's rapidly expanding electronics manufacturing and innovation ecosystem. Government has approved the Semicon India programme with a total outlay of INR 76,000 crore for the development of semiconductor and display manufacturing ecosystem in the country. The programme has further been modified in view of the aggressive incentives offered by countries already having established semiconductor ecosystem and limited number of companies owning the advanced node technologies. The modified programme aims to provide financial support to companies investing in semiconductors, display manufacturing and design ecosystem. This will serve to pave the way for India's growing presence in the global electronics value chains.

Following four schemes have been introduced under the aforesaid programme:

- i. **'Modified Scheme for setting up of Semiconductor Fabs in India'** for attracting large investments for setting up semiconductor wafer fabrication facilities in the country to strengthen the electronics manufacturing ecosystem and help establish a trusted value chain. The Scheme extends a fiscal support of 50% of the project cost on *pari-passu* basis for setting up of Silicon CMOS based Semiconductor Fab in India.
- ii. **'Modified Scheme for setting up of Display Fabs in India'** for attracting large investments for manufacturing TFT LCD or AMOLED based display panels in the country to strengthen the electronics manufacturing ecosystem. Scheme extends fiscal support of 50% of Project Cost on *pari-passu* basis for setting up of Display Fabs in India.
- iii. **'Modified Scheme for setting up of Compound Semiconductors / Silicon Photonics / Sensors Fab / Discrete Semiconductors Fab and Semiconductor Assembly, Testing, Marking and Packaging (ATMP) / OSAT facilities in India'** shall extend a fiscal support of 50% of the Capital Expenditure on *Pari-passu* basis for setting up of Compound Semiconductors / Silicon Photonics (SiPh) / Sensors (including MEMS) Fab/ Discrete Semiconductor Fab and Semiconductor ATMP / OSAT facilities in India.
- iv. **'Semicon India Future Design: Design Linked Incentive (DLI) Scheme'** offers financial incentives, design infrastructure support across various stages of development and deployment of semiconductor design for Integrated Circuits (ICs), Chipsets, System on Chips (SoCs), Systems & IP Cores and semiconductor linked design. The scheme provides "Product Design Linked Incentive" of up to 50% of the eligible expenditure subject to a ceiling of ₹15 Crore per application and "Deployment Linked Incentive" of 6% to 4% of net sales turnover over 5 years subject to a ceiling of ₹30 Crore per application.

In addition to the above schemes, Government has also approved modernisation of Semiconductor Laboratory, Mohali as a brownfield Fab.

(d) and (e): Government has reached out foreign semiconductor companies and invited them to set up semiconductor and display manufacturing facilities in the country. As a result, India Semiconductor Mission, a Nodal Agency setup for implementation of the programme has received proposals under all schemes which are currently under consideration.
