# GOVERNMENT OF INDIA MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY LOK SABHA UNSTARRED QUESTION NO. 868 TO BE ANSWERED ON: 07.02.2024

#### SEMICONDUCTOR MISSION

## 868. SHRI PRATAPRAO JADHAV: SHRI SUDHEER GUPTA: SHRI SHRIRANG APPA BARNE: SHRI DHAIRYASHEEL SAMBHAJIRAO MANE: SHRI SANJAY SADASHIVRAO MANDLIK:

Will the Minister of ELECTRONICS AND INFORMATION TECHNOLOGY be pleased to state:

- (a) the current status of semiconductors mission initiated by the Government in year 2021 to make India as a hub for semiconductors;
- (b) whether the demand for semiconductors is increasing in the country particularly in automobile, electronics and other consumer industries and if so, the details thereof;
- (c) the total number of semiconductors manufacturing units set up in the country during the last three years, year and location-wise;
- (d) whether the Government proposes to give subsidy to companies for setting up such plants/units in the country and if so, the details thereof; and
- (e) the other steps being taken by the Government to make India self-reliant in semiconductor manufacturing sector?

#### ANSWER

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

(a) and (c): Government is very focused on its objective of building the overall semiconductor ecosystem and ensure that, it in-turn catalyses India's rapidly expanding electronics manufacturing and innovation ecosystem. Under the Semicon India programme, the proposal of Micron Technology Inc., one of the global semiconductor companies, has been approved by the Government in June2023 for setting up a Semiconductor ATMP facility in Sanad, Gujarat with capital investment of INR 22,516 crore. The construction work of the plant has started.

(b): As a result of several initiatives taken by the Government and efforts of the industry, the domestic production of electronic goods has increased substantially from INR 1.90 lakh crore (USD 29 Billion) in 2014-15 to INR 8.22 lakh crore (USD 101 Billion) in 2022-23 at a Compound Annual Growth Rate (CAGR) of approx. 20%. Consistent with almost every leading electronics manufacturing nation, growth in electronics manufacturing is accompanied by proportionate growth in usage of semiconductors. India has also witnessed similar trend in usage of semiconductors over last few years.

(d): Government has approved Semicon India programme with a total outlay of INR 76,000 crore for the development of semiconductor and display manufacturing ecosystem in the country. This paves 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' extends 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 Semi-Conductor Laboratory, Mohali as a brownfield Fab.

(e): The other steps taken by the Government to make India self-reliant in semiconductor manufacturing sector:

- i. **Talent Development:** Recognizing the importance of Talent development in Semiconductor domain, a technology intensive sector, Government of India has been making significant efforts to develop India as a global talent hub for semiconductors. New curriculums for Diploma, Under-Graduate, Post Graduate and Doctoral programmes have been prepared in consultation with Industry. Ministry of Educationand AICTEis implementing the same.
- ii. Chips to Start-up (C2S) Programme has also been initiated with an outlay of Rs 250 Crore for a duration of 5 Years. C2S Programme aims to train 85,000 number of industry-ready manpower specialized in the area of VLSI/ Chip design/ Embedded System Design and leapfrog in ESDM space by way of inculcating the culture of Chip/ System-on-Chip (SoC)/ System Level Design at B.Tech, M.Tech & PhD level and act as catalyst for growth of Start-ups involved in semiconductor design in the country.
- iii. **Digital India futureLABS**, has been envisioned to catalyze domestic R&D by creating a collaborative ecosystem for development of IPs, Standards and catalyzing next-generation Electronics System Design ecosystem in the country.
- iv. **Collaborationswith other nations:** Government of India hasalso established collaborative partnership with relevant stakeholders such as MoU with USA, Japan, European Union. Additionally, India Semiconductor Mission has signed MoU with Purdue University and IBM India Private Limited.