

GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO. 378
TO BE ANSWERED ON: 04.02.2021

CHIP MANUFACTURING IN INDIA

378. DR. VIKAS MAHATME:

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

- (a) whether the Ministry is aware that despite its campaign of Digital India, the country lacks basic necessities like a semi-conductor chip manufacturing plant in country;
- (b) if so, the reasons therefor;
- (c) whether any electronic chip manufacturing units are likely to be operational in the next five years;
- (d) if so, the details and the present status thereof;
- (e) whether the setting up of electronic chip facilities would be of the nation's strategic purpose as have security implications and if so, the details thereof; and
- (f) whether Government is considering providing subsidy to these units and if so, the details thereof?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY
(SHRI SANJAY DHOTRE)

(a), (b), (c) and (d): Government attaches high priority to electronics hardware manufacturing and it is one of the important pillars of both "Make in India" and "Digital India" programmes. As a result of various measures taken by the Government over the last few years and efforts of the industry, electronics hardware production in the country has grown from Rs.1,90,366 crore in 2014-15 to Rs.5,33,550 crore in 2019-20, at a Compound Annual Growth Rate (CAGR) of 23%.

Semi-Conductor Laboratory (SCL), Mohali, an autonomous body under the Department of Space, and Gallium Arsenide Enabling Technology Centre (GAETEC), Hyderabad, a unit of Society for Integrated Circuit Technology and Applied Research (SITAR) have facilities for Design, Development, Fabrication, Assembly, Packaging, Testing and Quality Assurance of CMOS based semiconductor chips and GaAs monolithic microwave integrated circuits, RF sub systems, respectively, for various applications, and are meeting the strategic requirements.

However, there is no commercial semiconductor chip manufacturing plant in the country. Government has been making serious efforts to set up semiconductor fabrication facilities in the country. The Cabinet, in its decision dated 20.04.2011 had set up an Empowered Committee (EC) with the mandate to identify technology and potential investors for setting up Semiconductor Wafer Fabrication (FAB) manufacturing facilities in the country, and to recommend nature and

quantum of Government support. Based on the recommendations of the Empowered Committee (EC), Government had approved two proposals for setting up of Semiconductor FAB facility, based on which Letter of Intent (LoI) dated 19.03.2014 were issued to the two consortia. As per the LoI, both the consortia were required to submit certain documents for demonstration of commitment. The consortium led by M/s. Jaiprakash Associates Ltd. withdrew their proposal and the consortium led by M/s. HSMC Technologies India Pvt. Ltd. could not submit the requisite documents for demonstration of commitment, despite being provided extension of time on several occasions. Hence, the LoI issued to M/s. HSMC Technologies India Pvt. Ltd. was cancelled on 20.04.2018.

India is a signatory to the Information Technology Agreement (ITA-1) of WTO under which most of the electronic components, including semiconductor integrated circuits (chips), are being imported at Nil Basic Custom Duty (BCD). Besides, Electronics hardware manufacturing sector in the country faces lack of level playing field vis-à-vis competing nations on account of several disabilities such as lack of adequate infrastructure, domestic supply chain and logistics; high cost of finance; inadequate availability of quality power and water and limited focus on R&D by the industry, which render domestic electronics hardware manufacturing uncompetitive. Further, the manufacturing facilities for semiconductors are highly capital intensive and have to deal with constantly changing technology.

The Government has approved the following projects in the area of semiconductors:

- i. The project for “Establishment of Gallium Nitride (GaN) Ecosystem Enabling Centre and Incubator for High Power and High Frequency Electronics” to be implemented by Society for Innovation and Development (SID), being converted to a Section 8 company titled "Foundation for Science, Innovation and Development" under the auspices of Indian Institute of Science (IISc) at Centre for Nano Science and Engineering (CeNSE), Bengaluru at the total project cost of Rs. 298.66 crore.
- ii. A project for setting up of Assembly, Testing, Marking and Packaging (ATMP) of NAND Flash memory has been approved under the Production Linked Incentive (PLI) Scheme.
- iii. A project for discrete semiconductor devices, including transistors, diodes, thyristors, etc. and System in Package (SIP) has been approved under the Production Linked Incentive (PLI) Scheme.

(e): Electronics impacts a large number of economic sectors including IT, telecom, broadcasting, power, etc. as well as strategic sectors, viz., Defence, Space and Atomic Energy. The growth of electronics industry has enormous implication for all these sectors. Presently, SCL and GAETEC facilities are being used for strategic purposes.

(f): Following incentives are available to companies for setting up of Semiconductor FAB facilities in India:

- (i) A financial incentive of 25% on capital expenditure for setting up of semiconductor fabrication units under the Scheme for Promotion of manufacturing of Electronic Components and Semiconductors (SPECS).

- (ii) Capital goods for setting up of Semiconductor FAB are exempted from Basic Customs Duty (BCD).
- (iii) Investment linked deduction under Section 35AD of the Income-tax Act.
- (iv) Deduction of expenditure on research and development as admissible under Section 35(2AB) of the Income-tax Act.
- (v) New domestic companies making fresh investment in manufacturing and starting operations before March 31, 2023 have an option to pay corporate income tax at reduced rate of 15%. Such companies will also not be liable to pay Minimum Alternate Tax (MAT).
