GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO. 1503
TO BE ANSWERED ON: 10.02.2021

SEMICONDUCTOR WAFER FABRICATION AND MANUFACTURING

1503. DR. SUKANTA MAJUMDAR:
SHRI VINOD KUMAR SONKAR:
SHRI NISITH PRAMANIK:
SHRIMATI SANGEETA KUMARI SINGH DEO:
DR. JAYANTA KUMAR ROY:
SHRI BHOLA SINGH:
SHRI RAJA AMARESHWARA NAIK:

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

(a) whether there is any commercial Semiconductor Wafer Fabrication manufacturing facility in the country and if so, the details thereof and if not, the reasons therefor;
(b) whether in spite of approval of two proposals by the Government, there has been no response by the Industry and if so, the details thereof and the reasons therefor;
(c) whether despite provision of capital subsidy to attract investment in setting up of Fab manufacturing, no proposal has been received by the Government so far;
(d) if so, the reasons therefor;
(e) whether India is dependent on imports of chips, spending billons of dollars thereon and if so, the details thereof; and
(f) whether there is any need for development of semiconductor manufacturing ecosystem in the country and if so, the steps taken/being taken by the Government in this regard?

ANSWER

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

(a), (b), (c) and (d): Government has been making serious efforts to set up Semiconductor wafer fabrication facilities in the country. There is no commercial Semiconductor wafer fabrication (FAB) facility in the country at present. Government had approved two proposals for setting up of Semiconductor FAB facility in India - one from the consortium led by M/s. HSMC Technologies India Pvt. Ltd. (with ST Microelectronics and Silterra Malaysia Sdn. Bhd. as partners) and the other from consortium led by M/s. Jaiprakash Associates Ltd. (with IBM, USA and Tower Semiconductor Limited, Israel as partners). Letter of Intent (LoI) dated 19.03.2014 was issued to both the consortia.

As per the Letter of Intent (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 on 02.03.2016 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. Therefore, both the proposals for setting up of semiconductor FAB facilities in the country could not materialize.

Semiconductor FABs are highly capital intensive and have to deal with constantly changing technology. Further, the semiconductor fabrication capability for leading / cutting edge technology nodes is available with only few companies globally.

(e): In the absence of a commercial Semiconductor FAB facility, the country is dependent on imports for Semiconductor Integrated Circuits (ICs). As per the Directorate General of Commercial Intelligence and Statistics (DGCI&S) data, Semiconductor ICs of worth approximately INR 71,830 crore, and INR 51,261 crore have been imported in the country during FY 2019-20, and FY 2020-21(April-December), respectively.

(f): The Government attaches high priority to electronics hardware manufacturing, including setting up of Semiconductor FAB facilities, and it is one of the important pillars of both "Make in India" and "Digital India" programmes of Government of India. Following steps have been taken up for the development of Semiconductor manufacturing ecosystem in the country:

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), Bengaluru has been approved with total project cost of Rs. 298.66 crore.

II. An application for setting up of Assembly, Testing, Marking and Packaging (ATMP) of NAND Flash memory has been approved under the Production Linked Incentive (PLI) Scheme for large scale electronics manufacturing.

III. An application for discrete semiconductor devices, including transistors, diodes, thyristors, etc. and System in Package (SIP) has been approved under the Production Linked Incentive (PLI) Scheme for large scale electronics manufacturing.

IV. Further, following incentives are currently available to companies for setting up of Semiconductor FAB facilities in India:

   i. Financial incentive of 25% on capital expenditure under the Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS) notified on April 1, 2020.
   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).

V. Ministry of Electronics & Information Technology (MeitY) has also issued a notice inviting Expression of Interest (EoI) from global companies / consortia desirous of

setting up Semiconductor FABs in India or Indian companies / consortia desirous of acquisition of Semiconductor FABs outside India.

****