GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO. 5102
TO BE ANSWERED ON: 02.04.2025

SEMICONDUCTOR FABRICATION PLANTS

5102. SHRI NAVEEN JINDAL:

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

(a) the details of the semiconductor fabrication plants established in India since, 2020, State-wise and year-wise;
(b) the details of the semiconductor manufacturing units approved under the India Semiconductor Mission and their expected timeline for completion and operationalization, State-wise;
(c) the details of the policy measures introduced to promote domestic semiconductor production and reduce dependence on imports;
(d) the details of the collaborations with the global technology companies for semiconductor fabrication in India;
(e) the steps taken by the Government to establish India as a global hub for semiconductor manufacturing; and
(f) whether the Government has plans to ensure continuous innovation and scalability in the semiconductor sector for future technological advancements and if so, the details thereof?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY
(SHRI JITIN PRASADA)

(a) to (e):Government has approved Semicon India programme with a total outlay of Rs 76,000 crore for the development of semiconductor and display manufacturing ecosystem in India. which provides:

  i. Fiscal support of 50% of the project cost on *pari-passu* basis for setting up of Silicon Complementary Metal-Oxide-Semiconductor (CMOS) based Semiconductor Fabs in India.
 ii. Fiscal support of 50% of Project Cost on *pari-passu* basis for setting up of Display Fabs in India.
iii. Fiscal support of 50% of the Capital Expenditure on *pari-passu* basis for setting up of Compound Semiconductors / Silicon Photonics (SiPh) / Sensors (including Micro-Electro-Mechanical Systems) Fab/ Discrete Semiconductor Fab and Semiconductor Assembly, Testing, Marking and Packaging (ATMP) / Outsourced Semiconductor Assembly and Test (OSAT) facilities in India.

iv. Product Design Linked Incentive of up to 50% of the eligible expenditure subject to a ceiling of ₹15 Crore per application and also "Deployment Linked Incentive" of 6% to 4% of net sales turnover over 5 years subject to a ceiling of ₹30 Crore per application for incentivising chip design.

Government has also approved modernisation of Semi-Conductor Laboratory, Mohali to enhance efficiency and cycle time.

Government has approved five (5) semiconductor manufacturing projects that includes One Semiconductor Fabrication facility and Four (4) Semiconductor ATMP/OSAT facilities under Semicon India Program with cumulative investment of around Rs. 1,52,000 crore. The approved projects are under various phases of implementation and are expected to be completed in 4–6-year timeframe.

Further, to strengthen semiconductor manufacturing and creating a semiconductor ecosystem in the country, Government has entered in Memorandum of Understanding (MoU) with USA, European Union, Japan and Singapore.

Semiconductor manufacturing is very complex and Technology intensive sector which requires specialized skilled manpower. To address this, the following measures have been taken by the Government:

1. All India Council for Technical Education (AICTE) has launched the new curriculum for B. Tech in Electronics Engineering (Very Large-Scale Integration (VLSI) Design and Technology), Diploma in Integrated Circuit (IC) manufacturing and Minor Degree in Electronics Engineering (VLSI Design and Technology), as a step towards creation of Talent pool in Semiconductor domain.
2. Government has launched the Chips to Startup ('C2S') programme which plans to train 85,000 industry ready workforce at about 113 participating institutions in VLSI and Embedded System Design. More than 43,000 engineering students have been onboarded for training at 113 organizations under C2S Programme till date.
3. A Skilled Manpower Advanced Research and Training (SMART) Lab has been setup in NIELIT Calicut in 2022 with an aim to train one lakh engineers nation-wide within 5 years in VLSI and Embedded System design. More than 42,000 engineers have been trained nationwide using the SMART Lab.
4. Further, the following collaborations/ partnerships have been entered into by India Semiconductor Mission (ISM) to encourage skill development:

   (i) MoU between ISM with IISc and Lam Research: To train about 60,000 Indian engineers in the upcoming 10 years through Lam Research's Semiverse platform.
   (ii) MoU between ISM and IBM: To facilitate Indian students/professionals to build a broad skill base by gaining access to laboratories and research focal centers and establishing internship and fellowship programs.
   (iii) MoU between ISM with Purdue University: To promote the cutting-edge research and development and commercialization thereof, curating skilled talent pool and

investment opportunities in India enabling the Indian professionals to explore their potential in the semiconductor and display space.

(f):Government is focused on its objective of building the overall semiconductor design and manufacturing ecosystem with an emphasis on fostering R&D in semiconductor area in the country. MeitY supports R&D projects in the area of semiconductors at academic institutions, research organizations, and startup companies through a dedicated R&D Scheme. Some of them includes but not limited to the following- nanotechnology, semiconductor materials, semiconductor processes, chip design, semiconductor IP Cores etc

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