GOVERNMENT OF INDIA MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY LOK SABHA

UNSTARRED QUESTION NO. 631

TO BE ANSWERED ON: 03.12.2025

28NM FAB PROJECT

631. DR. HEMANG JOSHI: SHRI NABA CHARAN MAJHI: SMT. KAMALJEET SEHRAWAT:

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

- (a) the current status of the first 28nm fab project and its expected date of commercial production;
- (b) the manner in which the Government is expediting the clearance process for new proposals under the Semicon India Programme;
- (c) whether the Government has achieved the target for domestic chip design startups under the Design Linked Incentive scheme and if so, the details thereof;
- (d) the details of plans for developing the skilled workforce needed for the assembly, testing and packaging; and
- (e) whether the Ministry of Electronics and Information Technology (MeitY) is securing the supply of crucial chemicals and gases for the upcoming fabrication facilities?

ANSWER

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

(a) to (e): The semiconductor development strategy is inspired by Prime Minister Shri Narendra Modiji's vision of Atmanirbhar Bharat and Make in India, Make for the world.

As part of this strategy, India aims to develop a complete ecosystem, ranging from design, fabrication, assembly, testing, packing, and module manufacturing.

Manufacturing of Semiconductor chips and packaging

- Government approved Semicon India programme with a total outlay of ₹76,000 crore for the development of semiconductor & display manufacturing ecosystem
- In a short span of three years, it has seen investments of about Rs 1.6 Lakh Cr.
- 10 units have been approved including 2 fabs and 8 ATMPs/OSATs and construction work is also going on rapidly.

This includes the project of Tata Electronics Pvt. Ltd. for setting up a semiconductor fab facility in Dholera, Gujarat with an investment of Rs. 91,526 crore.

The production capacity of this fab will be 50,000 wafer starts per month, which inter-alia includes 28nm Technology node as well. This facility is expected to start the commercial operations by FY 2029-30.

The Government has instituted a streamlined mechanism through India Semiconductor Mission (ISM) for clearances of the proposals received under the Semicon India Programme. The applications are processed through the dedicated online portal and assessed by a team of professionals.

Developing Semiconductor design ecosystem

As part of our semiconductor strategy, we are supporting our startups and MSMEs and developing our talent pools.

- DLI scheme provides "Product Design Linked Incentive" of up to 50% and also "Deployment Linked Incentive" of 6% to 4% of net sales turnover over 5 years
- 24 chip design projects supported through startups, representing around ₹900 crore in project value
- 91 companies provided access to EDA tools, enabling 47 lakh hours of design tool usage
- DLI-supported Indian startups developing export-grade semiconductor IP, including:
 - o Netrasemi, Mindgrove, BigEndian SoCs for video surveillance
 - o InCore & Morphing Machines microprocessors and accelerators
 - o Aheesa Digital, Mbit Wireless, WiSig Networks broadband and IoT SoCs

Development of talent pipeline

Government has adopted a comprehensive approach for skilling for semiconductor manufacturing including ATMP, fabrication and design. Following steps have been taken for development of skilled workforce in semiconductor sector:

• Chips to Startup (C2S) programme

- o Developing 85 thousand skilled manpower in the semiconductor sector
- Engineering institutions are provided with necessary software and tools to design semiconductor chips
- o 1 lakh+ students from 300 institutions have been enrolled
- Further, 255 training sessions on design flow have been conducted in partnership with leading companies
- Trainings has been attended by students from 300 institutions and entrepreneurs from 91 start-ups.
- All India Council for Technical Education (AICTE) launched following three courses:
 - o B. Tech in Electronics Engineering (VLSI Design)
 - o Diploma in Integrated Circuit (IC) manufacturing, and
 - o Minor Degree in Electronics Engineering (VLSI Design and Technology
- Skilled Manpower Advanced Research and Training (SMART) Lab set up in NIELIT Calicut with an aim to train 1 lakh engineers nation-wide
 - o More than 62 thousand engineers have already been trained.
- ISM-Lam Research partnership launched to train 60,000 professionals in nanofabrication and process-engineering over the next decade
- The programme will strengthen the talent pipeline for ATMP and advanced packaging

• Government also enabling partnerships between academia, industry and global research institutions to build semiconductor capabilities

The approved applicants tie up with various global and local supply chain partners to ensure long term supply of the chemicals, gases and other raw materials.

Further, Government has also signed MoUs with the USA, EU, Japan, Singapore and the Netherlands which provides an enabling platform for B2B collaborations for securing supply chain partnerships of such approved companies.
