

GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO. 1671
TO BE ANSWERED ON: 13.02.2026

**IMPACT OF INDIA'S SELF-
RELIANCE ON GLOBAL SEMICONDUCTOR SUPPLY CHAIN**

1671. SHRI AYODHYA RAMI REDDY ALLA:

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

- (a) the manner in which India's push for self-reliance in 75 per cent of tech categories within four years will influence the global semiconductor supply chain, particularly in terms of reshaping trade dynamics and technology partnerships;
- (b) the manner in which India's goal to manufacture 3-nanometre chips by 2032 will impact its strategic relationships with global tech leaders, particularly in terms of navigating export controls and intellectual property sharing; and
- (c) the manner in which India's semiconductor ambitions will influence its approach to sustainability and environmental governance, particularly in terms of balancing economic growth with ecological concerns and responsible manufacturing practices?

ANSWER

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

(a) to (c): The semiconductor development strategy is inspired by Hon'ble Prime Minister'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, packaging and module manufacturing. India's Semiconductor strategy builds on the success of the electronics manufacturing. India is providing the most competitive incentives through following programmes to promote electronics/semiconductor manufacturing across the country, thereby increasing India's share in global electronics markets:

- a) Semicon India Programme
- b) PLI Scheme for IT Hardware and Large-Scale Electronics manufacturing
- c) Electronics Component Manufacturing Scheme (ECMS)
- d) Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS)
- e) Electronics Manufacturing Clusters Scheme (EMC)
- f) Modified Special Incentive Package Scheme (M-SIPS)

Given the foundational nature of semiconductor industry for the economy, the Government launched the 'Semicon India Programme' with a total outlay of Rs. 76,000 crore for the

development of semiconductor and display manufacturing ecosystem in the country. Following are salient achievements under this Programme:

- Government has approved 10 projects with envisaged investments of about Rs. 1.6 Lakh Crore which includes 2 fabs and 8 packaging units. These units inter-alia include CMOS (Silicon) fab, Silicon Carbide fab, advanced packaging, memory packaging, etc. These projects are in various stages of implementation and pilot production has started in 4 units.
- 24 chip design projects have been supported through startups. 16 have completed tapeouts and 13 have received VC funding.
- 350 universities have been provided access to EDA tools, used by 65 thousand engineers

Chip design is a strength of India, with Indian engineers already designing cutting-edge chips, for almost all the major global semiconductor companies. India already has a strong design talent base. More than 20% of the global semiconductor design engineers are of Indian origin, providing a robust foundation for scaling indigenous and globally competitive semiconductor design solutions.

The development of advanced node manufacturing capability will position India as a reliable and responsible stakeholder in the global semiconductor ecosystem. This would help India build strategic relationships and promote collaboration.

Recently, Qualcomm taped-out its 2nm chip designed in India.

To address the environmental concerns, the units approved under the Semicon India program have to follow environment laws and waste water management obligations under applicable laws. Further, the approved companies are targeting the responsible manufacturing by taking specific initiatives such as adopting green building strategies, renewable energy utilization, Zero Liquid Discharge, Energy Efficient architecture etc.

Union Budget for 2026-27 has also announced ISM 2.0 to further expand semiconductor manufacturing ecosystem.
