

GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO. 511
TO BE ANSWERED ON: 22.07.2026

SUPPORT FOR FABLESS AND EMBEDDED-SYSTEM START-UPS

511. SHRI CAPTAIN BRIJESH CHOWTA:

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

- (a) whether the Government has reviewed support for fabless and embedded-system start-ups and the programme coverage and participation from Karnataka including coastal Karnataka;
- (b) if so, the details of applications, beneficiaries, institutions, funds, compute or platform use and outcomes thereof;
- (c) the details of access, language, infrastructure, interoperability, skill or grievance gaps; and
- (d) the details of expansion and implementation roadmap with measurable regional targets?

ANSWER

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

(a) to (d): **Semiconductor industry:**

Semiconductor is a foundational industry. Semiconductor chips are now integral part of the electronic goods such as mobile phones, computers, household appliances, vehicles, railway equipment, drones, aeroplanes, etc.

India's semiconductor policy:

Successive Governments in India made multiple efforts since 1960s to set up semiconductor industry. However, these efforts did not materialise.

Semicon India program:

In 2022, Government launched Semicon India program. It was based on Prime Minister Narendra Modi's vision of Atmanirbhar Bharat and Make in India. Clear policy proposals and steadfast execution of the Semicon India program have given historic success.

Chip design is one of the most important parts of the semiconductor value chain. Recognising the potential of Indian chip engineers, the Government has undertaken several initiatives to strengthen the fabless semiconductor and embedded-system start-up ecosystem under the Semicon India Programme and other pan-India initiatives.

These initiatives include following support extended to the State of Karnataka:

- (i) The **Design Linked Incentive (DLI) Scheme** has been launched as part of Semicon India Programme to support domestic companies, startups and Micro, Small and Medium Enterprises (MSMEs) engaged in fabless and embedded-system design activities to develop semiconductor chips.

24 projects have been approved for financial support to develop semiconductor chips. In addition, 105 fabless chip design companies have been provided centralized access to advanced Electronic Design Automation (EDA) tools.

- (ii) The **Chips to Start-up (C2S) Programme** has been initiated for capacity building across the country to address the talent and design infrastructure requirements in fabless and embedded system design.

The Programme aims to generate 85,000 industry-ready manpower at B.Tech., M.Tech. and Ph.D. levels across the country. So far, access to advanced EDA tools has been provided to 320 academic institutions, resulting into 175 design tapeouts at SCL Mohali and generation of 68,000 number of trained manpower.

In the State of Karnataka:

- (i) The **ChipIN Centre** has been established at C-DAC, Bengaluru as a centralized national facility to strengthen the fabless and embedded-system design ecosystem under C2S Programme and DLI Scheme.

The Centre provides pan-India access to design infrastructure such as advanced EDA tools, Intellectual Property (IP) cores, hardware emulation, Field Programmable Gate Array (FPGA)-based prototyping, PARAM Utkarsh Supercomputer and regular trainings.

The Centre also facilitates and provides financial support for post-design activities such as Multi-Project Wafer (MPW) fabrication, packaging, post-silicon validation and characterization through domestic and overseas foundry partners. The other details of support at ChipIN Centre are available at <https://c2s.gov.in/chipin.jsp>

- (ii) 80 organizations, comprising 51 startups and 29 academic institutions, have been provided access to advanced EDA tools and regular design trainings. This has enabled training of more than 8,500 engineers & students and cumulative utilization of more than 75 lakh EDA tool-hours.
- (iii) 24 organizations, comprising 16 startups and 8 academic institutions, have been supported for implementation of semiconductor design projects with more than ₹200 crore of committed support from MeitY. These projects encompass fabless and embedded-system design activities.
- (iv) 39 chip designs from 6 academic institutions have been taped out through SCL, Mohali (180 nm), while 5 chip designs from startups have been taped out through various foundries, including advanced technology nodes such as 12 nm at TSMC.

Continuous feedback from participating organizations is leveraged to further strengthen support for fabless and embedded-system design startups by improving access to design infrastructure, technical support and skill development.

To address these challenges and build on the successful implementation of the first phase, the Union Cabinet has approved the next phase of the Programme ("**Semicon 2.0**") on 15.07.2026 with a fiscal outlay of ₹1,27,500 crore.

Semicon 2.0 adopts a holistic approach to strengthen the entire semiconductor value chain and shall further accelerate the development of a robust and resilient semiconductor ecosystem in the country. The programme focuses on six strategic pillars: Design; Machines and Materials; Setting up more Fabs; Strengthening the ATMP/OSAT Industry; Research & Development (R&D); and Talent Development.

To facilitate the design of complex semiconductor chips, the programme provides enhanced capital support for startups and MSMEs, along with introduction of fiscal support for domestic companies other than startups and MSMEs. It also enables the participation of companies owned and controlled by Overseas Citizens of India (OCIs), in order to leverage their global expertise and experience to strengthen India's semiconductor ecosystem.
