

GOVERNMENT OF INDIA  
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 5301**  
TO BE ANSWERED ON: 05.04.2023

**SEMICONDUCTOR UNITS**

**5301. SHRI RAJIV PRATAP RUDY:**

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

- (a) whether it is a fact that India is aiming of becoming a key semiconductor supplier for the world;
- (b) if so, the details thereof and investment approved so far, State/UT- wise including Bihar;
- (c) the details about the number of semiconductor units and their production capacities;
- (d) the present share that India has in the global semiconductor market and revenue generated thereof; and
- (e) whether the Government is focusing on any particular cities to develop them as semiconductor hubs in the country and if so, the details thereof along with the reasons therefor?

**ANSWER**

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY  
(SHRI RAJEEV CHANDRASEKHAR)

(a): Government is very focused on its important objective of building the overall semiconductor ecosystem and ensure that, it in-turn catalyses India's rapidly expanding electronics manufacturing and innovation ecosystem. Government has approved the Semicon India programme with a total outlay of INR 76,000 crore for the development of semiconductor and display manufacturing ecosystem in the country. The programme has further been modified in view of the aggressive incentives offered by countries already having established semiconductor ecosystem and limited number of companies owning the advanced node technologies. The modified programme aims to provide financial support to companies investing in semiconductors, display manufacturing and design ecosystem. This will serve to pave the way for India's growing presence in the global electronics value chains.

(b): Following four schemes have been introduced under the aforesaid programme:

- i. **'Modified Scheme for setting up of Semiconductor Fabs in India'** for attracting large investments for setting up semiconductor wafer fabrication facilities in the country to strengthen the electronics manufacturing ecosystem and help establish a trusted value chain. The Scheme extends a fiscal support of 50% of the project cost on *pari-passu* basis for setting up of Silicon CMOS based Semiconductor Fab in India.
- ii. **'Modified Scheme for setting up of Display Fabs in India'** for attracting large investments for manufacturing TFT LCD or AMOLED based display panels in the country to strengthen the electronics manufacturing ecosystem. Scheme extends fiscal support of 50% of Project Cost on *pari-passu* basis for setting up of Display Fabs in India.
- iii. **'Modified Scheme for setting up of Compound Semiconductors / Silicon Photonics / Sensors Fab / Discrete Semiconductors Fab and Semiconductor Assembly, Testing, Marking and Packaging (ATMP) / OSAT facilities in India'** shall extends a fiscal support of 50% of the Capital Expenditure on *Pari-passu* basis for setting up of Compound Semiconductors / Silicon Photonics (SiPh) / Sensors

(including MEMS) Fab/ Discrete Semiconductor Fab and Semiconductor ATMP / OSAT facilities in India.

- iv. **‘Semicon India Future Design: Design Linked Incentive (DLI) Scheme’** offers financial incentives, design infrastructure support across various stages of development and deployment of semiconductor design for Integrated Circuits (ICs), Chipsets, System on Chips (SoCs), Systems & IP Cores and semiconductor linked design. The scheme provides “Product Design Linked Incentive” of up to 50% of the eligible expenditure subject to a ceiling of ₹15 Crore per application and “Deployment Linked Incentive” of 6% to 4% of net sales turnover over 5 years subject to a ceiling of ₹30 Crore per application.

In addition to the above schemes, Government has also approved modernisation of Semiconductor Laboratory, Mohali as a brownfield Fab.

Applications received for setting up of semiconductor Fabs are currently under appraisal.

(c): Presently, there is no commercial semiconductor manufacturing Fabs in India. However, Government has established R&D and Incubator Centres in Semiconductors. Currently, following organisations have facilities for R&D: Semi-Conductor Laboratory (SCL) Mohali, Gallium Arsenide Enabling Technology Centre (GAETEC), Hyderabad and Society for Integrated Circuit Technology and Applied Research (SITAR), Bengaluru. Additionally,

Government has funded for Establishment of Gallium Nitride (GaN) Ecosystem Enabling Centre and Incubator for High Power and High Frequency Electronics at IISc, Bengaluru.

(d): As per the industry report, Global semiconductor market was estimated USD 572 Bn in 2022 and is estimated to reach US\$ 1.2 Trillion by 2030. Indian Semiconductor Market is estimated to be ~USD 30 Bn in 2023 and is expected to reach USD 59 Bn by 2026 and USD 109 Bn by 2030.

(e): Setting up of Semiconductor unit requires huge investments and necessitates suitable infrastructure like availability of uninterrupted Power and Clean Water. Further, Semiconductors manufacturing is a very complex and technology-intensive sector with huge capital investments, high risk, long gestation and payback periods, and rapid changes in technology which require significant and sustained investments. States such as Karnataka, Telangana, Tamil Nadu, Andhra Pradesh, Madhya Pradesh, Odisha, Tripura, Punjab and UT of Dadra and Nagar Haveli and Daman & Diu have shown interest in facilitating setting up of semiconductor chip manufacturing facilities. These States have also indicated the availability of stable power supply and sufficient water supply for chip manufacturing facilities. However, the decision regarding the location of chip manufacturing facility lies with companies proposing to setup such facilities based on various other parameters including availability of stable power supply, sufficient water supply and State Government incentives.

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