

GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
RAJYA SABHA
STARRED QUESTION NO. *136
TO BE ANSWERED ON 10.12.2021

DOMESTIC PRODUCTION OF ELECTRONIC HARDWARE

***136. DR. AMAR PATNAIK:**

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

- (a) the total domestic production of electronic hardware including semiconductors in the last five years;
- (b) the total import and export of semiconductors in India in the last three years;
- (c) whether Government has taken any steps to boost the manufacturing of semiconductors in India amidst a global shortage;
- (d) if so, the details thereof and if not, the reasons therefor;
- (e) whether Government has any proposals to boost the manufacturing of small and medium electronic components and semiconductors under a Production Linked Incentive (PLI) scheme; and
- (f) if so, the details thereof, if not, the reasons therefor?

ANSWER

MINISTER OF ELECTRONICS AND INFORMATION TECHNOLOGY
(SHRI ASHWINI VAISHNAW)

- (a) to (f): A Statement is laid on the Table of the House.

**STATEMENT REFERRED TO IN REPLY TO RAJYA SABHA
STARRED QUESTION NO. *136 FOR 10-12-2021
REGARDING DOMESTIC PRODUCTION OF ELECTRONIC HARDWARE**

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(a): Electronics permeate all sectors of the economy and the electronics industry has cross-cutting economic and strategic importance. Government attaches high priority to electronics hardware manufacturing as it is one of the important pillars of “Make in India” and “Digital India” Programme of Government of India.

As part of the AtmaNirbhar Bharat Economic policies, the Government is focused on broadening and deepening the Electronics System Design and Manufacturing (ESDM) sector with Semiconductor as one of the focus areas.

Electronics manufacturing has grown rapidly in the country with a CAGR of around 17% during the last 5 years. Many policies of the Government including the flagship Production Linked Incentive (PLI) scheme, Scheme for Promotion of manufacturing of Electronic Components and Semiconductors, Modified Electronics Manufacturing Cluster (EMC 2.0) are major steps towards making India – AtmaNirbhar in electronics manufacturing. As a result, domestic electronic production has increased from INR 1,90,366 Crores in 2014-15 to INR 5,33,670 Crores in 2020-21.

Production of Electronics Goods (INR crore)						
2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1,90,366	2,43,263	3,17,331	3,88,306	4,58,006	5,33,550	5,33,670

(b): The total import and export of semiconductors in India for last three (3) years is given below:

Import Values

INR Crore		
FY18-19	FY19-20	FY20-21
61,473	71,581	67,496

Export Values

INR Crore		
FY18-19	FY19-20	FY20-21
1,776	1,752	2,064

(c) and (d): Government is fully cognizant of the importance of semiconductor design and manufacturing for India to become an electronics manufacturing hub of the world in the post-covid scenario. Semiconductor FABs are highly capital intensive and resource intensive and are at the cutting edge of

manufacturing with rapidly changing technology cycles. Further, the semiconductor fabrication capability for leading / cutting edge technology nodes is available with only few companies globally.

Government has been making serious efforts to promote semiconductor design and also set up Semiconductor wafer fabrication facilities in the country. Currently, semiconductor wafer fabrication facilities for strategic requirements are available at Semi-Conductor Laboratory (SCL), Gallium Arsenide Enabling Technology Centre (GAETEC), Hyderabad and Society for Integrated Circuit Technology and Applied Research (SITAR), Bengaluru.

Government has approved the following projects for development of semiconductors:

- I. The project for “Establishment of Gallium Nitride (GaN) Ecosystem Enabling Centre and Incubator for High Power and High Frequency Electronics” is being implemented by Indian Institute of Science (IISc), Bengaluru at Centre for Nano Science and Engineering (CeNSE) with the project cost of Rs. 298.66 crore.
- II. An application for setting up of Assembly, Testing, Marking and Packaging (ATMP) of NAND Flash memory has been approved under the Production Linked Incentive (PLI) Scheme for large scale electronics manufacturing.
- III. An application for discrete semiconductor devices, including transistors, diodes, thyristors, etc. and System in Package (SIP) has been approved under the Production Linked Incentive (PLI) Scheme for large scale electronics manufacturing.
- IV. Following incentives are available to companies for setting up of Semiconductor Fabrication (FAB) facilities in India:
 - (i) A financial incentive of 25% on capital expenditure for setting up of semiconductor fabrication units under the Scheme for Promotion of manufacturing of Electronic Components and Semiconductors (SPECS).
 - (ii) Capital goods for setting up of Semiconductor FAB are exempted from Basic Customs Duty (BCD).
 - (iii) Investment linked deduction under Section 35AD of the Income-tax Act.
 - (iv) Deduction of expenditure on research and development as admissible under Section 35(2AB) of the Income-tax Act.
 - (v) New domestic companies making fresh investment in manufacturing and starting operations before March 31, 2023 have an option to pay corporate income tax at reduced rate of 15%.

(e) and (f): Following incentive based schemes of Government of India which are aimed at “Atmanirbhar Bharat” have been notified under the aegis of National Policy on Electronics 2019 (NPE 2019) to

encourage and driving capabilities in the country for developing core components, including chipsets, and creating an enabling environment for the industry to compete globally:

- (i) The Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS) provides financial incentive of 25% on capital expenditure for the electronic components, semiconductor / display fabrication units, Assembly, Testing, Marking and Packaging (ATMP) units, specialized sub-assemblies and capital goods for manufacture of aforesaid goods.
- (ii) Production Linked Incentive Scheme (PLI) for Large Scale Electronics Manufacturing offered a production linked incentive to boost domestic manufacturing and attract large investments in mobile phone manufacturing and specified electronic components, including Assembly, Testing, Marking and Packaging (ATMP) units.

Second Round of the PLI Scheme specifically targeted towards manufacturing of Electronic Components was open for applications till 31.03.2021. The thresholds of incremental investment and incremental production were reduced significantly in comparison to the first round to encourage the MSME sector in electronic component manufacturing. Twenty-Two (22) electronic component manufacturers have been approved under the PLI Scheme.
