GOVERNMENT OF INDIA MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY **RAJYA SABHA UNSTARRED QUESTION NO. 1354** TO BE ANSWERED ON: 06.12.2024

IMPORT OF SEMICONDUCTOR CHIPS AND SoCs

1354. SMT. SUMITRA BALMIK:

Will the Minister of Electronics and Information Technology be pleased to state:

(a) the total volume and value of semiconductor chips and System on a Chip (SoCs) imported in the country during the last three years, year-wise;

(b) whether any particular item (semiconductor chips and SoCs) have been identified for import substitution based on its import value, if so, the specific model and make of such items;

(c) whether Government has taken any steps towards discouraging the import of these components to boost domestic manufacturing; and

(d) whether the data pertaining to components imported is available in public domain so that domestic manufacturers can attempt producing the components indigenously?

ANSWER

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

(a): As per the Directorate General of Commercial Intelligence & Statistics (DGCIS) portal, the import volume (quantity) and value of Semiconductor chip under Harmonized System of Nomenclature (HSN) codes 85423100 (Monolithic integrated circuits - digital), 85423200 (Memories), 85423300 (Amplifiers), 85423900 (Other) and 85429000 (Parts of electronic integrated circuits and micro assemblies) are as follows:

FY	Volume (Quantity)	Value
2021-22	17.89 Bn	USD 13.6 Bn (INR 1.071 lakh crore)
2022-23	14.64 Bn	USD 16.14 Bn (INR 1.297 lakhcrore)
2023-24	18.43 Bn	USD 20.7 Bn (INR 1.714 lakh crore)

(b) and (c): As on date, India's capabilities in semiconductor manufacturing are limited to a few Government owned facilities. Currently, India is largely dependent on imports of semiconductors for its requirements. Semiconductor chips range from logic, memory to analog and mixed signals. Government has approved India's first commercial semiconductor fab project for manufacturing of logic and other semiconductor chips. Further, Government has also approved Assembly, Testing, Marking and Packaging (ATMP) facility for packaging capabilities of memory chips with in the country. Subsequently Government has also approved three (3) projects for Outsourced Semiconductor Assembly and Test (OSAT) facilities creating packaging capabilities for logic, memory and other semiconductor chips.

To boost domestic manufacturing of semiconductor chips, Government has approved Semicon India programme with a total outlay of Rs 76,000 crore for the development of semiconductor and display manufacturing ecosystem in the country. This programme provides:

- i. Fiscal support of 50% of the project cost on *pari-passu* basis for setting up of Silicon Complementary Metal-Oxide-Semiconductor (CMOS) based Semiconductor Fabs in India.
- ii. Fiscal support of 50% of Project Cost on *pari-passu* basis for setting up of Display Fabs in India.
- iii. Fiscal support of 50% of the Capital Expenditure on *pari-passu* basis for setting up of Compound Semiconductors / Silicon Photonics (SiPh) / Sensors (including Micro-Electro-Mechanical Systems) Fab/ Discrete Semiconductor Fab and Semiconductor Assembly, Testing, Marking and Packaging (ATMP) / Outsourced Semiconductor Assembly and Test (OSAT) facilities in India.
- iv. Product Design Linked Incentive of up to 50% of the eligible expenditure subject to a ceiling of ₹15 Crore per application and also "Deployment Linked Incentive" of 6% to 4% of net sales turnover over 5 years subject to a ceiling of ₹30 Crore per application for incentivising chip design.

Government has also approved modernisation of Semi-Conductor Laboratory, Mohali to enhance efficiency and cycle time.

To create the skilled manpower for chip design, Government has launched the Chips to Startup ('C2S') programme which plans to train 85 thousand specialized workforce at about 113 participating institutions in VLSI and Embedded System Design.

(d): Import data of all the Harmonized System (HS) Codes including the ones for semiconductors as indicated in part (a), is available at Directorate General of Commercial Intelligence and Statistics (DGCIS) portal in public domain.
