

MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO. 1375
TO BE ANSWERED ON 09.02.2022

ELECTRONICS MANUFACTURING

1375. SHRI SUDHAKAR TUKARAM SHRANGARE:
SHRI RANJEETSINGH HINDURAO NAIK NIMBALKAR: SHRI DEVJI M. PATEL:

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

- (a) whether the Government is aware that global shortages and other supply constraints have severely hit hard the domestic electronics productions/manufacturing industry;
- (b) if so, the details thereof; and
- (c) the details of the remedial steps taken by the Government to boost electronics products manufacturing in the country especially in the State of Maharashtra?

ANSWER

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

(a) and (b): Yes, Sir. Government is aware that global shortages and other supply constraints have severely impacted the domestic electronics productions/manufacturing industry. The shortage of semiconductor / microchips in particular has impacted many industries with auto and consumer electronics industries among the most affected sectors. Industry estimates indicate a production loss of a minimum 5-7% on account of this shortage. The shortage first emerged after the COVID-19 pandemic, due to lockdowns, restrictions and disruptions in global supply chains. The supply side problem has transformed into a demand side problem as our economy has started recovering strongly which has increased the consumption of electronic goods across various segments. Some key reasons behind the global chip shortage are supply chain disruptions, geographic concentration of electronic manufacturing, rise in demand for digital and electronic goods, and digital adoption across the world.

Government has conducted several engagements on this topic with OEMs, ODMs, Tier 1 companies as well as distributors to address this problem and pursue this opportunity as companies seeking to diversify the value chain from current geographies.

(c): Government of India's goal is to make India a significant design and manufacturing hub as part of its AtmaNirbhar Bharat economic policies. In this regard, we are broadening and deepening our electronic manufacturing ecosystem. The steps taken by Government for the expansion of electronics manufacturing in the country are at **Annexure-I**.

Maharashtra has emerged as one of the important destinations for electronics manufacturing and has seen substantial growth in the electronics System Design and Manufacturing (ESDM) Sector. The State is sharing about 18% of total electronics manufacturing production in the country. This growth is largely aided by the steps taken by the government to boost electronics manufacturing. Under **Electronics Manufacturing Clusters (EMC) scheme, two (2) Common Facility Centres (CFCs) are approved in State of Maharashtra** and are targeted to serve the requirement of Common Testing Facilities for electronics manufacturers in and around Pune and Aurangabad region in the State. The details of these EMCs/CFCs are enclosed at **Annexure-II**.

In addition, 80 companies have established their operations in the State and are taking benefits from **Modified Special Incentive Package Scheme (M-SIPS)**, **Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS)** and **Production Linked Incentive (PLI) Scheme** of Government of India. List of such companies approved under MSIPS, SPECS and PLI is enclosed at **Annexures-III, IV & V**. To boost the electronics manufacturing production and generate employment, the State has amended its Electronics Policy, 2016 to extend the benefits upto 2023 and has linked it with the new SPECS and PLI Schemes of the Govt. of India.

Annexure-I

Steps taken by Government for the expansion of electronics manufacturing in the country:

1. **National Policy on Electronics 2019:** The National Policy on Electronics 2019 (NPE 2019) has been notified on 25.02.2019. The vision of NPE 2019 is to position India as a global hub for Electronics System Design and Manufacturing (ESDM) by encouraging and driving capabilities in the country for developing core components, including chipsets, and creating an enabling environment for the industry to compete globally.
2. **100% FDI:** As per extant Foreign Direct Investment (FDI) policy, FDI up-to 100% under the automatic route is permitted for electronics manufacturing (except from countries sharing land border with India), subject to applicable laws / regulations; security and other conditions.
3. **Electronics Manufacturing Clusters (EMC) Scheme:** Electronics Manufacturing Clusters Scheme was notified on 22nd October, 2012 to provide support for creation of world-class infrastructure along with common facilities and amenities for attracting investment. Under the Scheme, 19 Greenfield EMCs and 3 Common Facility Centres (CFCs) measuring an area of 3,464 acres with total project cost of INR 3,762 crore including Government Grant-in-Aid of INR 1,538 crore have been approved.
4. **Electronics Development Fund (EDF):** Electronics Development Fund (EDF) has been set up as a “Fund of Funds” to participate in professionally managed “Daughter Funds” which in turn will provide risk capital to startups and companies developing new technologies in the area of electronics and Information Technology (IT). This fund is expected to foster R&D and innovation in these technology sectors.
5. **Phased Manufacturing Programme (PMP)** has been notified to promote domestic value addition in mobile phones and their sub-assemblies / parts manufacturing. As a result, India has rapidly started attracting investments into this sector and significant manufacturing capacities have been set up in the country. The manufacturing of mobile phones has been steadily moving from Semi Knocked Down (SKD) to Completely Knocked Down (CKD) level, thereby progressively increasing the domestic value addition.
6. **Tariff Structure has been rationalized** to promote domestic manufacturing of electronic goods, including, inter-alia, Cellular mobile phones, Televisions, Electronic components, Set Top Boxes for TV, LED products and Medical electronics equipment.
7. **Exemption from Basic Customs Duty on capital goods:** Notified capital goods for manufacture of specified electronic goods are permitted for import at “NIL” Basic Customs Duty.
8. **Simplified import of used plant and machinery:** The import of used plant and machinery having a residual life of at least 5 years for use by the electronics manufacturing industry has been simplified through the amendment of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, vide Ministry of Environment, Forest and Climate Change Notification dated 11.06.2018.
9. **Relaxing the ageing restriction:** The Department of Revenue vide Notification No.60/2018-Customs dated 11.09.2018 has amended the Notification No.158/95-Customs dated 14.11.1995, relaxing the ageing

restriction from 3 years to 7 years for specified electronic goods manufactured in India and re-imported into India for repairs or reconditioning.

10. **Public Procurement (Preference to Make in India) Order 2017:** To encourage ‘Make in India’ and to promote manufacturing and production of goods and services in India with a view to enhancing income and employment, the Government has issued Public Procurement (Preference to Make in India) Order 2017 vide the Department for Promotion of Industry and Internal Trade (DPIIT) Order dated 15.06.2017 and subsequent revisions vide Orders dated 28.05.2018, 29.05.2019, 04.06.2020 and 16.09.2020. In furtherance of the aforesaid Order, MeitY has notified mechanism for calculating local content for 13 Electronic Products viz., (i) Desktop PCs, (ii) Thin Clients, (iii) Computer Monitors, (iv) Laptop PCs, (v) Tablet PCs, (vi) Dot Matrix Printers, (vii) Contact and Contactless Smart Cards, (viii) LED Products, (ix) Biometric Access Control / Authentication Devices, (x) Biometric Finger Print Sensors, (xi) Biometric Iris Sensors, (xii) Servers, and (xiii) Cellular Mobile Phones, for procurement to be made from local suppliers.
11. **Compulsory Registration Order (CRO):** MeitY has notified “Electronics and Information Technology Goods (Requirement of Compulsory Registration) Order, 2012” for mandatory compliance to ensure safety of Indian citizens by curbing import of substandard and unsafe electronic goods into India. 63 Product Categories have been notified under the CRO and the order is applicable on 63 product categories.
12. **Establishment of Gallium Nitride (GaN) Ecosystem Enabling Centre and Incubator:** The project for “Establishment of Gallium Nitride (GaN) Ecosystem Enabling Centre and Incubator for High Power and High Frequency Electronics” has been approved. The project is being implemented by Society for Innovation and Development (SID), Centre for Nano Science and Engineering (CeNSE), IISc Bengaluru.

Annexure-II

Approved CFCs under EMC for State of Maharashtra

S.No.	State	Location	Area (Acres)	Implementing Agency	Financial Outlay (INR crore)	
					Project Cost	Grant-in-aid
1	Maharashtra	Shendra Industrial Area, Aurangabad District	1.98	Deogiri Electronics Cluster Private Limited (DECPL)	28.57	20.58
2	Maharashtra	Pimpri Industrial Area, Pune	0.61	MCCIA Electronic Cluster Foundation (MECF)	67	50

Annexure-III

Approved Applications under MSIPS for State of Maharashtra

S. No	Name of Company	Project Location	Products	Proposed Investment (Rs crore)	Approved Incentives (Rs Crore)
1	Sterlite Technologies Limited	Aurangabad	Optical Fiber cable and Optical Fiber	1006.14	234.6
2	LG Electronics India Pvt. Ltd	Pune	Refrigerator	531.92	62.55
3	Liebherr Appliances India Private Limited	Aurangabad	Refrigerators	837.31	85.5
4	Haier appliances India	Pune	Refrigerator, washing machine, Air	490.28	104.92

	(P) Ltd		conditioner, LED TV		
5	Jabil Circuits India Pvt Ltd	Pune	Set Top Boxes, Mi Fi, Home Gateway, STB II, Dongles, PCB	103.64	36.27
6	Jabil Circuits India Pvt Ltd	Pune	EMS	105.90	28.89
7	LG Electronics India Pvt. Ltd	Pune	Plasma Display LED TVs	721.46	56.94
8	Siemens Limited	Thane	Contactors and Contactor Relays	80.03	19.87
9	ShoginiTechnoarts Pvt Ltd	Pune	PCBs	174.88	9.35
10	Harman International India Private Limited US Company	Pune	Infotainment Audio System	134.27	6.79
11	MindaKateloc Electronics Services Private Limited	Pune	PCBA	65.75	7.48
12	TE Connectivity India Pvt Ltd	Pune	Connectors, Terminals, Fuse and Relay Boxes, cable assemblies, headers, component assemblies	155.60	5.54
13	LG Electronics India Pvt. Ltd	Pune	Fully automatic washing machine	177.60	10.04
14	Aurangabad Electricals Ltd	Aurangabad	ECU Covers	56.14	5.95
15	Alcon Electronics Pvt. Ltd	Nashik	Capacitors	17.14	3.82
16	Elcom International(P) Limited	Kolhapur	Switch, connector, power cords, solar connectors, fuse holder, DIN Connector, LED Holders, Terminals, Universal Adaptors, IEC connectors, indian sockets, knobs & caps, Nema connectors and RFI/EMI filters etc	16.84	4.1
17	NovasysGreenery Private Limited	Nagpur	solar photovoltaic modules	82.32	3.73
18	Epitome Components Ltd (Epitome Components Private Limited)	Ahmednagar	Single Side PCB, Double Side with RF PCB	75.21	3.41
19	Sedemac Mechatronics Private Limited	Pune	ECU	12.50	3.93
20	Desai Electronics Pvt. Ltd. (Application -II)	Pune	Plastic Film Capacitors	55.00	2.46
21	Robonik India Pvt. Ltd	Thane	Biochemistry Analyser, ELISA, Coagulation, Urine Analyser, Electrolyte Analyser, Hematology Analyser	21.19	4.76
22	Smart Card It Solutions Ltd	Pune	Smart Card, ID cards, GSM Cards, Banking Cards	30.11	5.33
23	Desai Electronics Pvt.	Pune	Plastic Film Capacitors	16.00	3.85

	Ltd.(Application- I)				
24	TATA Power SED	Andheri, Mumbai	Telecom products, Strategic Electronics, Avionics, Industrial Electronics, Opto Electronics, Power supplies for ESDM products	2127.00	90.97
25	Corning Technologies India Private Limited	Pune	Optical Fibre	1701	197.91
26	Jabil Circuit India Private Limited	Ranjangaon	Mobile Chargers, Set Top Box, Mobile and Mobile Accessories, Radio Units and PCBA	756.88	100.53
27	Jindal Polyfilms Limited	Nasik	Bi-axially Oriented Poly-Propylene Capacitor Grade Di-Electric Films	750	52.76
28	Hengtong Optic Electric India Private Limited	Pune	Optical Fibre and Optical Fibre Cables	624.69	47.15
29	Whirlpool of India Limited	Pune	single door direct cool refrigerators, double door frost free refrigerator and front load fully automatic washing machine	587.05	39.74
30	Carrier Midea India Private Limited	Ahmednagar	Variable Refrigerant Flow (Commercial air conditioners), Room Air Conditioner	404.29	75.34
31	Midea India Private Limited	Ahmednagar	Fully automatic washing machines Refrigerators	374.26	79.5
32	Amber Enterprises India Pvt Ltd	Pune	AIR CONDITIONER indoor/outdoor unit/ Window AC	342.25	10.73
33	Epitome Components Private Limited	Ahmednagar, Maharashtra	Phase-I: PCB, Phase-II: Lithium Ion Batteries Cells,Lithium Ion Batteries Pack	300	20.71
34	Emitec Emission Control Technologies India Private Limited (New Name: Vitesco Technologies India Private Limited)	Plot -B2, Talegaon Industrial Area, Phase-II, Pune Maharashtra- 410506	Nitrogen Oxide (NOx) Sensor, High Temperature Sensors (HTS), M4A-Electronic Control Unit (ECU), Door Handling Sensor (DHS), Knock Sensor for automobile sector	285.1	16.77
35	Belden India Private Limited	Plot No. D - 228/1, Chakan Industrial Area, Phase - II Village Bhamboli, Taluka Khed, Pune, Maharashtra - 410507	Industrial Switches, Patch Cords and Cables	260	5.08

36	Rishabh Instruments Pvt Ltd	Location 1: F-31, Satpur, MIDC, Nashik, Maharashtra- 422007 Location 2: C-6, Satpur, NICE, Nashik, Maharashtra- 422007	DG Set Controller, Low Voltage CT/PT, Power Factor Controller, Programmable AC/DC power supply, Solar Converter and Temperature Controller	250.76	12.69
37	Endress and Hauser Flowtec India Private Limited	M-171 to 176 MIDC Waluj Aurangabad Aurangabad Maharashtra 431136	Flow Meter	245.25	37.01
38	Bel Optronic Devices Limited	Pune	Image Intensifier Tubes (XD-4 and XR-5)	210.31	21.32
39	Delphi Automotive Systems Pvt Ltd	Pune	Body control Module, Engine Control Module, Immobiliser, rear view camera, radio, cluster, combi switch, antenna, driver information system, wiring harness	201.35	12.08
40	Kabra Extrusion Technik Limited	Pune	Lithium-ion Battery with Battery Management System (BMS)	198.89	15.93
41	Varroc Engineering Limited	Pune	PCBA	197	21.84
42	Amphenol Interconnect India Private Limited	Pune	Connectors and part of connectors	194.82	21.29
43	Minda Industries Limited	Pune	Sensors	150	34.45
44	TE Connectivity India Private Limited	Pune and Satara	Terminals Fuse and Relay Boxes Cable Assemblies Headers Component Assemblies Sensors ABS Modules USB Cable Assembly Connectors	150	10.99

45	MSS India Private Limited	Nashik	Light Emitting Diodes (Assembly) based Products, Capacitors, Connectors & Parts and Small Precision Plastic & Metal Parts	147.88	19.96
46	Minda Stoneridge Instruments Limited	Pune	Instrument Cluster and Sensor	140.86	20.89
47	Topband India Private Limited	Pune	EMS for PCBA	134.44	21.42
48	Electrolab India Private Limited	Navi Mumbai	Testing Apparatus for Medical Applications	117	3.84
49	Amphenol Interconnect India Pvt. Ltd	Pune	Connectors and parts of connector	99.69	8.82
50	Selec Controls Pvt Ltd	Navi Mumbai and Thane	Multifunctional meter Energy meter Digital voltmeter Digital ammeter VAF meters Power factor meters Frequency meters Human Machine Interface (HMI) Programmable Logic Controller (PLC) Temperature controllers Process indicators Counters Protection & time relays Analog timers	91.03	4.38
51	Frontline Electronics Limited	Pune	Solenoid Assemblies, Electronic assemblies for agriculture equipments like pumps, PCBA	90.37	10.5
52	GKN Fokker Elmo India Private Limited	Pune	Wiring Harness (for aerospace market)	83.6	3.38
53	Radix Electrosystems Pvt Ltd	Thane	Flow transmitters controllers and other products 2,099 Energy Meters Panel Meters Other Electric meters 28,600 Protection and Monitoring Relays 12,375 Gas Detection Products 1,238 Communication Converters and Gateways 3,403 Building Management System Products 35,282 Temperature and Process Controllers and Indicators 74,442	82.41	4.67

			Isolators Transmitters IO modules 58,772 SCR Power Controllers 1,581 Level transmitters controllers and other products 16,706 GPRS and GPS wireless products 2,656 Zigbee Wireless Communication Products 1,998		
54	TDK India Private Limited (EPCOS India Private Limited)	Nashik	AC Capacitors	74.30	4.56
55	TDK India Private Limited (EPCOS India Private Limited)	Nashik	DC Capacitors	65.15	9.58
56	OEN India Limited	Pune	Micro relays, Mini relays, Solenoids, Sensors, Power relays	62.13	9.492758
57	Endress And Hauser India Automation Instrumentation Private Limited	Aurangabad	Level & Pressure measuring equipment	43.91	9.09
58	Sedemac Mechatronics Private Limited	Pune	Integrated Starter Generator (ISG) ECU	41.74	3.36
59	Inteva Products India Automotive Private Limited	Pune	Brushed DC Motor	41.00	5.38
60	BG LI IN Electricals Limited	Aurangabad	Electromechanical components including Buzzer, Switches, E-Thermostat, LED lamps with Harness, Defrost Heater, AC Terminal Box, LED Bulb Socket and Water Inlet Valve/Solenoid Valve for white goods industry	40.58	4.69
61	Motion Drivetronics	Thane	Stepper Motor	37.82	1.44
62	Minda Industries Ltd	Pune	2W BCM; 2W Navigation ; 4W MF ECU; AIS 140; BCM; Fleet Management; ITS; UBI ; Wireless Charger	30	5.38
63	Star Engineers (I) Pvt. Ltd.	Pune	Regulator rectifier, controlling device for ignition, Flasher, Sensor, controller	29.98	8.53
64	FineLine Circuit Limited	Andheri Mumbai SEZ	PCB (Bare complex)	27.17	1
65	Nitiraj Engineers Limited	Dhule	Electronic Weighing Scale, Electronic Fare Meter and Electronic Currency Counting machine	23.17	1.32
66	Renu Electronics Pvt. Ltd.	Pune	Automation Products - Human Machine Interfact (HMI), Programmable logic controller (PLCs)	19.52	3.08

S. No	Name of Company	Project Location	Product /Vertical	Proposed Investment (INR crore)	Approved Incentives (INR crore)
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67	Evolute Solutions Pvt Ltd	Thane	AdaptorsChargers Battery Operated Power Supplies (BOPS) Lithium Ion Battery Packs Bluetooth Printer Hand Held Terminal Home Lighting Systems Street Lighting Systems LED Drivers Portable ECG Machines	16.19	2.34
68	Behr HellaThermocontrol India Private Limited	Pune	Printed Circuit Board Assembly	12.9	2.53
69	Sedemac Mechatronics Private Limited	Pune	Printed Circuit Board Assembly (PCBA) for Voltage Regulator and Rectifier (VRR), Transistor Control Igniter (TCI), Flasher, ISG (Integrated Starter Generator)	11.51	2.44

1.	Epitome Components Pvt. Ltd.	Maharashtra	Printed Circuit Board (PCB)	13.32	3.14
2.	TE Connectivity India Private Limited	Maharashtra	A.4 - Connectors	146.31	31.81
3.	Tara Relays Private Limited	Maharashtra	A.4 - Relays	9.49	1.93

Annexure-V

PLI Scheme for Large Scale Electronics Manufacturing for Specified Electronic Components

S. No.	Name of the Company	Product Segment	Project Location
1	TDK India Private Limited	Electronic Components	Nasik
2	Vitesco Technologies India Private Limited	Electronic Components	Pune
3	Epitome Components Private Limited	Electronic Components	Ahmednagar
4	Vishay Components India Private Limited	Electronic Components	Pune
5	ShoginiTechnoarts Private Limited	Electronic Components	Pune
6	Alcon Electronics Private Limited	Electronic Components	Nasik
7	Desai Electronics Private Limited	Electronic Components	Pune

PLI Scheme for IT Hardware

S. No.	Name of the Company	Product Segment	Project Location
1	Panache Digilife	AIOs, Laptops	Thane
