

### **Press Response regarding queries from “The Economic Times”**

India Semiconductor Mission is a specialised business division that has been created within the Digital India Corporation. The mission aims to build a vibrant semiconductor and display ecosystem to enable India's emergence as a global hub for electronics manufacturing and design.

Interestingly, the mission is authorised to negotiate with the applicants under the semiconductor fab scheme and the display fab scheme. This mission has been given the autonomy to decide the appropriate technology mix, applications, node generation, capacity, among others and propose the structure and quantum of fiscal support for the selected applicants.

Semiconductors and displays are the foundation of modern electronics driving the next phase of digital transformation under Industry 4.0. Semiconductors and display manufacturing is very complex and technology-intensive sector involving huge capital investments, high risk, long gestation and payback periods, and rapid changes in technology, which require significant and sustained investments. The programme will give an impetus to semiconductors and display manufacturing by facilitating capital support and technological collaborations.

India Semiconductor Mission aims to provide attractive incentive support to companies / consortia that are engaged in Silicon Semiconductor Fabs, Display Fabs, Compound Semiconductors / Silicon Photonics / Sensors (including MEMS) Fabs, Semiconductor Packaging (ATMP / OSAT) and Semiconductor Design.

In line with the “Indian Semiconductor Mission” Govt has announced an incentive of Rs 76,000-Cr, to push semiconductor manufacturing in India. The mega incentive programme aims to provide attractive incentive support to companies/consortia that are engaged in Silicon Semiconductor Fabs, Display Fabs, Compound Semiconductors / Silicon Photonics / Sensors (including MEMS) Fabs, Semiconductor Packaging (ATMP / OSAT), Semiconductor Design.

### **SEMICONDUCTOR MISSION AND ROLE OF MSME's**

Semiconductor industry is always associated with large corporates and mega corporations. This is a very limited view, as from the outside, we are unable to visualise the important role that MSME's play in driving the supply chain of semiconductor manufacturing. It is agreed that it is unimaginable for MSME's to aspire to set up a Semiconductor Fab and largely opportunities for them would be deeper in the supply chain in chemical or mechanical processes or consumables and possibly also as vendors and tech support for the complex capital equipment. For example there are as many as 200 processes required to manufacture display products and its inputs, and this provides opportunity for MSME's.

There are some opportunities in Assembly Test Mark & Pack (ATMP) or IC Packaging in niche areas where MSME's could operate independently, subject to the semiconductor supply chain being mature and a good network of companies being in place.

The new Scheme of MeitY identifies some opportunities in Fabs for compound semiconductors and Design Linked incentives which are expected to provide equal opportunity for MSME's as well as large players, especially in design. The schemes announced under the Semiconductor Mission, provide some space for MSME's to contribute in the semiconductor value chain. These include Scheme for Setting up Compound Semiconductors, Silicon Photonics, Sensors (including MEMS) Fab for manufacturing of High Frequency, High Power, Optoelectronics devices, with a minimum Capital Investment threshold of INR 100 crore (INR 1 billion). There is further scope for Assembly

Test Mark & Pack (ATMP) and OSAT Units where investment threshold is Rs 50 Crores which includes Building, Plant Machinery, Clean Rooms, R&D Expenses, and ToT Expenses.

Examples of Indian MSME's which have a presence in Semicon landscape are companies such as CDIL, the pioneer in semiconductors in India since mid 1960's, SPEL Semiconductor, Ruttonshah International, Vishay Semiconductors, and Semikron. These and other similar companies may be able to avail benefits of these Schemes, either independently or by joining hands with other existing companies.

Further the Design Linked Incentive Scheme seeks applications from 100 domestic companies, start-ups and MSMEs, which is part of the Program for Development of Semiconductors and Display Manufacturing Ecosystem in India. India has many existing MSME's which are already working like boutique firms in the domain of design such as Saankhya Labs, Black Pepper Technologies, Signalchip, Terminus Circuits and many others. The most lucrative incentive under this scheme is in Deployment Linked Incentive wherein Government is offering 4-6% of net sales over 5 years subject to a ceiling of INR 30 crore. DLI also provides design infrastructure support for Start-Ups & MSME's including access to National EDA Grid, IP Core Repository, prototyping and Post Silicon Validation. There is also a provision for reimbursement of 50% of the eligible expenditure subject to a ceiling of INR 15 crore which is quite significant for MSME's.

We have to consider SMEs as India's strengths and realise that this sector has immense potential in semiconductor space as well. With the changing geo-political conditions numerous new opportunities are emerging. As was highlighted in a recent industry discussion organised by ELCINA-EFY, India has strengths in engineering, we are innovative and we can scale the engineering doing a lot of customized work. Our strength is our labour and innovation and not capital which is very expensive. The semiconductor industry has many segments that the small and medium sized companies can operate in and support. These include not only in designing, fabricating or packaging, but also in areas such as supply raw materials, products like valves and much more to the ecosystem, developing software, transporting chips and more.

The announcement by government to set up a specialised and independent "India Semiconductor Mission (ISM)" to drive the long-term strategies for developing a sustainable semiconductor and display ecosystem is indeed good news. The role of MSME's needs to be visualised in the deliverables of this 'Mission' else we may leave out this important segment. The

MSME's create the fabric on which the semiconductor industry can thrive. The hundreds of processes and support activities mentioned above need to be considered so that we do not ignore them, inadvertently classifying them as unimportant and leave a gap which would become a serious weakness in the supply chain.

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