

Govt to spend \$1.2 bn to revamp semiconductor facility in Mohali

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New Delhi, 12 May

The government will spend about \$1.2 billion to modernise the semiconductor laboratory (SCL) in Mohali — a 30-year-old facility capable of producing 8-inch CMOS microchip wafers, mostly used for strategic needs such as the space programme.

The modernisation and commercialisation of the facility is part of the government's \$10-billion India Semiconductor Mission announced in 2021. The Union Cabinet approved the modernisation plan in July 2022, which includes exploring the possibility of a joint venture (JV) of the SCL with one or more commercial fab partners. However, the government has not provided a timeline for the project.

According to a request for proposal floated by the Ministry of Electronics and Information Technology (MeitY), the planned upgrade aims to transform SCL into

an entity with volume production and profitable assets. It also wants to extend SCL's design, fabrication, testing and packaging capabilities to a wider range of semiconductor products and enhance competitiveness, improve quality and bring cost-effectiveness.

The fab plant, which started production in 1984, was devastated by a factory fire in 1989 and could not fully recover to operate at its full capacity. However, it remains the only fab owned by the government and is credited for the creation of chips for crucial projects such as Mangalyaan, the country's Mars Orbiter Mission.

MoS IT Rajeev Chandrasekhar, while speaking at SemiconIndia FutureDESIGN roadshow in Delhi, said the fab will also aid research and prototyping capacities for semiconductors after the upgrade.

He added that India Semiconductor Research Centre will soon be announced for "cutting-edge research" at centres of excel-

lence on campuses of premier institutions like the Indian Institutes of Technology.

The government estimates the semiconductor market in India to have a compound annual growth rate of 22 per cent and may reach ₹9 trillion — 10 per cent of the global market — from ₹1.25 trillion in 2020.

"We are significantly increasing our electronics capabilities, both manufacturing, design, and innovation. In the next 10 years, we want to achieve what China took 30 years to achieve in electronics and semiconductors," Chandrasekhar said.

The setting up of the semiconductor unit requires huge investments and necessitates suitable infrastructure such as the availability of uninterrupted power and clean water. The complex technology-intensive sector needs huge capital investments, high risk, long gestation and payback periods, and rapid changes in technology which require significant and sustained investments.

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RAJEEV CHANDRASEKHAR,
Minister of state for electronics and IT

