

Indians making entry into chipmaking, quietly

Leveraging govt incentives, firms are making strides in compound chips and packaging

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New Delhi, 24 July

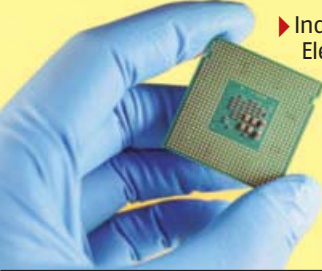
Indian entrepreneurs, including non-resident Indians, are quietly making their way into the country's semiconductor industry. With proposals ranging from building compound semiconductor fabrication (fab) facilities to establishing semiconductor packaging plants in the country, these entrepreneurs are capitalising on the government's liberal financial incentives under the semiconductor scheme.

These entrepreneurs come from various industries and include real estate giants like the Hiranandanis through their company, Tarq Semiconductors; Harshad Mehta, who runs US-based Silicon Power Corporation, and Delhi-based Sahasra Electronics, an electronics manufacturing services (EMS) and printed circuit board (PCB) fab company. The latter has already set up its silicon semiconductor packaging plant in Bhiwadi, Rajasthan, after qualifying under the government scheme.

Under the central scheme, companies receive a 50 per cent subsidy on the project cost, and according to trends, many states are offering additional support of 25 per cent.

The Hiranandanis, according to sources, are applying to the government for both an assembly, testing, marking, and packaging

CHIPPING AWAY



HARSHAD MEHTA
Sahasra Electronics & Silicon Power Corporation

- ▶ India-based Sahasra Electronics has set up silicon semiconductor packaging plant in Bhiwadi, Rajasthan
- ▶ US-based Silicon Power Corporation is planning to apply for silicon carbide-based plant in one of the three states: Gujarat, Uttar Pradesh, or Odisha

DARSHAN HIRANADANI
Tarq Semiconductors

- ▶ Applying for assembly, testing, marking, and packaging unit
- ▶ Considering compound semiconductor fab plant

(ATMP) unit and possibly a compound semiconductor fab plant, based on either silicon carbide or gallium nitride. These wafers are used in power electronics, ranging from automobiles to chargers and telecommunication, among others.

Confirming the development, Darshan Hiranandani, chairman of Tarq Semiconductors, said: "Yes, we intend to invest in the entire power compound supply chain. At the moment, the rest of the details remain confidential."

The company has reportedly asked the Yamuna Express Authority for 100 acres of land to set up the ATMP unit and envisages an investment of around ₹2,500 crore in the first phase of its semiconductor foray. The Hiranandanis are also involved in setting up data centres, including a large one in Uttar Pradesh.

Silicon Power Corporation, based in the US, is planning to apply to the Indian government for the second and third phases of its foray into compound semiconductors based on silicon carbide. The company has already imported

machines to manufacture the substrate for the wafer in the first phase and has invested ₹50 crore. It is considering setting up the plant in one of the three states: Gujarat, Uttar Pradesh, or Odisha.

In the second phase, the company plans to make the power wafers and in the third phase, it aims to package devices and offer complete solutions for its clients, where the value addition is higher.

Harshad Mehta, chairman, Silicon Power, said: "We expect an investment of ₹350 crore on the project and will apply under the government scheme for Phases II and III. As the market for wafers in India is currently small, we will export them. We can also export power wafers from our fab plant in the US and do the packaging and solutions in India until the Indian wafer plant is ready. Our focus will be to sell our complete solutions initially in aerospace and defence, and then later on in renewables and electric vehicles."

Mehta added that they have been in talks with the Tatas in aerospace and defence to supply their requirements, however, product qualifications could take as much as 18 months or so. Based in Delhi-National Capital Region, Sahasra is ahead of the others as it has already set up the first silicon semiconductor packaging unit under the scheme in the country in Bhiwadi, Rajasthan.