

Video Explainer: How Karnataka Is Leading India's Big Push For Building A Semiconductor ecosystem



ISMC MoU Signing

Snapshot

- *Modi government's initiatives for attracting global semiconductors with a slew of incentives is paving the way for realising India's semiconductor ambition. And Karnataka is set to play an instrumental role in it.*
- *A good investment climate, proactive government policies, high-quality human capital, an already entrenched electronic ecosystem, power situation and water availability gives the state a huge edge.*

To lure chip manufacturing behemoths and propel India into a global hub of semiconductors manufacturing, the Union Government recently set up the India Semiconductor Mission (ISM). It also unveiled incentives worth 10 billion USD (Rs 76,000 crores).

It seems that the government's efforts are already yielding results.

Earlier this month, the International semiconductor consortium ISMC announced that it would invest \$3 billion (around Rs 23,000 crore) in Karnataka to set up a chip-making plant. This will be India's first and largest semiconductor fabrication unit upon completion.

ISMC represents a consortium of investors led by Abu Dhabi-based Next Orbit Venture and leading chip manufacturer Towers. ISMC is also one of the applicants for the Modi Government's \$10-billion Production Linked Incentive scheme for semiconductor manufacturing.

In this regard, an MoU has been already signed between the Department of IT and ISMC, which was welcomed by the state's Chief Minister Basavaraj Bommai as well, who said that "Karnataka understands that it's not just the fiscal incentives that matter but availability of a conducive ecosystem and overall ease in operations are also important."

ISMC will set up a 65 nm Analog Fab in technology partnership with Israel-based Tower Semiconductors. The chip behemoth had earlier announced the acquisition of Tower Semiconductors.

According to ISMC, the proposed fab will create at least 1,500 direct jobs and 10,000 indirect ones.

ISMC was looking at a couple of other states apart from Karnataka, including the Dholera Special Investment Region in Gujarat, but it chose Karnataka.

Why did the global consortium pick Karnataka over a few other states in contention?

Just not the \$3 billion semiconductor investment, Karnataka has been at the forefront of FDI investments in India.

Despite what looks like a motivated campaign by sections of press over issues like alleged persecution of minorities, controversy over anti-conversion law, and hijab controversy, Karnataka continues to be an investment magnet.

Next Orbit Venture's MD Ajay Jalan gave his reasons why Karnataka is one of the ideal destinations for investors. He cited "water, power, access to talent, quality of life for talented engineers, customised incentives, a decisive and proactive CM and his team were the primary drivers behind the move."

Karnataka has already emerged as the top investment destination and top recipient, with a 48 per cent share of the total FDIs in India in the last three quarters. The FDI inflow to Karnataka has been across sectors- aerospace and defence manufacturing, agrotech, fintech, biotech, nanotechnology, electronics, drone technology, hospitality, food processing, hardware, and electronic system design and manufacturing (ESDM) - you name it, it's all there.

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If we were to analyse it further, here are five reasons why Karnataka has emerged as one of the top destinations for investments:

- 1. Incentives by Karnataka government:** In 2020, the BJP government in Karnataka, in a bid to provide a further fillip for Electronic System Design and Manufacturing (ESDM) sector, announced a slew of incentives. The incentives announced include a 25% subsidy on land only in areas other than Bengaluru Urban and Bengaluru Rural districts and a 20% subsidy on plant & machinery. The fab is likely to come up in Mysore. ISMC has sought 150 acres of land in Kochanahalli Industrial Area in Mysuru District. Kochanahalli is approximately 5 km from Mysuru airport. The government of Karnataka had identified a land parcel at Kochanahalli Industrial Area in Mysuru for setting up of an Electronics Manufacturing Cluster. The cluster will be well-connected by the soon to be inaugurated 10-lane expressway from Bengaluru
- 2. Existing Ecosystem, which is unmatched by any other state:** Karnataka is home to more than 300 export-oriented manufacturing units. It is India's largest chip design hub, consisting of 85 fabless chip design houses and is the leading producer of aerospace and defence equipment in India. Karnataka's contribution to the national share stands at ~50% in electronic product companies and 40% in electronic design. Karnataka has several companies like Qualcomm, Siemens, Wistron, Samsung, AT&S, AMD, NVIDIA, Intel, and Cisco as a part of the ESDM Ecosystem.
- 3. Human capital of Bengaluru:** Karnataka and Bengaluru pioneered the IT/BT REVOLUTION in India. It has a tremendous human capital pool and a high-quality educational system. The depth of the electronic system here is formidable. Almost all leading global chipmakers and chip design firms have their design centres in Bengaluru. Though the city faces infrastructure challenges as it struggles to manage the rapid urbanisation (it witnessed a decadal increase of 10 million population), ongoing construction of over 100 km of metro rail, ring roads, and suburban rail systems are expected to fix some of the issues.
- 4. The power situation in Karnataka gives it an edge:** India has been facing a bit of power shortage due to a massive surge in demand due to heat waves sweeping the country and economic activity peaking. Neighbouring states, including Tamil Nadu, have faced power cuts. But Karnataka has completely insulated itself from the power shortage through a judicious mix of renewable and non-renewable resources. The state also has a very high installed capacity of Solar Power at over 7000 MW.
- 5. Water:** Fabs need a good quantity of water and a reliable supply. Karnataka, blessed with abundant water resources in southern districts, has an edge on this front.

Overall, a good investment climate, proactive government policy, abundance of human capital, and an already entrenched electronic ecosystem swung it for Karnataka.

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