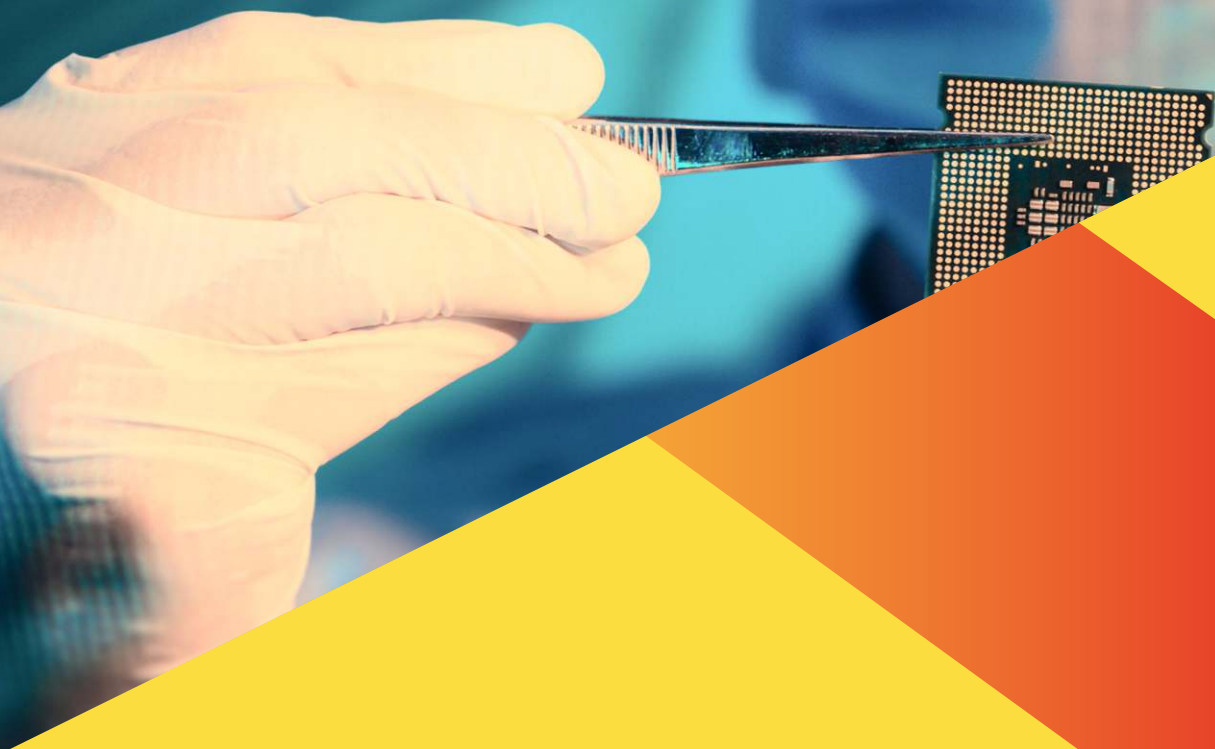


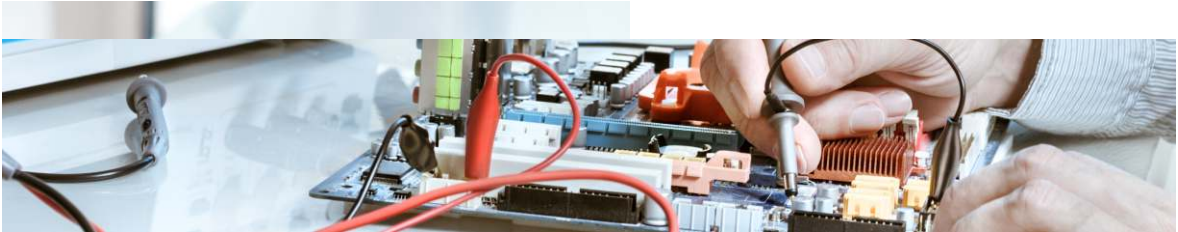
ELECTRONICS & ELECTRICAL





HIGHLIGHTS OF ELECTRONICS MANUFACTURE IN KARNATAKA

- One of the largest contributors to Electronic Industrial Output in the country and recorded a growth rate of 18% CAGR (2008-13).
- Presence of 85 chip designing companies.
- ESDM Revenues – USD 2.8 bn.
- 1 mn Direct Employment, 2.5 mn Indirect Employment in IT sector.
- 3,500 Tech Companies.
- India's first Centre of Excellence on Internet of Things (CoE– IoT) was launched in Bengaluru, Karnataka on July 7, 2016.



WHY ELECTRONICS & ELECTRICAL, KARNATAKA?

- Being home to 70% of India's chip designers makes Karnataka the 2nd largest chip design hub of India.
- Bangalore is the 4th largest technological cluster in the world and the 1st state to roll out ESDM skill development program targeting for 15,000 youth to be trained across 5 years.
- Preferred Location for designing companies.
- Bengaluru is a global hub for R&D activity in the software industry, which will greatly aid the electronic hardware industry.
- Two ESDM clusters in Bengaluru and Mysuru being set up with total investment of USD 25 mn.
- Two world class innovation centres for designing, prototyping, testing, characterization and certification-IIIT - Bengaluru and STPI – Bengaluru.
- Apple Inc. has recently had discussions about the initiatives in manufacturing in Karnataka.





INVESTMENT OPPORTUNITIES

Potential Areas of Investments

Medical Electronics

- Diagnostic and therapeutic instruments
- Equipment testing and monitoring with wireless connectivity

Communication Hardware and Networks

- Manufacturing of networking hardware like gateways, routers, network bridges, switches, convertors, etc
- Mobile phones, Personal Display Assistants (PDAs)

Semiconductor Design

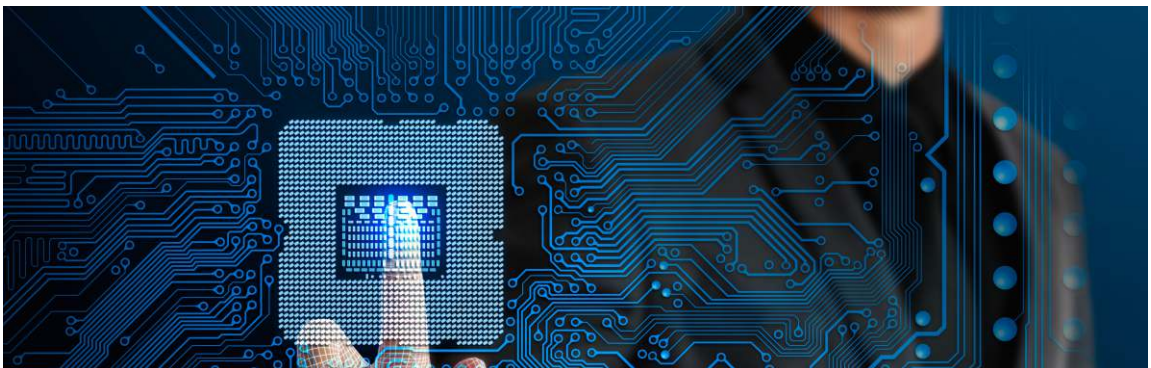
- Medical, automotive, mobile equipment
- Design for consumer electronics like personal electronics, PCs, servers, etc

Consumer Electronics

- Audio and video equipment for home entertainment (TV sets, set top boxes, music systems), and musical instrument amplification

Defence Electronics

- System design, engineering and testing services
- Development of Tactical Communication System; Internet protocol based mobile system





GOVERNMENT INITIATIVES

- Karnataka Electronic System Design and Manufacturing (ESDM) Policy announced in 2013 which provides measures for investments, ease of doing business, venture capital, R&D and capital subsidies, Special package for Mega Projects.
- First state to roll out initiatives for innovation centres, skilling centres and dedicated ESDM clusters.
- 3000 personnel to be trained every year in Electronics System Design & Manufacturing (ESDM) sector.
- Financial and human resource contribution in providing flagship initiatives such as support infrastructure, the SMART Lab (Semiconductor Measurement, Analysis and Reliability Test Lab) and the Electronic Hardware common facility center.
- Monetary support for filing patents.
- Fiscal incentives in the form of capital subsidy (Upto 10% of capital investment or INR 50 million, whichever is lower) and R&D subsidy (reimbursement of up to 20% of actual R&D spend upto maximum of 2% of Annual Turnover).
- Capital Subsidy for Anchor units in Greenfield clusters.
- Encouraging start up ecosystem, patent grants and incentives for export markets, Preferential Market Access (PMA) and Post performance Incentives and subsidies.
- Karnataka Semiconductor Venture Capital Fund (KARSEMVEN Fund), a specialized fund for semiconductor start-ups.





ELECTRONICS & ELECTRICAL COMPANIES MAKING IN KARNATAKA

