

Opportunities in the Indian Microelectronics and Precision Components Industry

June 2020

PRECISION COMPONENTS INDUSTRY: DEMAND DRIVERS

Machine Tools

Growing machine tools industry and increased use of CNC machines is driving growth for precision components



Machine Tools

Miniaturization

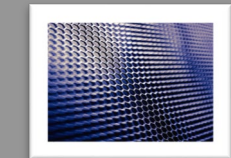
Miniaturization continues to be the key trend that is driving the precision components industry in reduction of cost and providing aesthetics.



Miniaturization

Surface Mount Technology

The rise of SMT in construction of electronic circuits because of its advantage of automation, high speed assembly, miniaturization, and better mechanical and electrical performance is driving the precision components industry



Surface Mount Technology

PRECISION COMPONENTS INDUSTRY: MARKET OPPORTUNITY

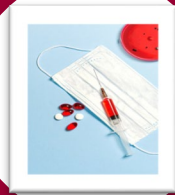
Chassis Components

Automobile Chassis component companies use precision turned parts ranging between 0.3 mm to 20 mm diameter size



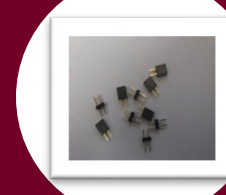
Hearing Aids

Limited number of companies in India but consistent importer of precision turned parts in order to maintain quality



Drug Delivery Systems

Companies in this segment have consistent demand for precision turned parts falling between range of 0.3 mm to 20 mm



Micro Plugs and Switches

Companies in this segment have a considerably higher demand for precision turned parts for cable terminals, plugs and sockets.

PRECISION COMPONENTS INDUSTRY: MARKET TRENDS

Price Sensitive

Precision industry is facing pricing pressure and companies are looking to replace imports with locally manufactured products



Import Driven

Precision components industry is an import driven industry with majority imports from Japan, U.S. and Europe



Automotive & Electronics driven

Demand for high quality precision components is driven by automotive, electronics, industrial and construction equipment

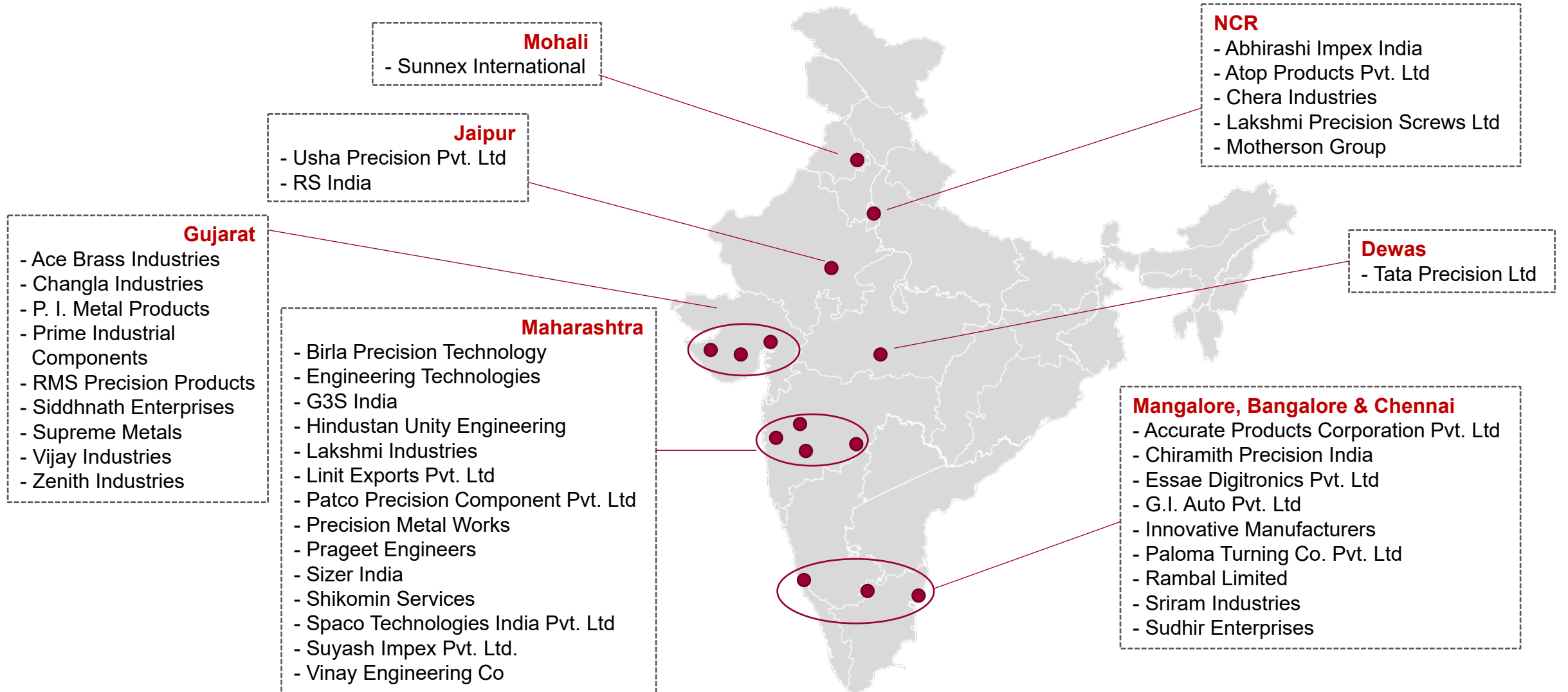


Gujarat- Major Hub

Gujarat is the leading hub for precision turned parts followed by Maharashtra and Karnataka (Mangalore and Bengaluru).



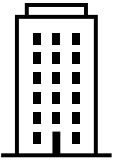
PRECISION COMPONENTS INDUSTRY : MANUFACTURING CLUSTERS



PRECISION COMPONENTS INDUSTRY : CASE STUDIES

**Maxon Precision Motor
India Pvt. Ltd.**

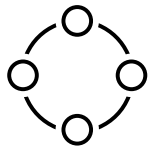
Company Profile



100% Subsidiary of Maxon Motor AG
Switzerland

Maxon India was established in the year
2010 in Bengaluru

India Operations



It is the leading provider of high-
precision drive systems up to 500 W

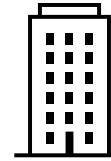
Product Portfolio includes

- Brushless and brushed DC motors with ironless winding up to 500 W



SRM Technologies

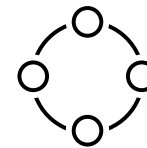
Company Profile



Global technology solution provider and a
value-add strategic partner engineering
turnkey solutions

Headquartered in Chennai and has offices
in Bengaluru and Mumbai

India Operations



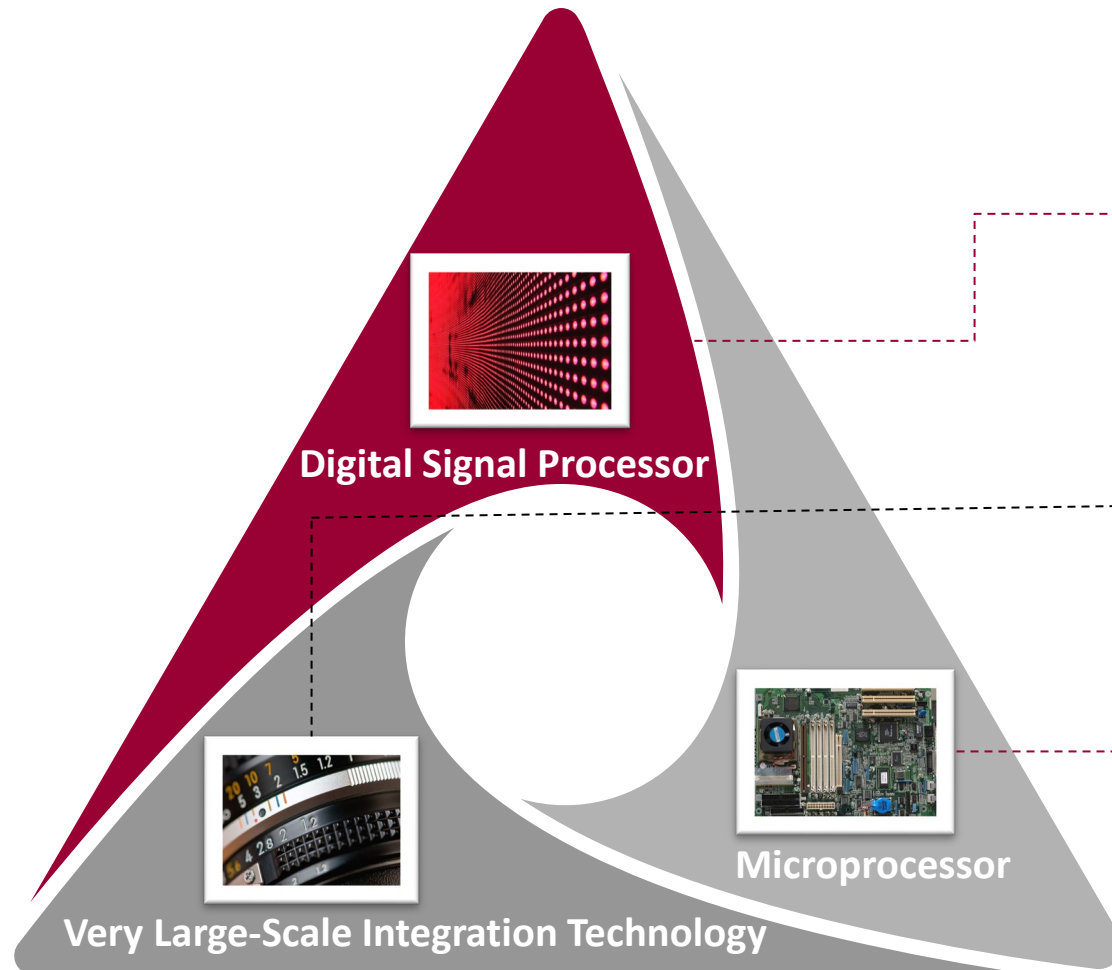
SRM Technologies (Switzerland) has done
JV with RUJ Group(Jaipur);

RS India is the JV of an Indian Company
'Rajendra and Ursula Joshi Skill
Development Private Limited' and a Swiss
Company 'SRM Technologies AG'.

PRECISION COMPONENTS INDUSTRY : SWISS PRESENCE



MICROELECTRONICS INDUSTRY: *DEMAND DRIVERS*



Digital Signal Processors (DSP)

Increasing adoption of embedded DSP in the manufacturing process of high performing smart phones.

VLSI Technology

Rising demand for technologically advanced DSPs for power efficient smart gadgets, television and air conditioners.

Microprocessor

Increasing demand for microprocessors for processing large information in order to satisfy demand for cellular standards and IoT components.

MICROELECTRONICS INDUSTRY: MARKET TRENDS

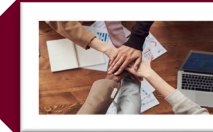
Market Leader

Japan holds 35% of international patent filings for microelectronics



Industry Concentration

Microelectronics industry is a highly fragmented industry dominated by foreign MNCs .

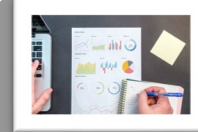


Market Share

Consumer electronics accounts for the largest share of microelectronics industry.

Recent Trends

Demand for IoT and wireless devices in consumer and industrial applications is driving the microelectronics industry



Expansion Strategy

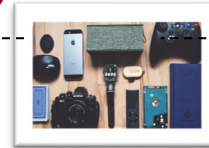
Product development and M&A is the market expansion strategy for companies



MICROELECTRONICS INDUSTRY: MARKET OPPORTUNITY

Consumer Electronics

Processing more MIIPS (million instructions per second) while consuming less power for smart phones is driving the demand of microelectronics in consumer electronics.



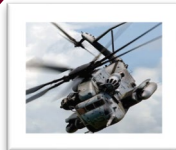
Agriculture

Wireless sensors for food stocking/ crop improvement and embedded processors for integrated pest management and surveillance system will drive application of microelectronics in agriculture.



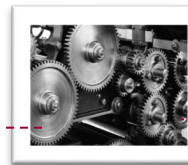
Defense

ASICs for strategic/ defense applications, SiC radiation detectors for cameras and power applications will accelerate the growth of microelectronics in defense sector.



Industrial Sector

Smart grid and smart meters for transmission infrastructure will drive the demand for microelectronics industry in India.



THANK YOU
