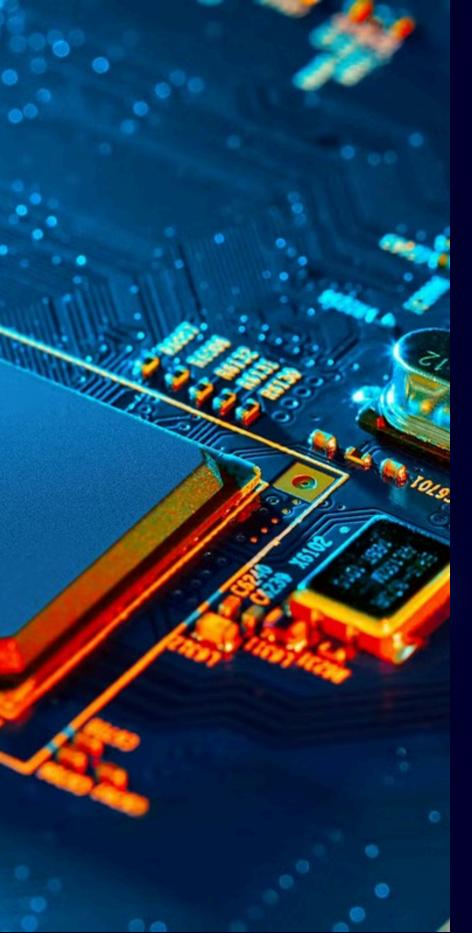


Epsilon Electronics- Driving Innovation in Product Manufacturing



www.epsilonelectronics.in



About Us

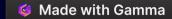
Epsilon Electronics isn't an option, it's the solution.

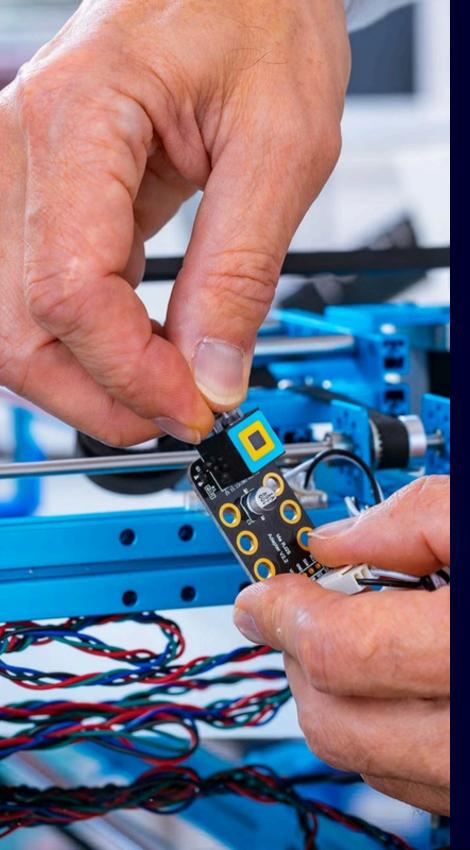
Welcome to Epsilon Electronics, a leading provider of innovative electronic solutions for businesses and individuals alike.

Our mission is to create cutting-edge electronics that meet the needs of our customers, whether they are looking to streamline their operations, enhance their productivity, or simply enjoy the latest and greatest gadgets.

We believe that quality should never be compromised, which is why we only use the highest-quality components in our products. From durable materials to state-of-the-art hardware and software, everything we create is built to last and perform at the highest level.

www.epsilonelectronics.in





Epsilon Electronics primarily focuses on providing Manufacturing for the domains like

- Healthcare
- Automotive & Transport
- Audio & Video
- Wearables
- Wireless connectivity
- Home Automation
- Medical Devices
- Agriculture
- Entertainment

www.epsilonelectronics.in



Epsilon Electronics provides a range of core solutions that includes

- **BOM Sourcing**
- Stencil Printing
- SMT Assembly
- Through Hole Assembly
- BOX Building
- PCB Designing
- Testing & Certifications

Aims to provide a one-stop solution for all product manufacturing needs.

www.epsilonelectronics.in

Our Turnkey Manufacturing Workflow



Requirement Gathering & Analysis

Understanding client needs, specifications, and design requirements.



Material Procurement

Sourcing high-quality materials from trusted vendors, adhering to strict quality control measures.



Production Planning

Scheduling the manufacturing process efficiently, taking into account production capacity, lead times, and available resources.



Manufacturing Execution

Experienced
technicians utilizing
state-of-the-art
equipment to fabricate,
assemble, and test
components according
to the established
design.



Quality Control & Inspection

Stringent quality inspections at every stage to ensure each component and finished product meets the highest standards.



Packaging & Labeling

Products are packaged and labeled according to specifications, ensuring proper branding and identification.



Shipping & Logistics

Products are shipped to the client's location via reliable logistics partners, ensuring timely and safe delivery.

www.epsilonelectronics.in



Manufacturing Department Structure



Production Planning

This team schedules production, forecasts demand, and ensures resources are available to meet targets.



Process Engineering

These engineers
design and improve
manufacturing
processes, ensuring
efficiency, scalability,
and high product
quality.



Manufacturing Operations

This team executes the production plan, manages assembly lines, and maintains product quality.



Quality Assurance

They make sure products meet the highest quality standards.



Maintenance and Facilities

This team maintains and optimizes production equipment, machinery, and infrastructure.



Supply Chain Management

This team manages procurement of raw materials, inventory control, and timely logistics.



Continuous Improvement

This team drives innovation by finding and implementing ways to improve processes.



Production Support

This team provides technical assistance, training, and troubleshooting to manufacturing personnel.

www.epsilonelectronics.in



Manufacturing with Maximum Observation



Temperature

Monitoring temperature levels to ensure optimal operating conditions for equipment and processes.



Humidity

Controlling humidity levels to prevent corrosion, condensation, and other environmental issues.



Air Quality

Monitoring air quality parameters like dust, particulate matter, and gases to maintain a safe and healthy working environment.



Lighting

Optimizing lighting levels for improved visibility, energy efficiency, and worker productivity.



Noise Levels

Controlling noise levels to ensure a comfortable and safe working environment for employees.



Vibration

Monitoring vibration levels to prevent damage to equipment and ensure smooth operations.



Pressure

Maintaining optimal pressure levels for various processes and equipment.



Dust and Particulate Matter

Controlling dust and particulate matter levels to protect equipment and employee health.



Chemical Exposure

Monitoring chemical levels to ensure a safe working environment and compliance with regulations.



Fire Safety

Implementing fire safety measures and monitoring fire suppression systems.



Security

Implementing security measures to protect personnel and equipment from unauthorized access.

www.epsilonelectronics.in



Assembly Process Workflow

1	Solder Paste Printing Applying solder paste to a circuit board for surface-mount devices (SMDs).
2	Solder Paste Inspection Inspecting the applied solder paste for any inconsistencies or defects.
3	SMD Parts Placement via Pick & Place Automated placement of surface-mount devices (SMDs) onto the solder paste.
4	Reflow Soldering Melting the solder paste, attaching the SMDs to the circuit board.
5	Flipping the board Turning the circuit board over for the next stage of the assembly process.
6	Solder Paste Printing Applying solder paste to the other side of the circuit board for through-hole components (THTs).
7	Solder Paste Inspection Inspecting the solder paste for any defects before placing through-hole components.
8	Through-hole Component Placement Placing through-hole components into their designated holes on the circuit board.
9	Wave Soldering Soldering through-hole components using a wave soldering machine.
10	PTH Parts Soldering Soldering through-hole components to the circuit board.
11)——	Visual Inspection Inspecting the circuit board for any defects, ensuring quality and functionality.
12—	Cleaning & Washing Removing any residue or impurities from the circuit board.

www.epsilonelectronics.in

Vendor Selection: The 10C Rule



Commitment to Quality

Vendors consistently deliver high-quality products and services, meeting high standards of workmanship.



Consistent Performance

Vendors deliver
products and services
on time, within budget,
and meet agreed-upon
specifications.



Cost-Effectiveness

Vendors offer competitive pricing and manage resources efficiently for value for money.



Financial Stability

Vendors have a healthy financial track record, ensuring long-term stability and reliability.



Effective Communication

Vendors maintain
transparent
communication
channels, promoting
trust and collaboration.



Control of Internal Processes

Vendors ensure
consistent product
quality and efficient
operations with strong
internal process
control.



Corporate Social Responsibility

Vendors operate
ethically, considering
environmental and
social impacts in their
business practices.



Company Culture

Positive company culture fosters a dedicated workforce, promoting teamwork and customer satisfaction.



Competency and Expertise

Vendors possess the technical knowledge and experience to deliver high-quality products and services.



Capacity and Scalability

Vendors adapt to changing demands and scale production efficiently to meet increasing needs.

www.epsilonelectronics.in



Manufacturing Defects: Identification & Mitigation Process

1

2

3

4

Defect Identification

Utilizing visual inspection, automated testing, or statistical process control to identify defects in the manufacturing process.

Defect Analysis

Conducting a thorough examination of the defect, including its nature, location, and severity.

Root Cause Investigation

Investigating the underlying factors contributing to the defect, such as process variations, material issues, or equipment malfunctions.

Data Collection and Analysis

Gathering relevant data on the defect, including historical records, process parameters, and operator feedback.

5

6

7

8

Corrective Action Planning

Developing a detailed plan to address the root cause of the defect, including specific actions to be taken and the resources required.

Corrective Action Implementation

Implementing the corrective actions identified in the plan, making necessary adjustments to processes, equipment, or materials.

Defect Verification

Verifying the effectiveness of the corrective actions by monitoring the defect rate and assessing the impact on product quality.

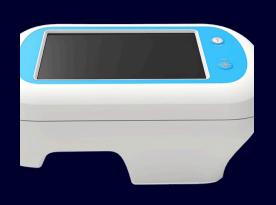
Continuous Improvement

Implementing preventive measures, adopting best practices, and conducting regular audits to prevent future defects.

www.epsilonelectronics.in



Products Under Epsilon Electronics Manufacturing Facility



CXL Instrument

Scope: Turnkey



Electronic Pipette

Scope: Electronics



Thermostat

Scope: Turnkey



Air Purifier

Scope: Electronics



Surgical Headlight

Scope: Turnkey



BLE Beacons & Gateway

Scope: Turnkey



Footrax

Scope: Turnkey



12 Lead ECG

Scope: Electronics



Infusion Pump

Scope: Electronics



Infusion Pump

Scope: Electronics



Water Purifier

Scope: Electronics

www.epsilonelectronics.in

Production Samples













www.epsilonelectronics.in

Manufacturing Certifications





To verify certificate visit at:









Forum Limited, 71-75, Shelton Street, Convent Garden, London, WC2H 9JQ non UKA Forum Limited, London, UK. This certification of remains the property of QAMS and must be returned to of the partificate is subject to successful completion of surveillance audits. Further clarification regarding the pullity of standard may be obtained by consulting the organisation on contact@qamsglobal.com;

www.epsilonelectronics.in



www.epsilonelectronics.in

info@epsilonelectronics.in

079-4800-2842/+91-9879626181

Corporate:

Epsilon Electronics, B-503, Amrapali Lake View, Opp Alpha One Mall, Vastrapur, Ahmedabad, Gujarat-380006, India

Manufacturing Unit:

Epsilon Electronics, E-7+8/2, GIDC Electronics Estate, SECTOR-26, Gandhinagar-382028, Gujarat, India