

Machining Capability Sheet – Electronics & Electricals (ESDM)

(IndiaUnbox Verified Facilities & EMS Units)

PCB & Electronics Manufacturing

- **PCB Fabrication:**
 - Single-layer, multi-layer (up to 16+ layers), HDI boards.
 - Processes: drilling, plating, solder mask, silkscreen.
 - **PCB Assembly (SMT & THT):**
 - High-speed SMT pick & place (10k–100k components/hr).
 - Reflow ovens, wave soldering, selective soldering.
 - Automated optical inspection (AOI), X-ray inspection.
 - **Prototype to Mass Production:**
 - Low-volume pilot builds → mass production runs.
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Electricals & Components

- **Winding & Assembly:** Motors, transformers, inductors.
 - **Switchgear & Panels:** Circuit breakers, MCCBs, distribution boards.
 - **Cables & Wires:** Extrusion lines, braiding, sheathing, flame-retardant testing.
 - **Lighting:** LED assembly lines, optical lens fitting, driver testing.
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Enclosure & Mechanical Parts

- **Injection Molding:** ABS, polycarbonate, nylon housings.
 - **Die Casting & Sheet Metal:** Enclosures for control panels, power supplies.
 - **3D Printing:** Rapid prototyping of housings, IoT enclosures.
 - **Finishing:** Painting, powder coating, laser engraving.
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Testing & Compliance

- **Electrical Safety:** Hi-pot testing, insulation resistance, leakage current.
- **Electronics:** Functional circuit testing, burn-in, in-circuit testing.
- **EMI/EMC Labs:** Shielded chambers, spectrum analyzers.
- **Certifications Supported:** CE, UL, RoHS, REACH, BIS, FCC, ISO 9001/14001.

Sustainability & Compliance

- Lead-free soldering (RoHS).
- E-waste management & recycling programs.
- Energy-efficient production with solar-powered plants.
- ISO 14001 & Responsible Manufacturing certified facilities.

Regional Strengths

- **Noida / Greater Noida (UP):** Mobile phones, PCB assembly, LED lighting.
- **Bengaluru (KA):** Electronics design, semiconductors, IoT.
- **Hyderabad (TS):** PCB design, EMS, aerospace electronics.
- **Pune & Chennai (MH/TN):** Consumer electronics, auto electronics, EV parts.
- **Gujarat:** Electrical machinery, cables, transformers.

IndiaUnbox Assures:

- Access to **world-class EMS facilities**.
- Support from **concept → prototype → mass production**.
- Strict compliance for **global markets (EU/US/Asia)**.
- On-time export-ready deliveries.

 **Download Machining Capability Sheet (PDF)**