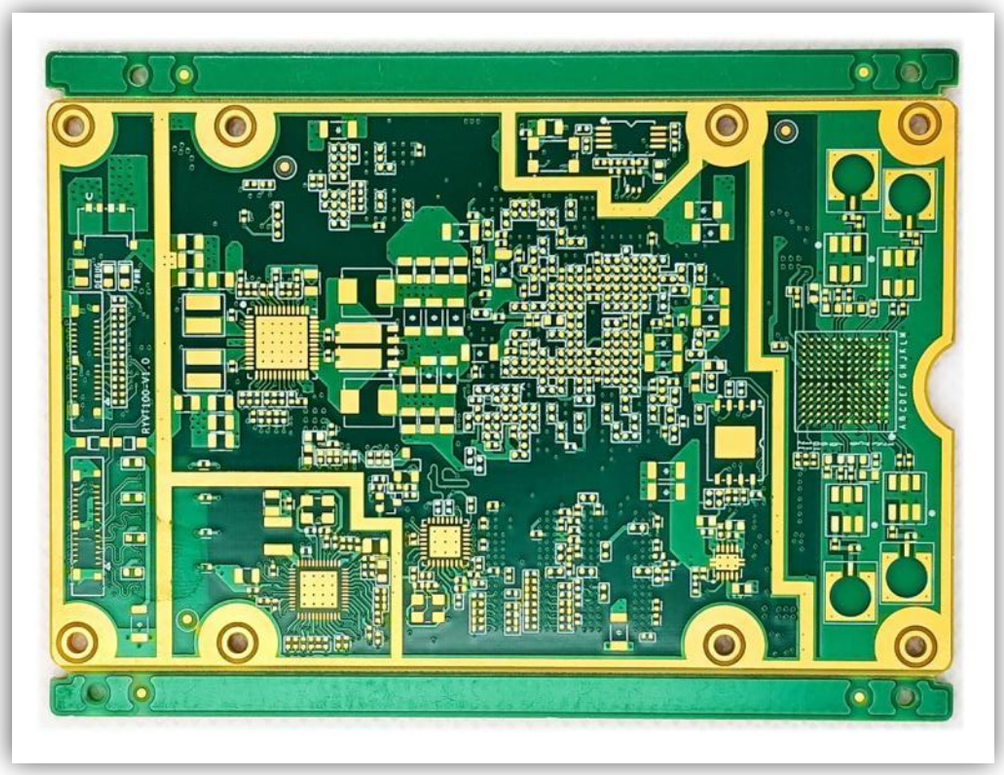
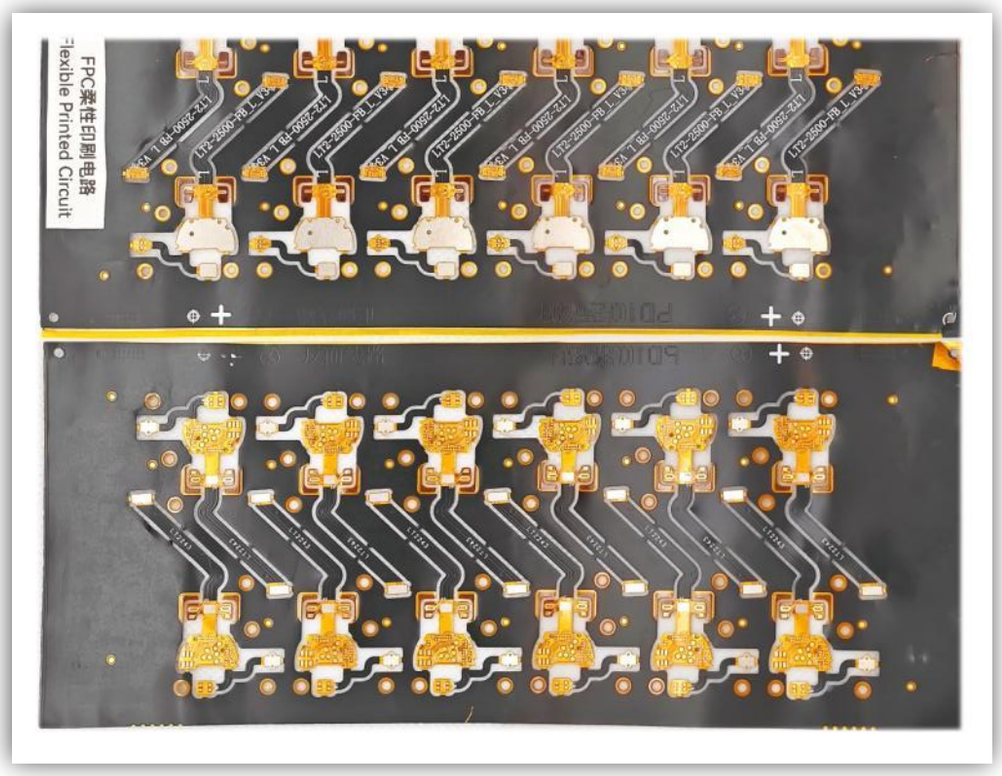
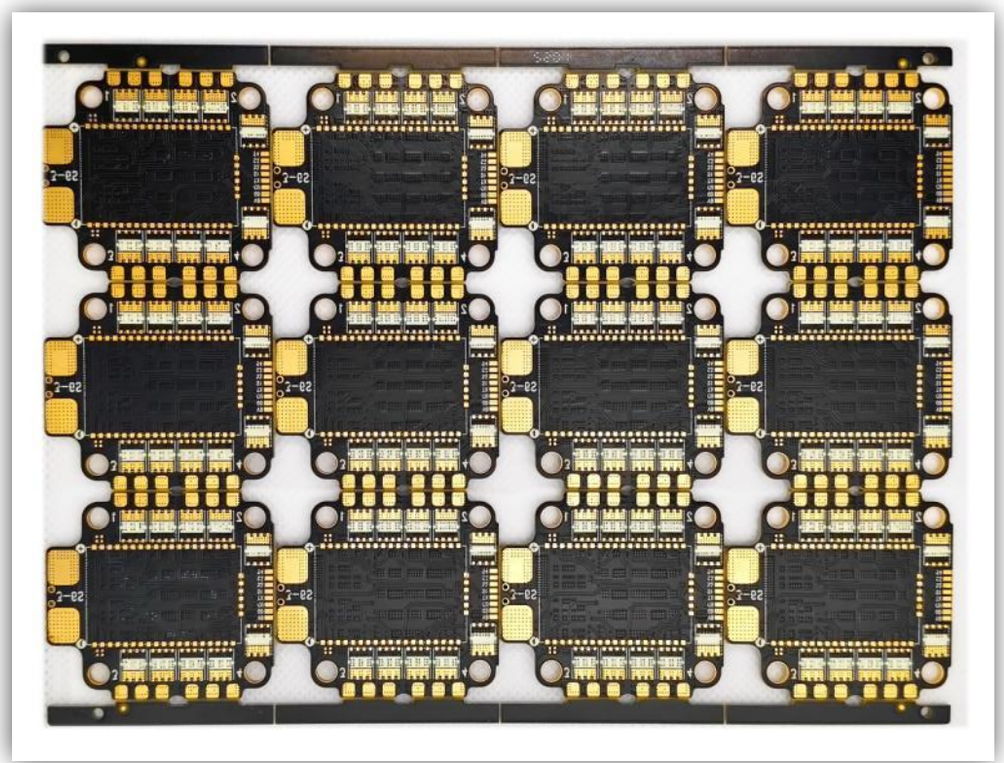
PCB Manufacturing Data sheet

Printed Circuit Board

- Factory certified to ISO9001, ISO14001 and TS16949, UL listed.
  Factory certified; IPC class preserved
- Conform to IPC standard (IPC-600F class 2).
  IPC class preserved
- Fine line PCB (3mil/3mil), multi-layer PCB (up to 18 layers).
  High-resolution traces and multilayer support
- High density interconnecting circuit (Blind/Buries Via), metal-based PCB
  Supports HDI and metal core boards
- Standard board thickness: 0.1mm – 3.2mm
  Broad thickness range for prototypes to production
- Prototype, pilot run and production
  Range From prototypes to production
- ENIG, Flash gold, immersion tin, HASL, lead free HAL, Entek finish possible.
  Multiple finish options for reliability and solderability
- Routing, V-score, punching, beveling outline.
  Standard board shaping and edge treatments
- Fly probe tester and e-fixture board tester for testing
  Electrical testing for prototypes and production







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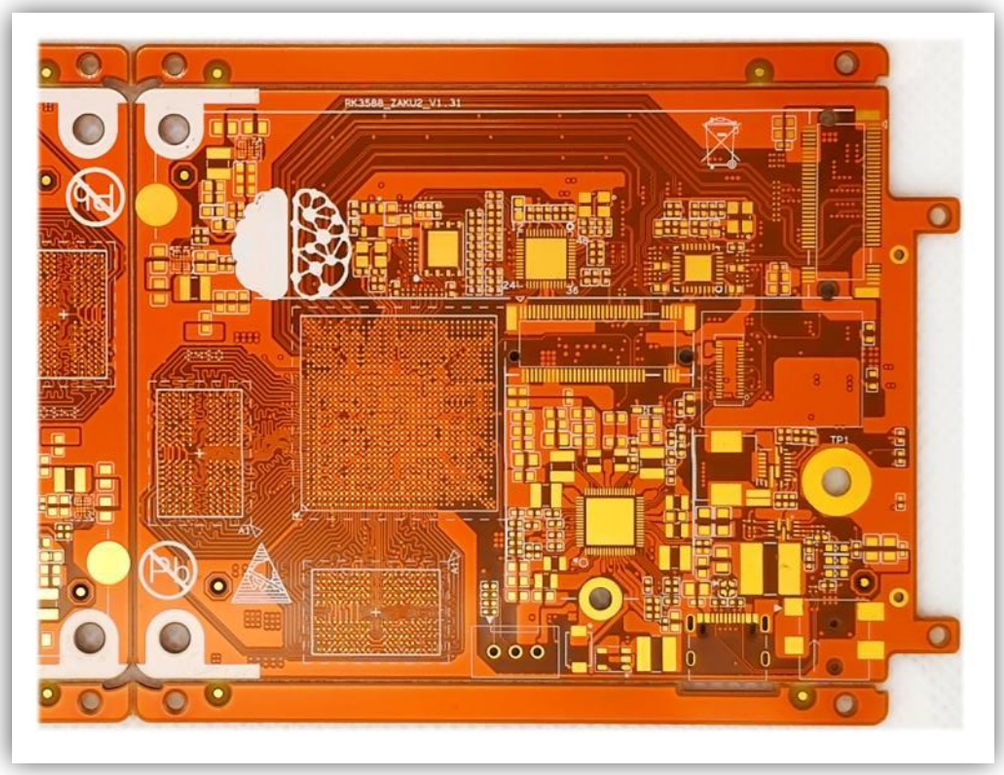
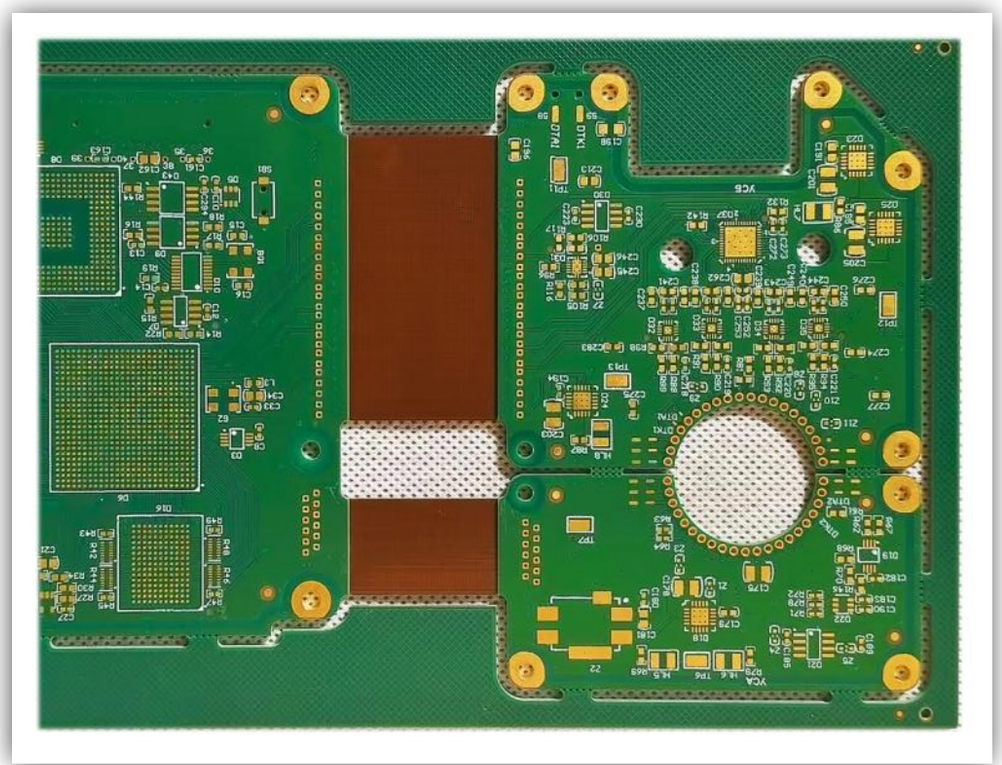
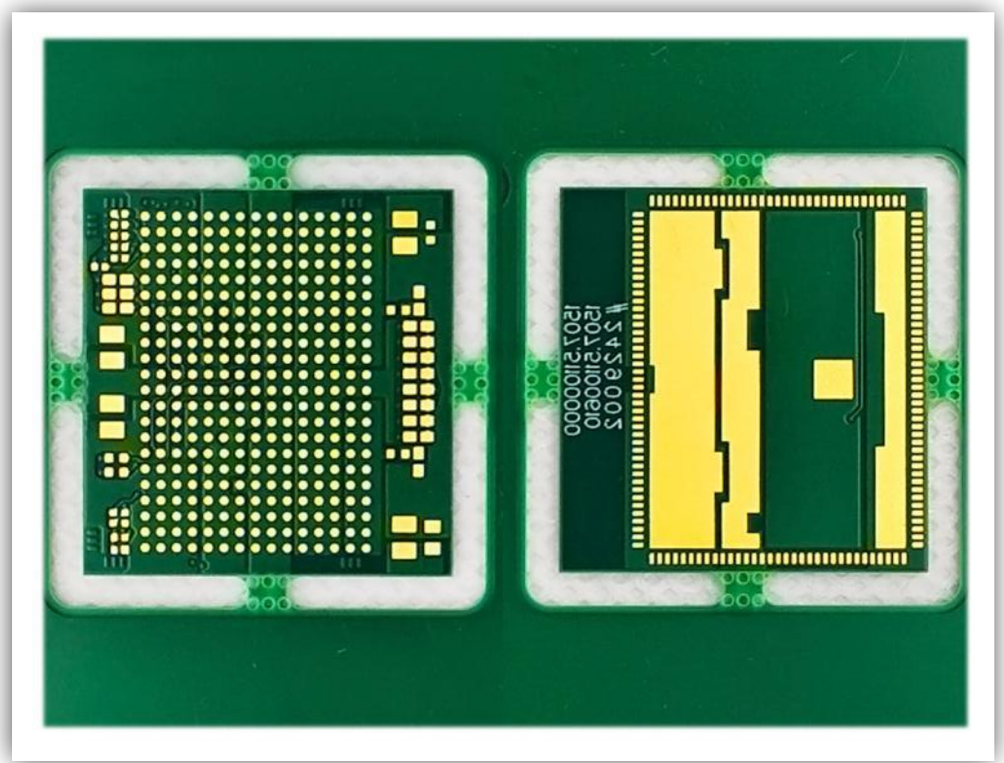
PCB Types for Diverse PCB Needs

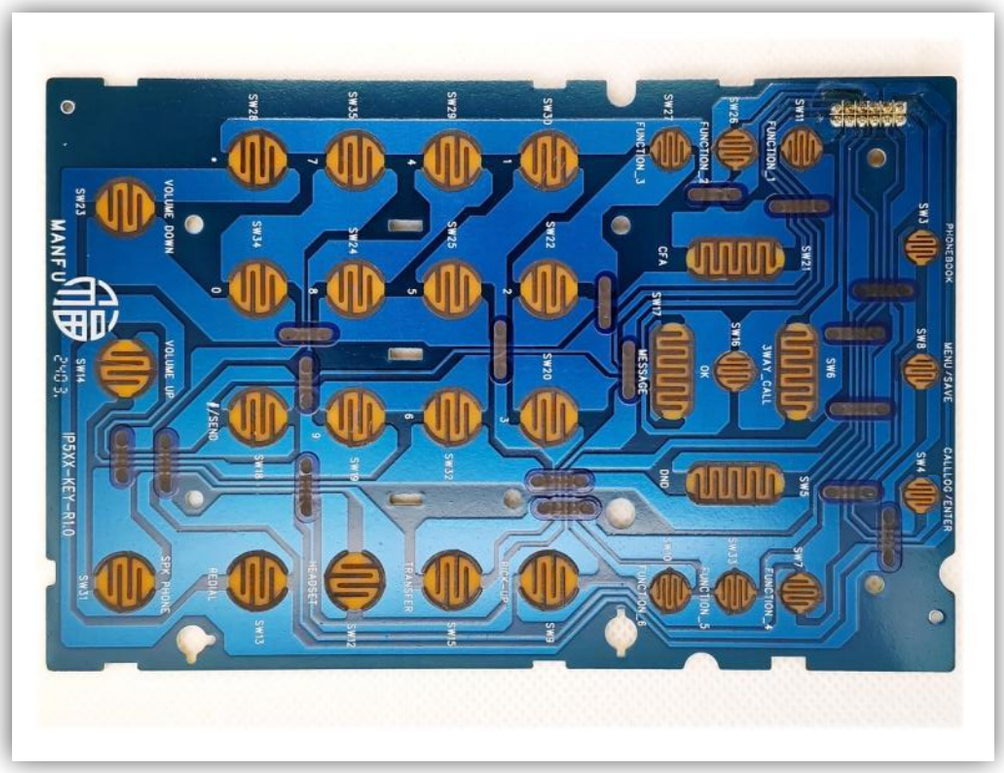
Select the right board for electrical, mechanical and environmental constraints

- Rigid PCB
- Flex PCB
- Rigid Flex PCB
- HDI PCB
- Aluminum PCB
- Multilayer PCB
- PCB Prototype
- Microwave & RF PCB
- Metal Core PCB
- Custom PCB
- Gold Finger PCB
- Impedance Control PCB
- Bare PCB









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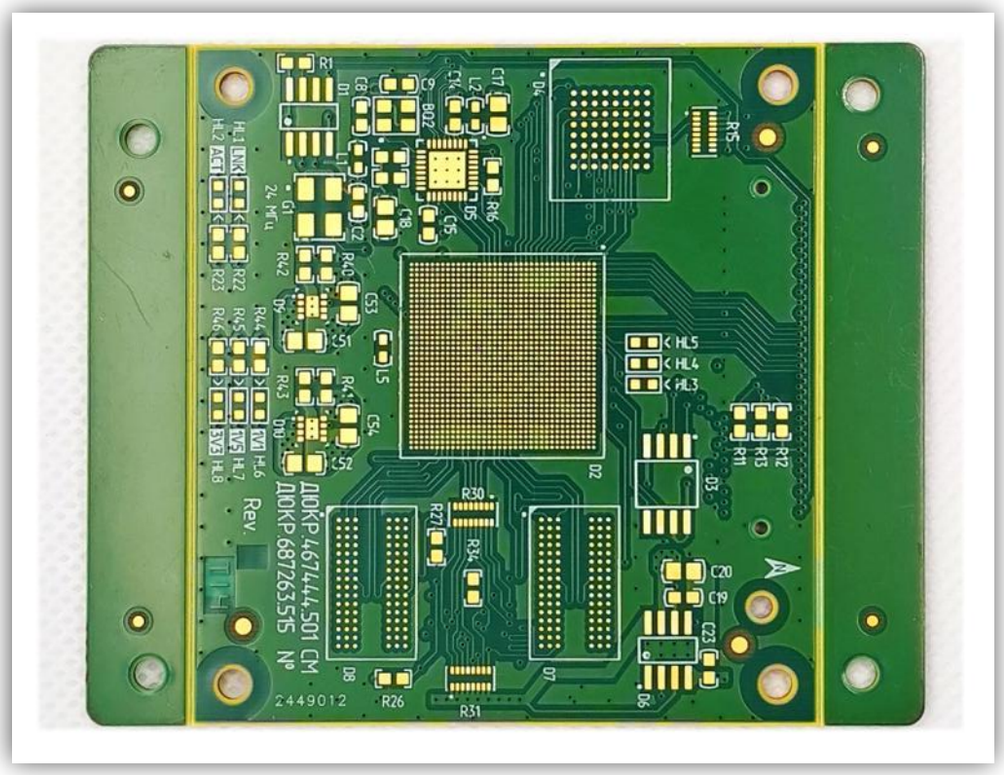
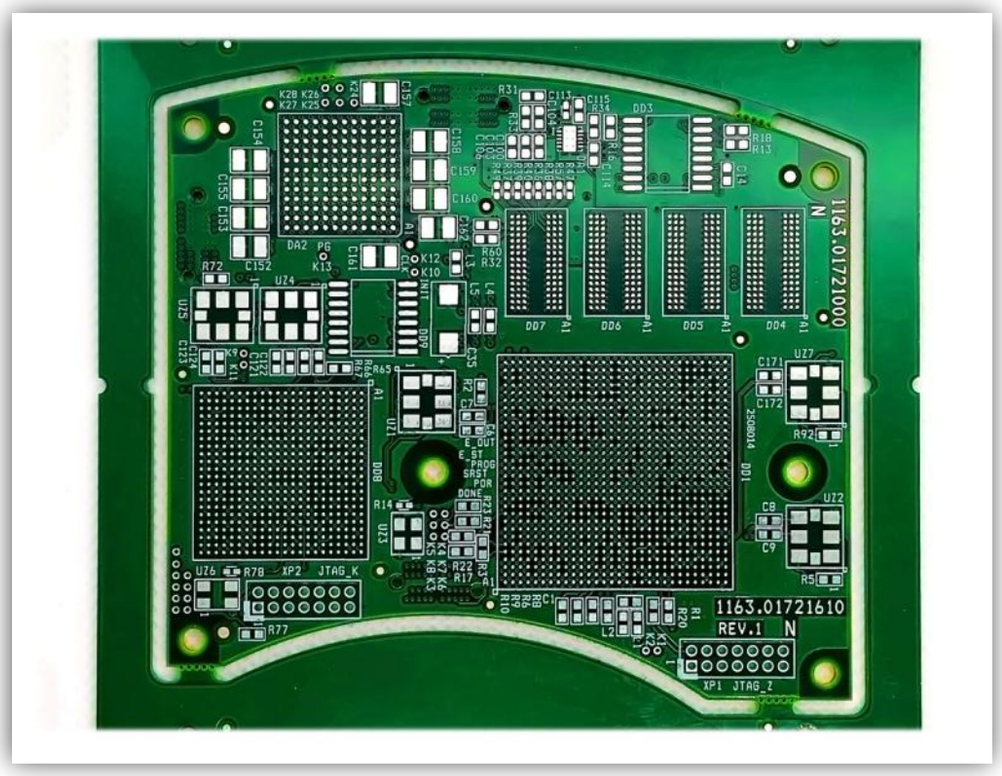
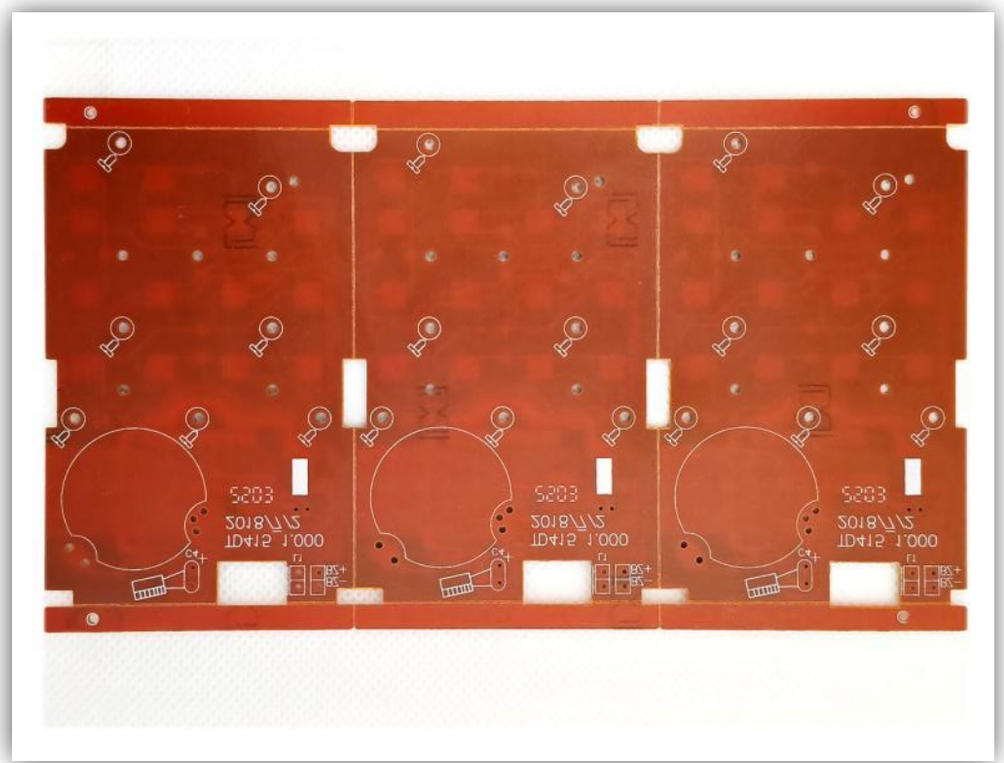
PCBs Materials

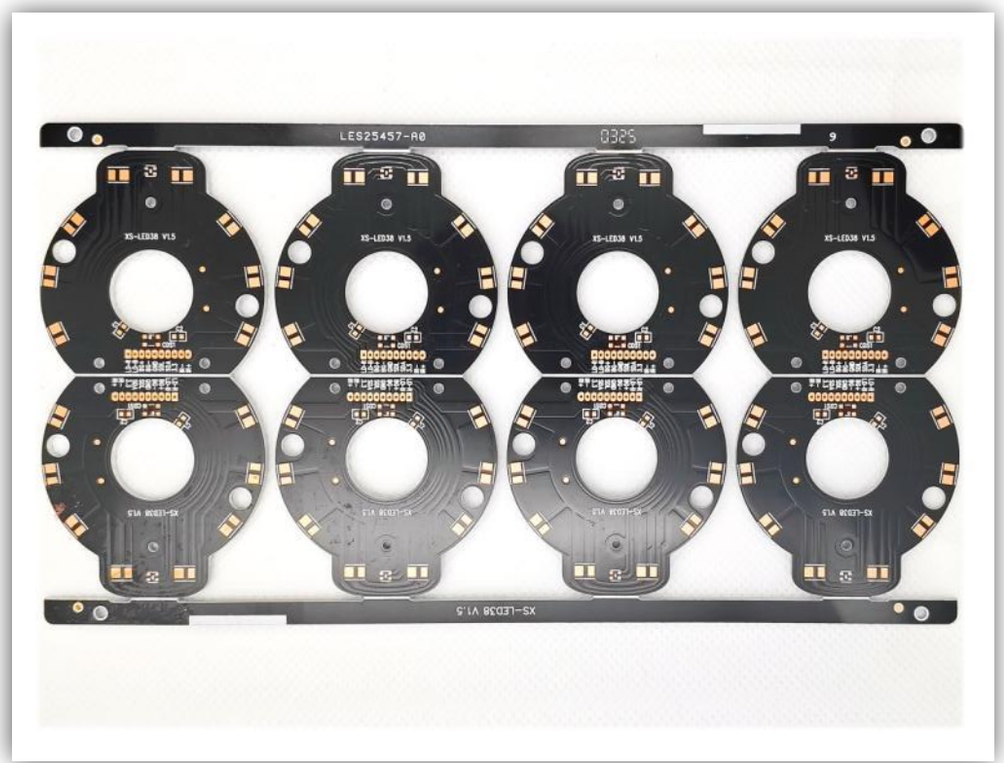
Select the right Material to match performance, thermal, and manufacturability needs

- FR4 PCB
- Rogers PCB
- Ceramic PCB
- Polyamide PCB
- Semi flex PCB
- Isola PCB
- Teflon PCB
- Alumina PCB
- High TG PCB
- Halogen Free PCB
- Copper Based PCB
- Taconic PCB
- Low Loss PCB









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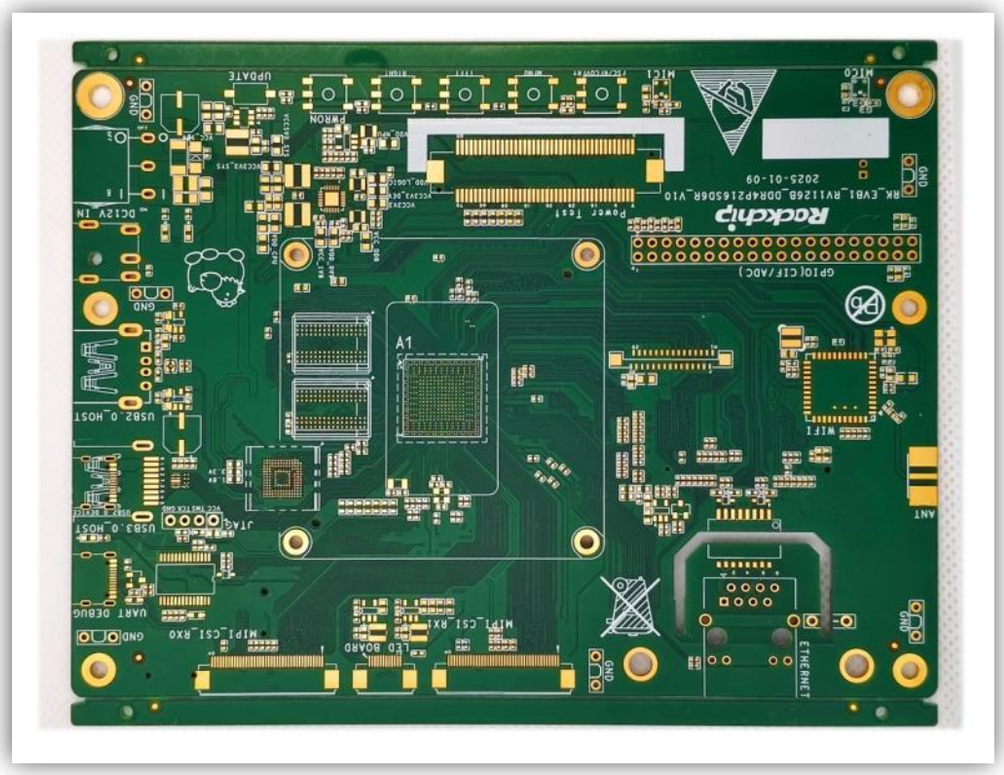
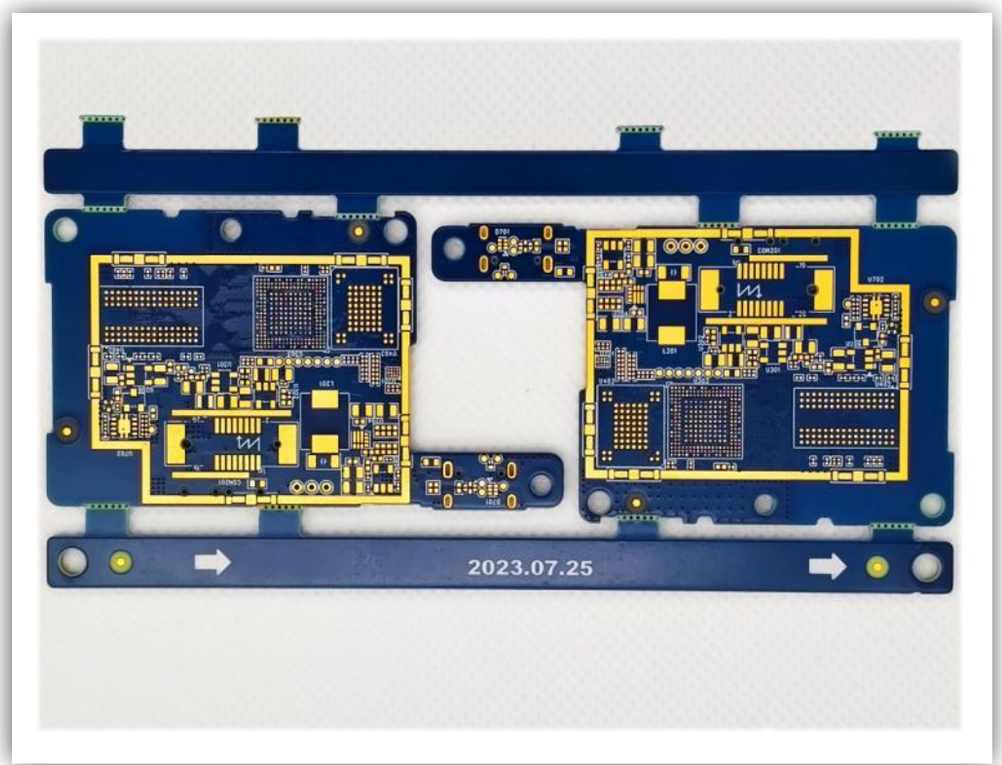
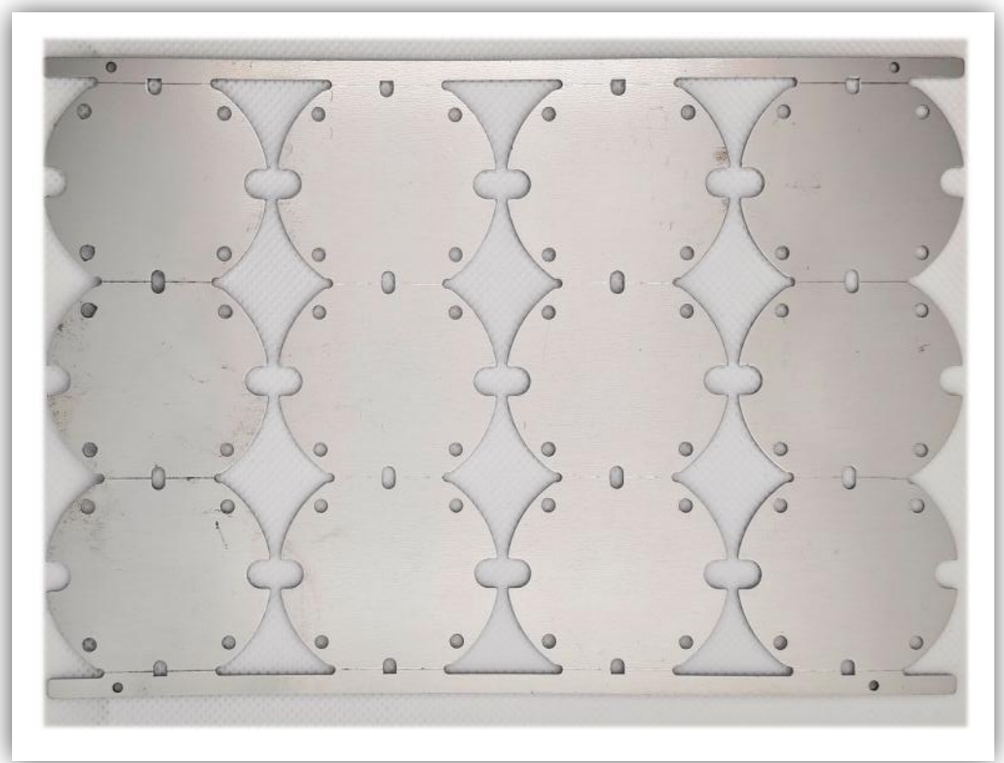
PCBs Features

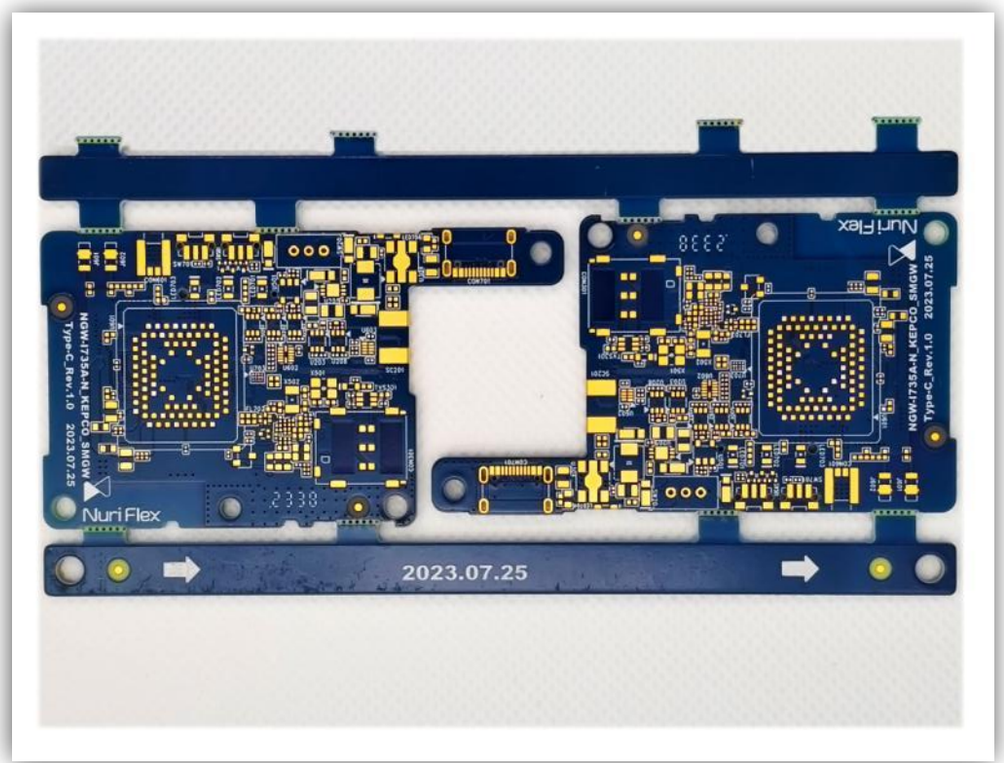
Groupings by Features Sector

- **Heavy Copper PCB**
- **Blind and Buried Vias**
- **Micro via PCB**
- **VIPPO PCB**
- **High-Frequency PCB**
- **High Speed PCB**
- **Quick Turn PCB**
- **Single-Sided PCB**
- **Double Sided PCB**
- **4 Layer PCB**
- **6 Layer PCB**
- **IC Substrate PCB**
- **Embedded PCB**









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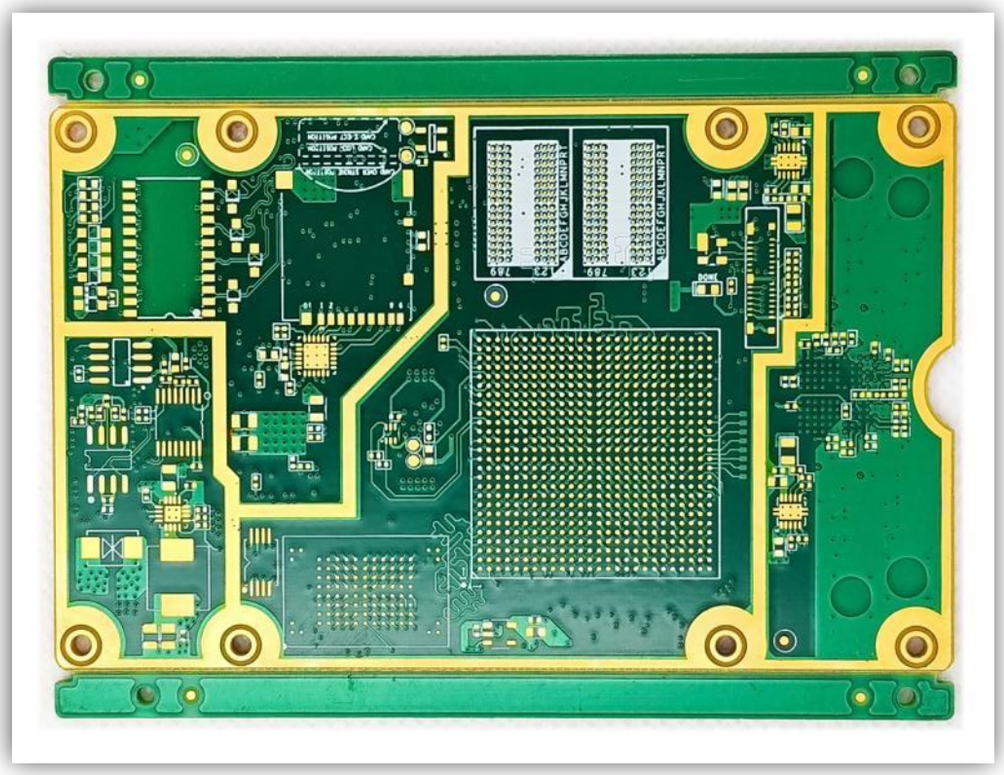
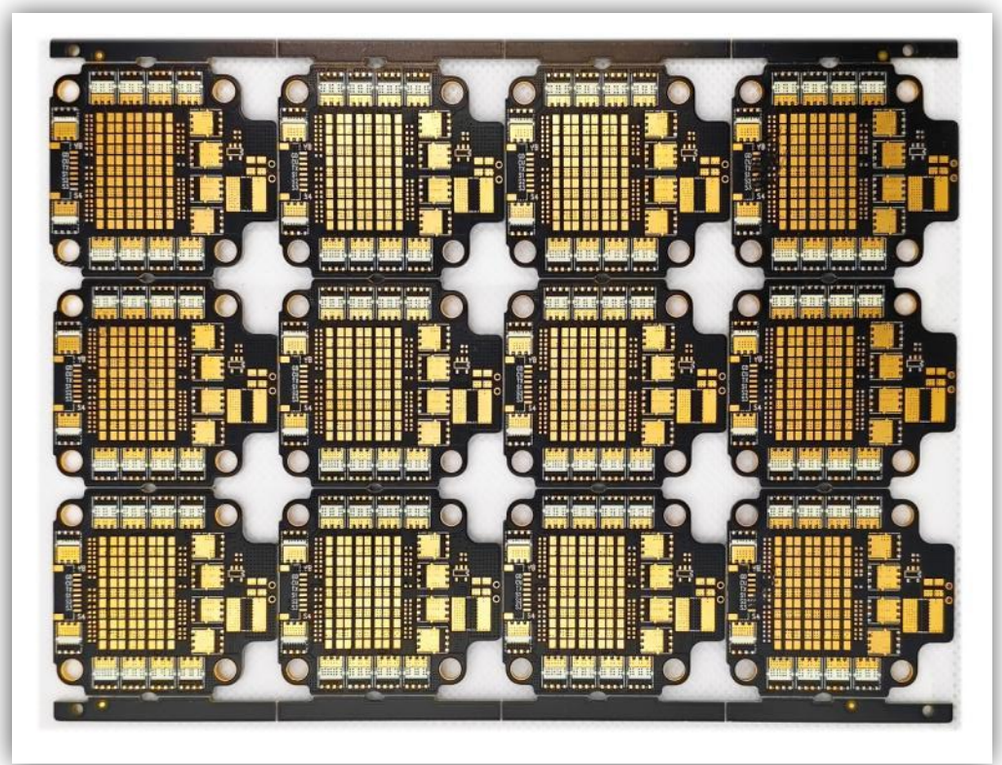
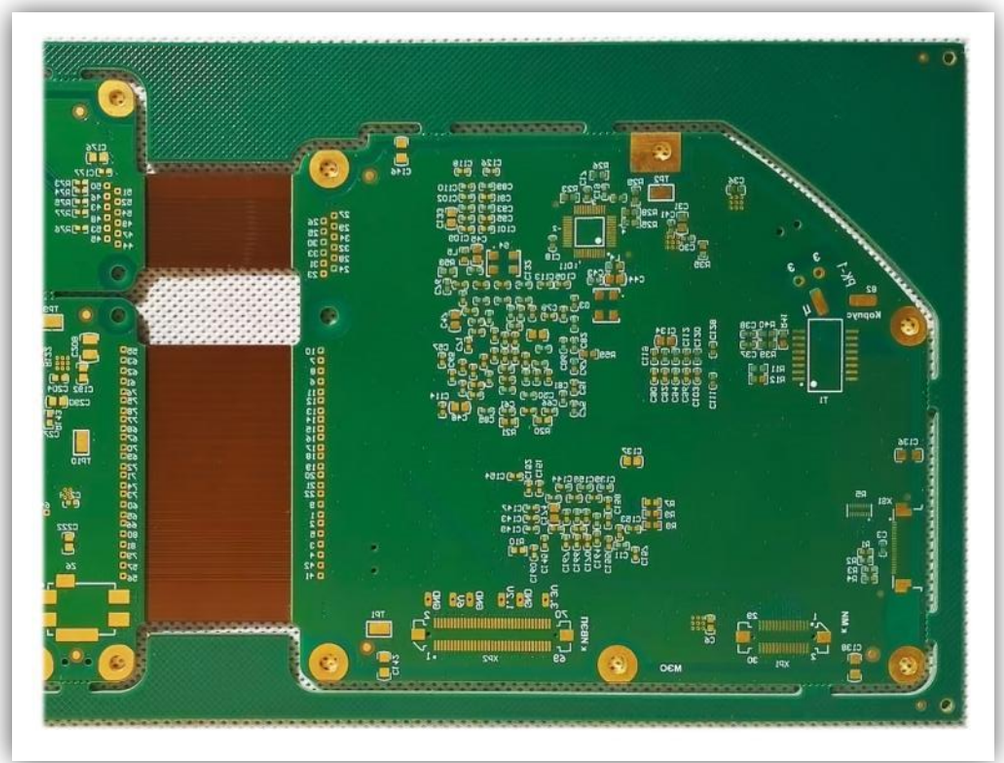
PCBs Application

Groupings by Application Sector

- Power PCB
- Led PCB
- Inverter PCB
- Control PCB
- Sensor PCB
- Amplifier PCB
- Radar PCB
- Medical PCB
- Automotive PCB
- Capacitive PCB
- HVAC Circuit Board
- UPS Circuit Board
- Industrial PCB







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Let’s Talk About Your PCB Manufacturing Challenges

- **Hidden structural risks**
  Layer separation, internal stress, or warpage only appear after assembly or reflow, compromising long-term reliability.
- **Unreliable solder performance**
  Surface finish and solder mask issues lead to weak solder joints, rework, or early field failures.
- **Board flatness problems**
  PCB warping causes component misalignment, BGA solder defects, and mechanical fit issues.
- **Uncontrolled impedance**
  Signal integrity varies between batches due to inconsistent stack-up execution and impedance control.
- **Invisible BGA defects**
  Voids and hidden solder issues under BGAs go undetected without proper inspection and process control.
- **Via reliability issues**
  Incomplete or inconsistent via filling affects solder quality, signal integrity, and mechanical stability.
- **Dimensional inaccuracy**
  Tolerance drift and misalignment create conflicts with enclosures, connectors, and final assembly.
- **Edge clearance risks**
  Copper too close to board edges leads to exposure, corrosion, or short-circuit risks after routing.
- **Solder mask execution errors**
  Mask design or registration issues result in shorts, inspection blind spots, and rework cycles.
- **Unbalanced stack-up design**
  Asymmetrical layer structures cause warpage, impedance deviation, and fabrication delays.

What Happen next?

- We review your project details and scope to align resources and timeline
- Clarification and feasibility check to confirm manufacturability and cost drivers
- Manufacturing assessment including lead time, capacity, and risk analysis
- You decide the next step

Free quality verification to de-risk procurement

- Free quotation to estimate cost and MOQ implications for your program
- Free DFM/DFT to identify assembly and test optimizations early
- Free PCB prototype to validate form, fit, and basic function before volume
- Free manufacturing assessment to verify supplier capability and capacity

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