

## Your Contract Manufacturer FOR PCBA



- ✓ Free design services for PCBA
- ✓ BOM analysis
- ✓ Cost-saving PCB assembly
- ✓ Components inventory management
- ✓ PCBA value-added service services
- ✓ Shortage/EOL management



[www.pcbonline.com](http://www.pcbonline.com)

## WHO ARE WE

PCBONLINE is a source-factory PCBA manufacturer for medical, automotive, industrial, defense, aerospace, mobile, computing, and consumer applications.

From PCBA prototypes to EMS box build assembly, we offer you a one-stop-shopping experience. This wide range of PCBA services will help you stay ahead of your competition.

## PCBA Value-Added Services

- ✓ IC Programming
- ✓ Box Build Assembly
- ✓ Thermal Aging
- ✓ Tape and Reel
- ✓ Conformal Coating
- ✓ Functional Testing
- ✓ Application Mock Testing
- ✓ Free Project Optimization

## PCB Assembly Capabilities

PCBONLINE's EMS factory provides custom PCBA manufacturing meeting every requirement of clients around the globe from all industries. You can check our PCB assembly capabilities below.

PCBA Quantity	From 1 to 100,000+
PCB Assembly Levels	IPC-A-610 Class 2/3
Finest Pitch	0.05mm
Smallest SMD Footprint	01005
Tests On SMT line	Solder Paste Inspection X-Ray Inspection for BGA 3D AOI Visual Inspection
Reflow Soldering	Lead-Free Reflow & Nitrogen Reflow
First Article Test	Yes
Wave Soldering	Jig Wave Soldering & Selective Soldering
Lead-Time	From 8 Working Hours to 14 Days
Quality Certification	ISO 9001:2015, IPC, IATF 16949, REACH, RoHS, and UL

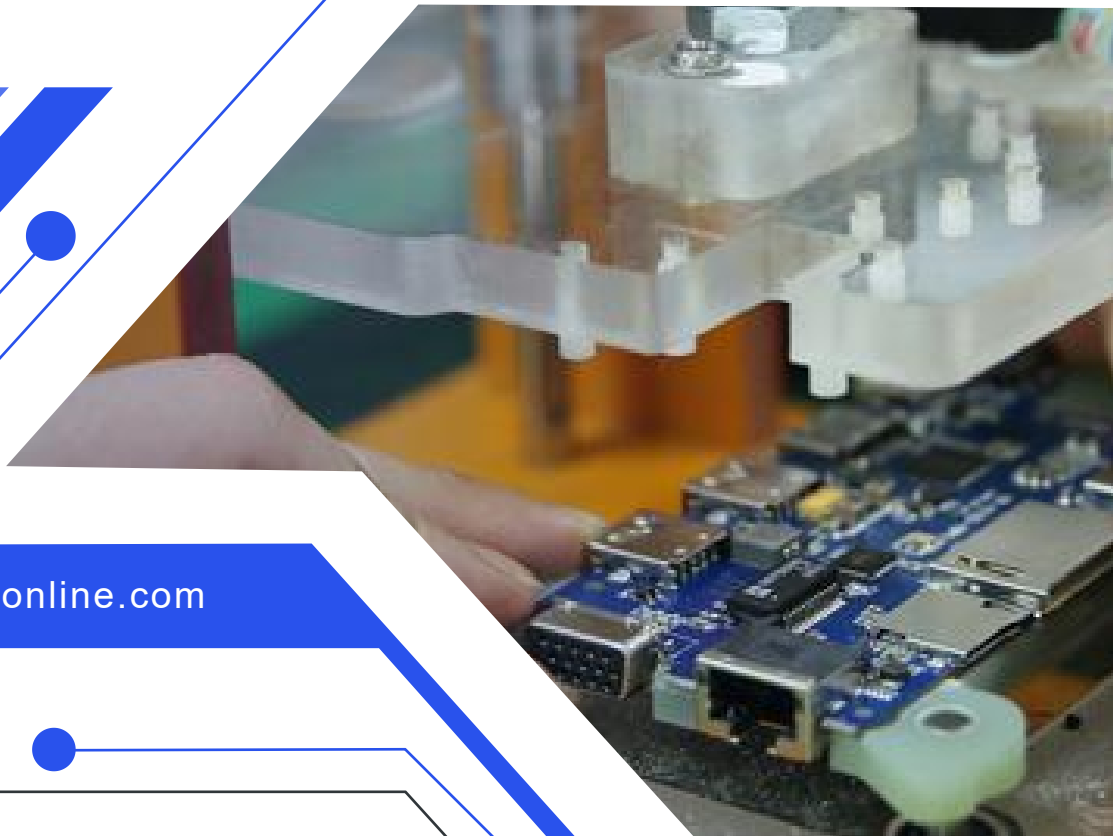


## PCB Fabrication

Besides the EMS PCBA factory, PCBONLINE has two large advanced PCB manufacturing bases to independently fabricate PCBs from prototypes to massive fabrication.

What PCBs can you have manufactured by PCBONLINE?

They can be FR4 PCBs of any Tg from 1 to 64 layers, aluminum PCBs with single/dual component-mounting sides from 1 to 4 layers, high-frequency PCBs from 4 to 24 layers, ceramic PCBs including aluminum nitride PCBs, aluminum oxide PCBs, silicon nitride PCBs, and silicon carbide PCBs, flexible PCBs from 1 to 8 layers, transparent flexible PCBs from 1 to 6 layers, rigid-flex PCBs from 2 to 24 layers, HDI PCBs with 1+N+1, 2+N+2, and 3+N+3 stack-ups, single-component-mounting-sided glass PCBs, and copper-base PCBs from 1 to 8 layers.



[info@pcbonline.com](mailto:info@pcbonline.com)

## Component Sourcing

Time to market is key to success in any industry. Our component sourcing goal is to provide you with reliable, secure, and cost-effective components as quickly as possible.

Relying on our EMS factory, we take part in co-procurement with other large EMS from original factories and enjoy discounts. Besides, we source components from class-one direct suppliers that have been audited and keep long-term cooperation with us.

Using industry-leading software, PCBONLINE will identify at-risk components before they impact production and work with you to find alternatives. If no second source is available, we can warehouse buffer stock and allow you time to redesign with a supported component.

## Classic PCBA Cases

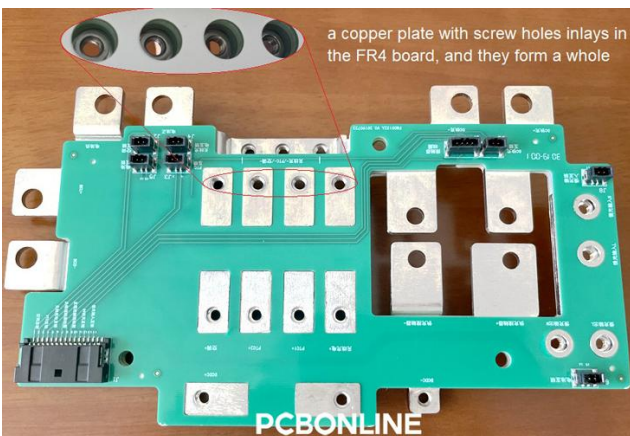
We have more than 20 years of experience in PCBA manufacturing for automotive, industrial, medical, communications, computing, and consumer applications.



### Case 1 - CAN Communication PCBA

CAN is controller area network, which is used for networking local components for automotive and industrial applications. This PCBA that PCBONLINE manufactured is an audio and video decoding motherboard with the CAN communication function.

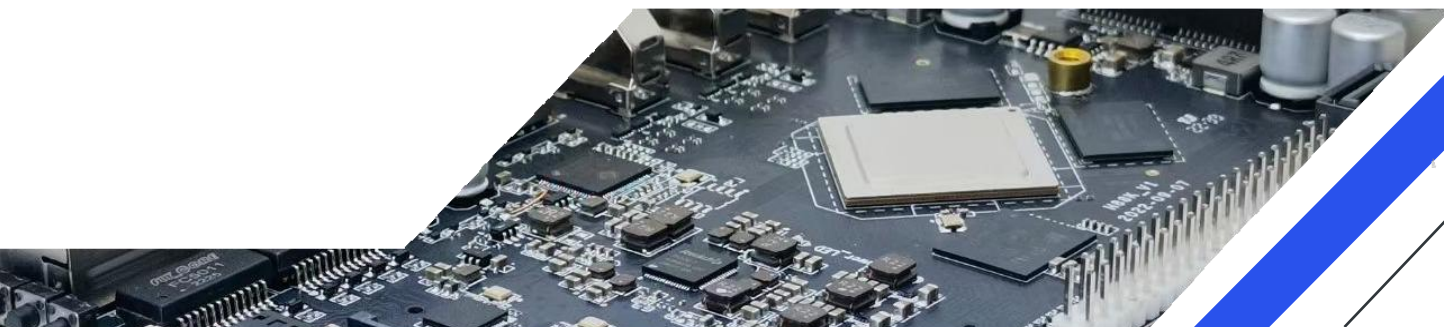
It has an FPGA that generates a lot of heat, and we suggested our client add a heat sink, which is the black part, to ensure the key components work more stably and efficiently.



### Case 2 - EV Charging Pile PCBA

PCBONLINE has strong manufacturing capabilities and technical experiences in electronic vehicle (EV) automotive electronics, especially electricity management.

When fast charging the EV's lithium battery pack, the high power and high current will generate a lot of heat. For the sake of safety and reliability, the electrical networks of high current and small current are designed separately in the PCB design. And we use copper blocks for large current conduction and heat dissipation, and PCB circuit layers in a 3oz thickness for small current and signal conduction. Our effective combination of FR-4 and copper blocks plays a key role in the PCBA fabrication process.





## One-on-One Engineering Support

Throughout your PCBA project, we will work closely with R & D, engineering, production department, and procurement, making sure achieve your project goals while exceeding your expectations.

Our engineering support involves in your project since we receive your inquiry, from Gerber check and BOM analysis to solving every technical issue in your PCBA. Our technical team will join the R & D of your project to lower your fabrication cost with an appropriate PCB design. Meanwhile, we offer free design for manufacturing (DFM), DFT, and DFA. If you need box builds, we also offer free design for excellence (DFX).

For massive manufacturing orders, our R & D team can help develop products and provide samples as well as testing for free.



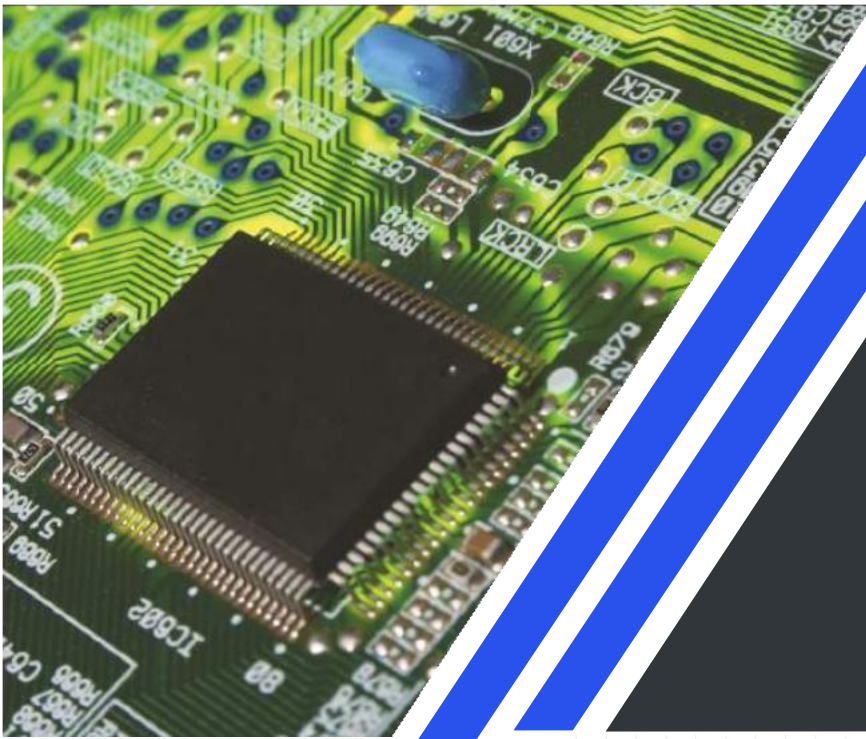
## Quality Control

Quality is what we believe in. We conduct rigorous quality control over the whole PCBA project from components to PCB assembly to ensure the highest reliability.

From de-capsulation and solder test, automatic optical inspection, circuit testing, and x-ray to visual inspection and specification check, up to and including functional testing and thermal aging, we do what's necessary to make sure every component is an original factory product and every PCB/PCBA is durable. For defense, medical, automotive, and aerospace applications, we also have four-terminal sensing on PCBs to ensure each micro resistance qualifies.

In addition, we prevent bad products in advance. Each team for each process will have a member responsible for random inspection of quality, which is a self-inspection action independent of the QC system.

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### CERTIFICATIONS

- ✓ ISO 9001:2008
- ✓ GOVERNED BY IDEA-STD-1010-B
- ✓ ESD CONTROLLED
- ✓ ENVIRONMENT HUMIDITY CONTROL



### CONTACT US

#### PCBONLINE USA

575 Shelton Mill Rd., Apt 404,  
Auburn,  
Alabama, USA

+1 3343320770  
Wang@pcbonline.com

#### PCBONLINE Canada

740 Proudfoot Lane, London  
Ontario, Canada

+1 5196978492  
Simin@pcbonline.com

#### PCBONLINE Australia

82 Culloden Rd,  
Marsfield NSW,  
Australia

+61 404 695 564  
Simon@pcbonline.com

#### PCBONLINE Russia

г. Москва,  
109202,Перовское  
шоссе, д.9

+7 (495) 2230796  
Huang@pcbonline.com

#### PCBONLINE Nigeria

Obikings C plot  
50, Amuwo  
Odofin, Lagos,  
Nigeria

+00234 8183970415  
Anson@pcbonline.com

#### PCBONLINE Sweden

Teleskopgatan  
Göteborg 10

+46735534812  
Steve@pcbonline.com