

8mil BGA PAD Multilayer layers HDI PCB Board Electronic Assembly Manufacturer Pcb Assembly Service

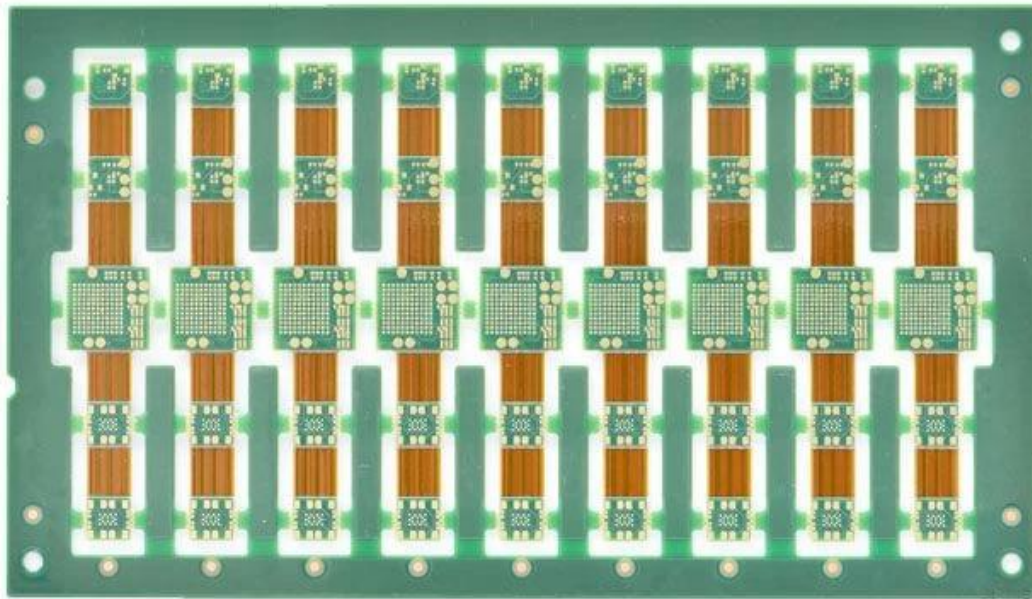
Point:rigid flexible pcb/8mil BGA PAD/Multilayer HDI PCB/HDI PCB with blind via holes and buried via holes/Quick turn HDI PCB ([Customization HDI PCB Printed Circuit Boards Manufacturer](#))



PRODUCT DESCRIPTION

TOP QUALITY PCBA

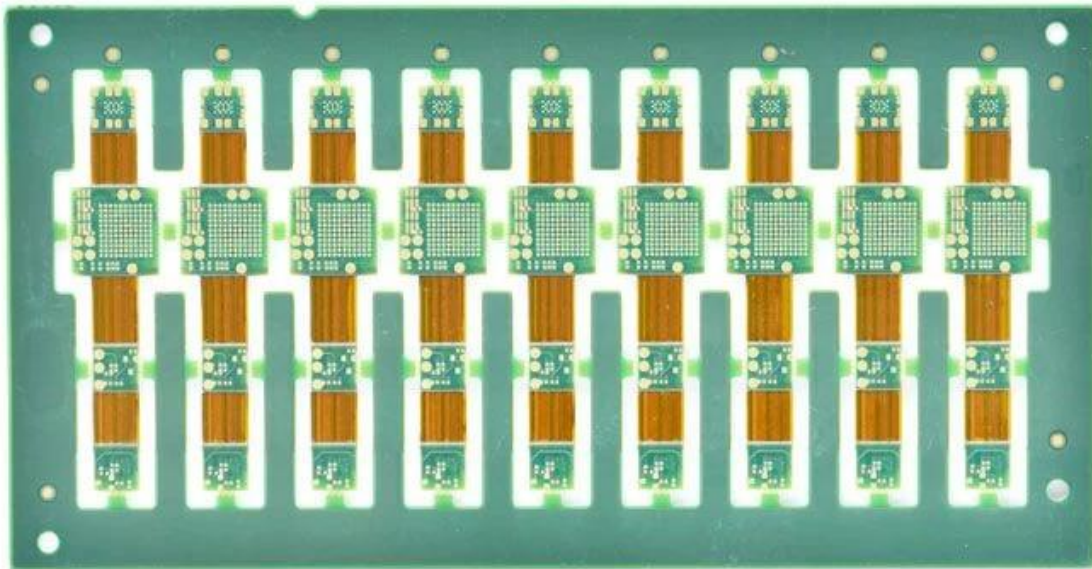
O-LEADING
To Be Reliable, To Be Valuable



Multilayer HDI PCB

TOP QUALITY PCBA

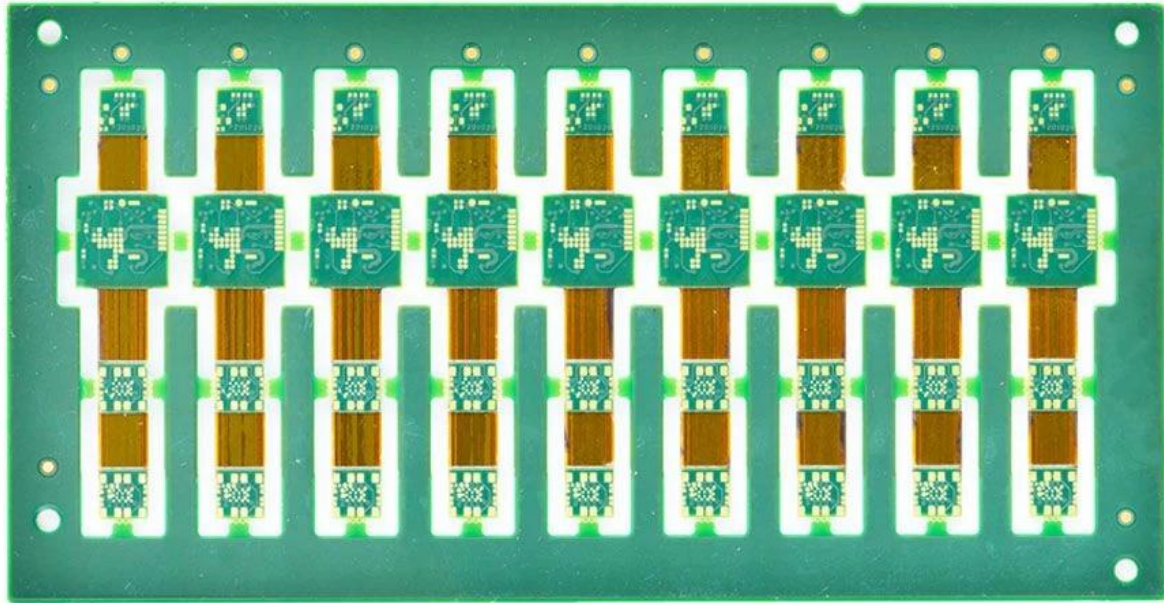
O-LEADING
To Be Reliable, To Be Valuable



8mil BGA PAD^{TRUE}

TOP QUALITY PCBA

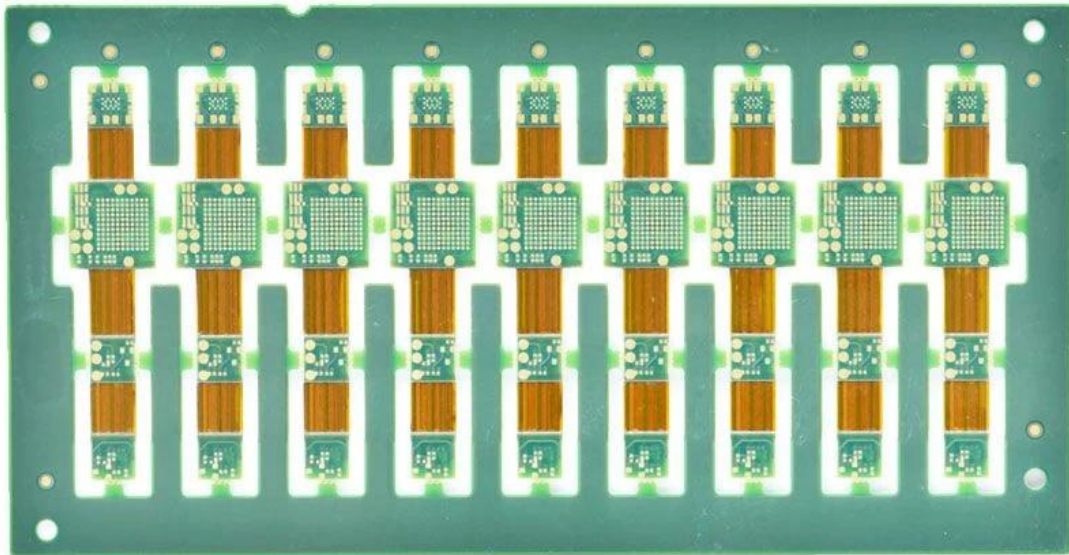
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Quick turn HDI PCB

TOP QUALITY PCBA

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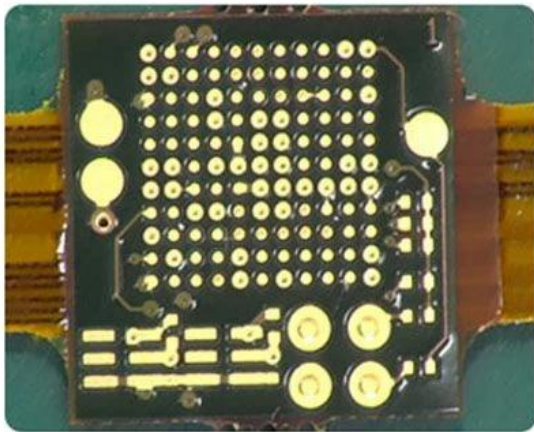
HDI PCB with blind via holes and buried via holes

TOP QUALITY PCBA

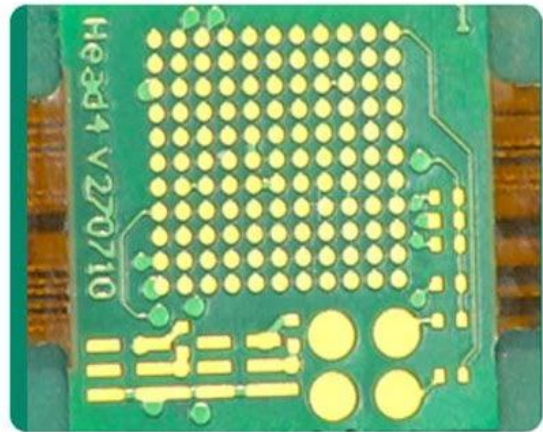
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VOP Comparison



Other competitors is dent in the Pad.



Our PCB is flat.

MAKE YOUR IDEA COME TRUE

TOP QUALITY PCBA

O-LEADING

To Be Reliable, To Be Valuable




| Layer | Stack up | Processed Thickness | Supplier Description | Copper Coverage | Impedance ID | Isolation Distance (Summed) |
|-------|----------|---------------------|----------------------------|-----------------|--------------|-----------------------------|
| 1 | | 50,000 | PROBIMER77 | | | |
| | | 45,000 | CSC_0.49_12/12_HTE_Punched | 0,000 | | |
| | | 58,200 | 106_38N_Polyimide_No_flow | | | 141,400 |
| | | 58,200 | 106_38N_Polyimide_No_flow | | | - |
| 2 | | 25,000 | LF7001 | | | - |
| | | 9,000 | | 60,000 | | |
| | | 25,000 | KK_0.025_9_9_Du_AP7163E | | | 25,000 |
| | | 9,000 | | 60,000 | | |
| 3 | | 25,000 | LF7001 | | | 192,800 |
| | | 71,400 | 1080_38N_Polyimide_No_flow | | | - |
| | | 71,400 | 1080_38N_Polyimide_No_flow | | | - |
| | | 25,000 | LF7001 | | | - |
| 4 | | 9,000 | | 60,000 | | |
| | | 25,000 | KK_0.025_9_9_Du_AP7163E | | | 25,000 |
| | | 9,000 | | 60,000 | | |
| | | 25,000 | LF7001 | | | 141,400 |
| 5 | | 58,200 | 106_38N_Polyimide_No_flow | | | - |
| | | 58,200 | 106_38N_Polyimide_No_flow | | | - |
| | | 45,000 | CSC_0.49_12/12_HTE_Punched | 0,000 | | |
| | | 50,000 | PROBIMER77 | | | |

Copper Thickness = 126,000 | Dielectric Thickness = 525,600 | Solder Mask Thickness = 100,000 |
Stack Up Thickness = 651,600 | Stack Up Thickness with Soldermask = 751,600

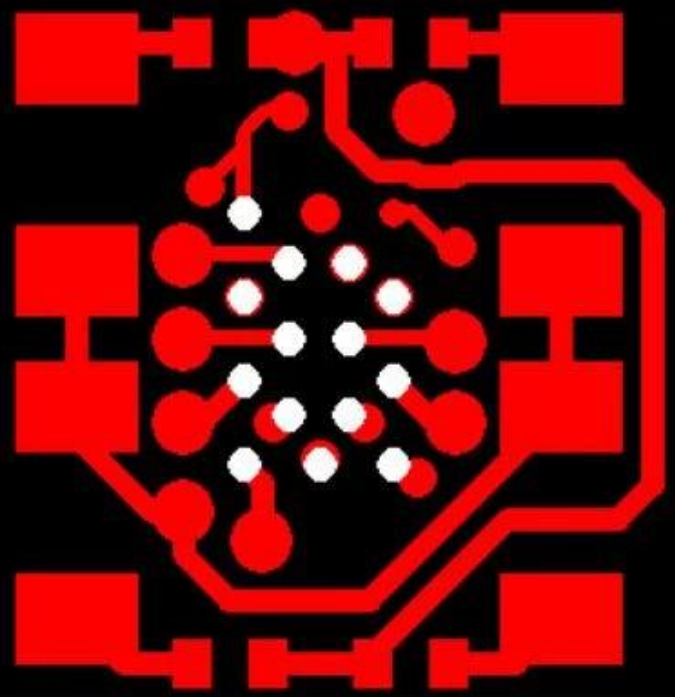
| Drill Image | 1st Layer | 2nd Layer | Column Position | Drill Type | Fill Type |
|-------------|-----------|-----------|-----------------|----------------|-----------|
| | 1 | 2 | 2 | Laser PTH | None |
| | 1 | 6 | 1 | Mechanical PTH | None |
| | 6 | 5 | 2 | Laser PTH | None |

MAKE YOUR IDEA COME TRUE



Query All

| | |
|-------------|---------------|
| Type: | Flash |
| At: | 1065.4:1088.6 |
| Type: | Thru Hole |
| Net: | |
| Layer: | L14:Head4.GTL |
| Layer Type: | Graphic |
| Dcode: | D77 |
| Shape: | Round |
| Size: | 8.2 |



Production Process

18 years experience in one-stop PCB and PCBA, we can make your idea come true,



品质至上
Quality Focused

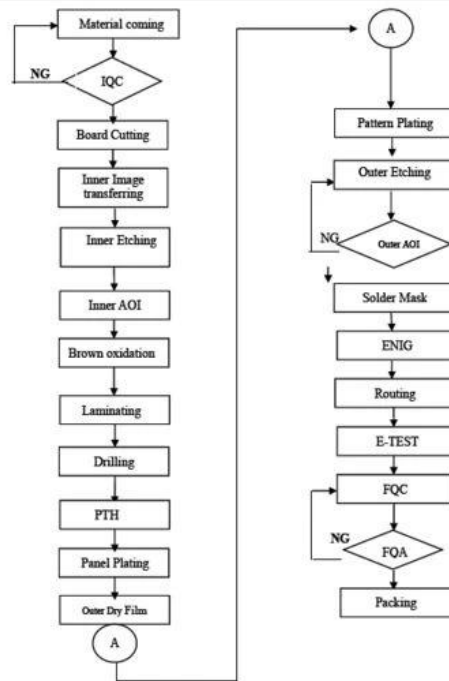


用户满意
Customer satisfaction

永续经营
Exemplary management

Process flow chart

工艺能力 Process Capability



APPLICATION



Engineering



PCB CAD
Layout



Materials



Electro-
Mechanical
Assembly



Printed
Circuit Board
Assembly



Test
Solutions



System
Build



BGA & Board
Repair

● ● ● ● ●

WHY CHOOSE US?



TO BE
RELIABLE



Quality first,
Customer supreme,
Scientific management,
Striving for famous brand



TO BE
VALUABLE



Science and technology
keeps head,
Put people first,
Be precise and practical,
Contribute sincerely



KEEP
LEADING



There's a phrase in Buddhism,
'Beginner's mind.'

It's wonderful to have a
beginner's mind.

COMPANY PROFILE



O-Leading strives to be your one stop solution partner in EMS supply chain, including PCB design, PCB fabrication and PCB assembly (PCBA). We provide some of the most advanced PCB technology, including HDI PCBs, multilayer PCBs, Rigid-Flexible PCBs. We can support from quick turn prototype to medium & mass Production. In general, our global customers are very impressed with our services: rapid response, competitive price and quality commitment. Providing more valuable technical service and overall solution is the way O-leading forward.



SGS

SGS

SGS

ISO

UL

Looking to the future, O-leading will concentrate on the innovation and development of electronics manufacturing technology as always, and make persistent efforts on PCB & PCBA one-stop service to provide first-class services and create more value for our customers. PCB Assembly manufacturer china.



Factory Price Multilayer Rigid Flexible HDI PCB Circuit Board

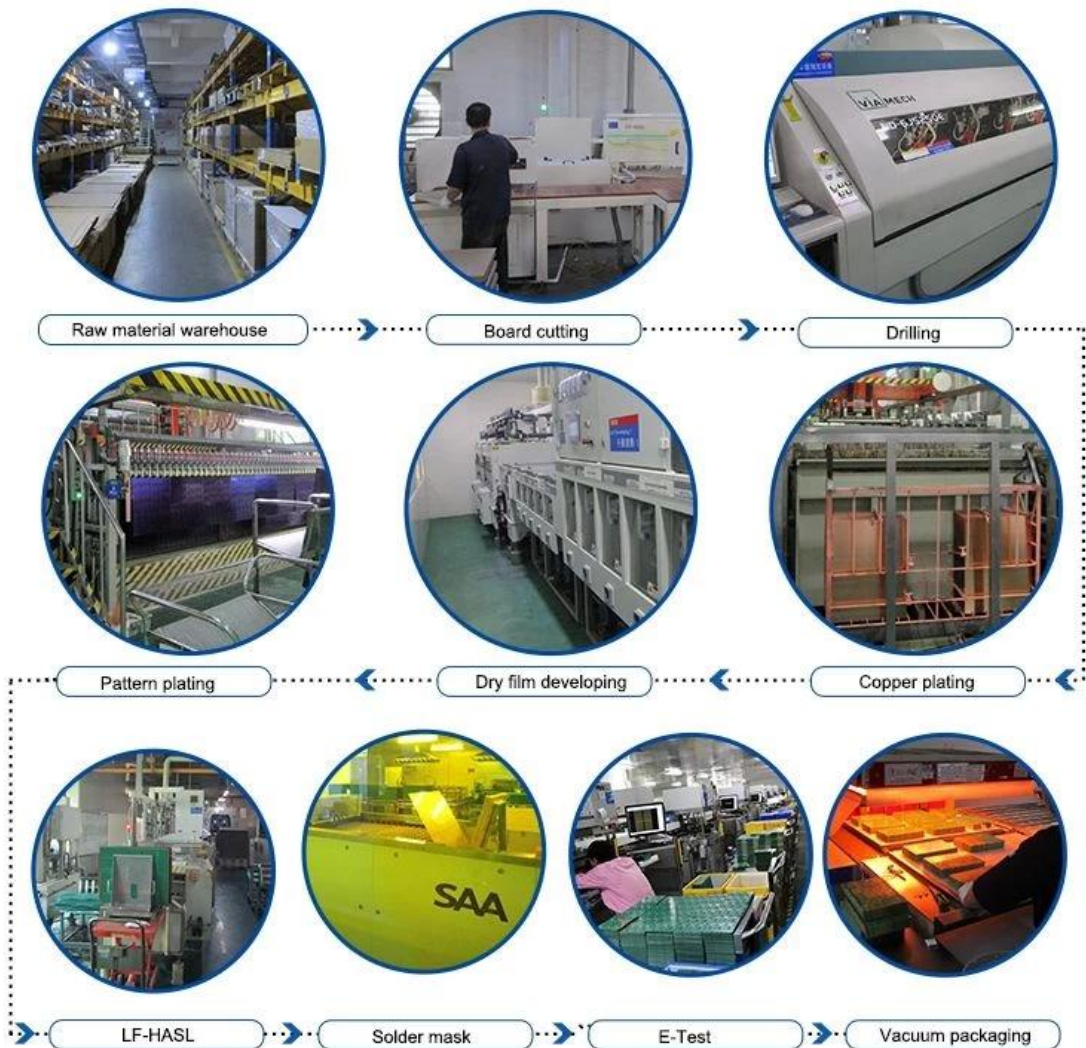
PROCESS CAPABILITY

| PCB Production Capabilities | |
|-------------------------------------|---|
| Layer Count | 1Layer-32Layer |
| Finished copper thickness | 1/3oz-12oz |
| Min Line width/spacing internal | 3.0mil/3.0mil |
| Min Line width/spacing external | 4.0mil/4.0mil |
| Max Aspect Ratio | 10:1 |
| Board thickness | 0.2mm-5.0mm |
| Max Panel size(inches) | 635*1500mm |
| Minimum Drilled Hole Size | 4mil |
| Plated Hole Tolerance | +/-3mil |
| Blind/Buried Vias (All Types) | YES |
| Via Fill(Conductive,Non-Conductive) | YES |
| Base Material | FR-4,FR-4high Tg,Halogen free material,Rogers,Aluminium base,Polyimide,Heavy Copper |
| Surface finishes | HASL,OSP,ENIG,HAL-LF,Immersion silver,Immersion Tin,Gold fingers,Carbon ink |
| SMT Production Capabilities | |
| PCB Material | FR-4,CEM-1,CEM-3,Aluminum-based board,FPC |
| Max PCB size | 510x1500mm |
| Min PCB size | 50x50mm |
| PCB Thickness | 0.5mm-4.5mm |
| Board thickness | 0.5-4mm |
| Min Components size | 0201 |
| Standard chip size component | 0603 and larger |
| Component max height | 15mm |
| Min lead pitch | 0.3mm |
| Min BGA ball pitch | 0.4mm |
| Placement precision | +/-0.03mm |

OUR EXHIBITION



PRODUCTION PROCESS



PRODUCTION LINE

PCB PRODUCTION WORKSHOP



AUTOMATIC VACUUM PRESS MACHIN



DRILLING MA CHINE



PATTERN PLATING MACHINE



SCRUBBING MACHINE



DEVELOPING MACHINE



ROUTING MACHINE

SMT PRODUCTION WORKSHOP



OUR CUSTOMER REVIEWS



订单编号: 49335463501024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



High quality usb power pcb , pcba manufacturer

★★★★★

Fancy has done an exllent job, whenever we write, she answered us within 1 second, O-leading is very perct with fast delivery, fast logistics, the most important thing is good quality, good packaging, thank you!

[回复该评论](#)



oem customized rohs pcb drawing schematic s...

★★★★★

We received the boards, the quality is very good,the price is very reasonable, Fancy is very nice & smart & experienced, the logistics is super fast, I will come to see more in the future.

[回复该评论](#)

订单编号: 49298271001024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



High TG180 FR-4 Circuit HDI PCB 94V0 Board ...

★★★★★

perfect product,perfect PCB supplier!

[回复该评论](#)



oem customized rohs pcb drawing schematic s...

★★★★★

Very good and professional PCB product as usual!

[回复该评论](#)



Strip LED Aluminum FR-4 lighting PCB board 9...

★★★★★

High quality, fast delivery, good service, competitive price, lucky and happy to purchase from O-leading!

[回复该评论](#)

订单编号: 45922A11001024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



High TG180 FR-4 Circuit HDI PCB 94V0 Board ...

★★★★★

This is a very difficult PCB design, but we are lucky to find O-leading to support the PCB for us,very good to p PCB supplier!



universal FR4 Multilayer PCB washing machine...

★★★★★

Fancy gives us very excellent service, very professional and experienced, O-leading is the best one of our suppliers, very happy to work with them.

订单编号: 49024962001024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



High quality Keyboard pcb & pcba Factory SMT...

★★★★★

Top quality,it's the right choice to choose O-leading to make the PCB & PCBA

[回复该评论](#)

订单编号: 40938622501024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



Professional Printed Circuit Board Manufactur...

★★★★★

Very high quality PCB products, O-leading is the best PCB supplier that we have ever worked with,

订单编号: 44068794501024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



High TG180 FR-4 Circuit HDI PCB 94V0 Board ...

★★★★★

We bought two batches, one by DHL, the other one by air, good quality and fast delivery!

LISTEN TO CUSTOMER VOICE

订单编号: 40903347501024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



Strip LED Aluminum FR-4 lighting PCB board 9...

★★★★★

Very fast delivery! Fantastic, good job!!



Professional Printed Circuit Board Manufactur...

★★★★★

Very happy to great support from Oleading,they are not only professional on the PCB, but also provide good PCB products, very good supplier!!



hot sale rigid-flexible PCB with 0.2mm BGA an...

★★★★★

very professional supplier.



High Quality custom FPCB/Flex PCB/FPC/Flexi...

★★★★★

Good product



OEM ODM PCBA Bluetooth Wireless Marking G...

★★★★★

high soldering quality



Electronic parts haptic pcba Circuit Board asse...

★★★★★

Very Good product

订单编号: 37378603001024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



Raspberry pi 0 Zero Raspberry PI Zero PI W ver...

★★★★★

Fantastic products!!



double layer pcb with red S/M and LF-HASL su...

★★★★★

Good!

订单编号: 36919647001024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



AML-S802 Quad-core Android embedded board...

★★★★★

Good products



Fast delivery low cost pcb fabrication O-leadin...

★★★★★

Good supplier



Lidar IR Sensor board pcba(H08R6x)

★★★★★

perfect product



Customized PCBA design PCB design

★★★★★

perfect



Audio Speaker and Headphone Jack (H07R3x)

★★★★★

High quality, good



half hole pcb, half hole pcb module, half hole m...

★★★★★

Top half hole pcb supplier, very perfect goods



High Quality custom FPCB/Flex PCB/FPC/Flexi...

★★★★★

this rigid-flexible pcb quality is perfect!



Electronic parts haptic pcba Circuit Board asse...

★★★★★

Very satisfied with Oleading products and quality,especially their on-time delivery, fantastic!

Be **kind** to your client,
because he has many choices,
but he chooses you instead.



1. How do O-Leading ensure quality? Our high quality standard is achieved with the following.

- 1.1 The process is strictly controlled under ISO 9001:2008 standards.
- 1.2 Extensive use of software in managing the production process
- 1.3 State-of-art testing equipments and tools. E.g. Flying Probe, X-ray Inspection, AOI (Automated Optical Inspector) and ICT (in-circuit testing).
- 1.4. Dedicated quality assurance team with failure case analysis process
- 1.5. Continuous staff training and education

2. How do O-Leading keep your price competitive?

Over the last decade, prices of many raw materials (e.g. copper, chemicals) had doubled, tripled or quadrupled; Chinese currency RMB had appreciated 31% over US dollar; And our labor cost also increased significantly.

However, O-Leading have kept our pricing steady. This owns entirely to our innovations in reducing cost, avoiding wastes and improving efficiency. Our prices are very competitive in the industry at the same quality level.

We believe in a win-win partnership with our customers. Our partnership will be mutually beneficial if we can provide you an edge on cost and quality.

3. What kinds of boards can O-Leading process?

Common FR4, high-TG and halogen-free boards, Rogers, Arlon, Teflon, aluminum/copper-based boards, PI, etc.

4. What data are needed for PCB & PCBA production?

- 4.1 BOM (Bill of Materials) with reference designators: component description, manufacturer's name and part number.
- 4.2 PCB Gerber files.
- 4.3 PCB fabrication drawing and PCBA assembly drawing.
- 4.4 Test procedures.
- 4.5 Any mechanical restrictions such as assembly height requirements.

5. What's the typical process flow for multi-layer PCB?

Material cutting → Inner dry film → inner etching → Inner AOI → Multi-bond → Layer stack up Pressing → Drilling → PTH → Panel Plating → Outer Dry Film → Pattern Plating → Outer etching → Outer AOI → Solder Mask → Component Mark → Surface finish → Routing → E/T → Visual Inspection.

6. What's the key equipments for HDI manufacturing?

Key equipment list is as following: Laser drilling machine, Pressing machine, VCP line, Automatic Exposing machine, LDI and etc. The equipments we have are the best in the industry, laser drilling machines are from Mitsubishi and Hitachi, LDI machines are from Screen (Japan), Automatic Exposing machines are also from Hitachi, all of them make we can meet customer's technical requirements.

7. How many types of surface finish O-lead can do?

O-the leader has the full series of surface finish, such as: ENIG, OSP, LF-HASL, gold plating (soft/hard), immersion silver, Tin, silver plating, immersion tin plating, carbon ink and etc. .. OSP, ENIG, OSP + ENIG commonly used on the HDI, we usually recommend that you use a client or OSP OSP + ENIG if BGA PAD

size less than 0.3 mm.

8. What's your capability for FPC? Can O-Leading provide SMT service also?

O-Leading can fabricate FPC from single layer to 8layer, the working panel size can be as large as 2000mm*240mm, please find the details in the page "Flex Capability". We also provide SMT one stop service to customer.

9. What are the main factors which will affect the price of PCB?

Material;
Surface finish;
Technology difficulty;
Different quality criteria;
PCB characteristics;
Payment terms;
Different manufacturing countries.

10. What's the definition of PCB, PWB and FPC and what's the difference?

PCB is short for Printed Circuit Board;
PWB is short for Printed Wire Board, same meaning as Printed Circuit Board;
FPC is short for Flexible Printed Board.

11. What factors should be considered when choosing the material for a PCB board?

Below factors should be considered when we choose the material for PCB:
The material's Tg value should be greater than the operation temperature;
Low CTE material has good performance of thermal stability;
Good thermal resistance performance: Normally PCBs are required to resist 250°C for at least 50s.
Good flatness; In consideration of the electrical properties, low loss/high permittivity material is used on high frequency PCB;
Polyimide glass fiber substrate used