

# Welcome to O-leading

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.

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.

We are professional PCB manufacturer with more than ten years experiences . Products range-single, double side ,multi-layer PCB ,flexible PCB and MCPCB.We can provide fast prototype service - S/S in 24hrs , 4-8layers in 48-96 working hrs production time.

COPPER PLATE HOLES MINIMUM .025 AVG, .020 MIN.. HOLES MAY NOT BE PLUGGED

Pack with colorless transparent bubble film ,25 PCS/ bag, put desiccant in flank, put humidity indicator card on top side

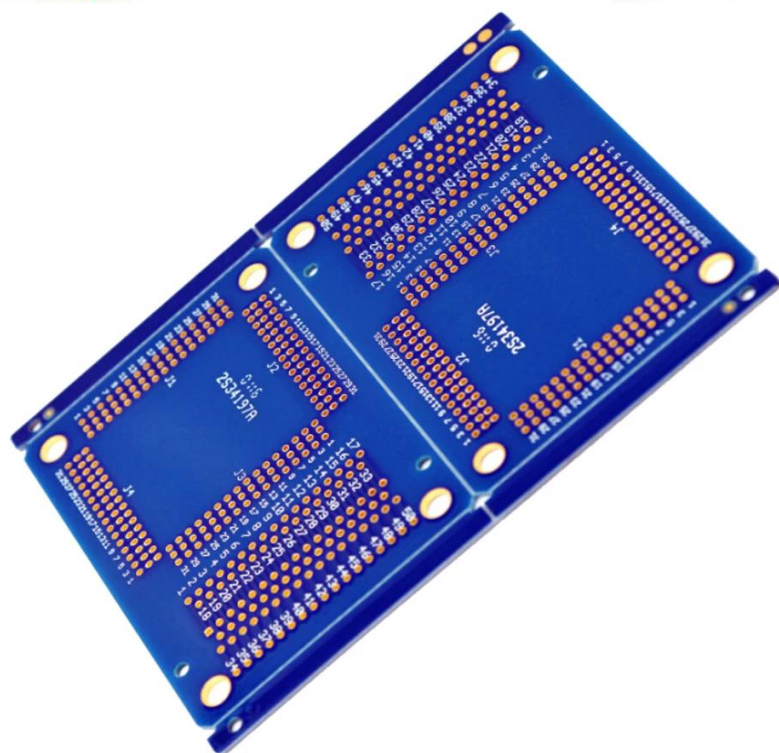
## Product Description

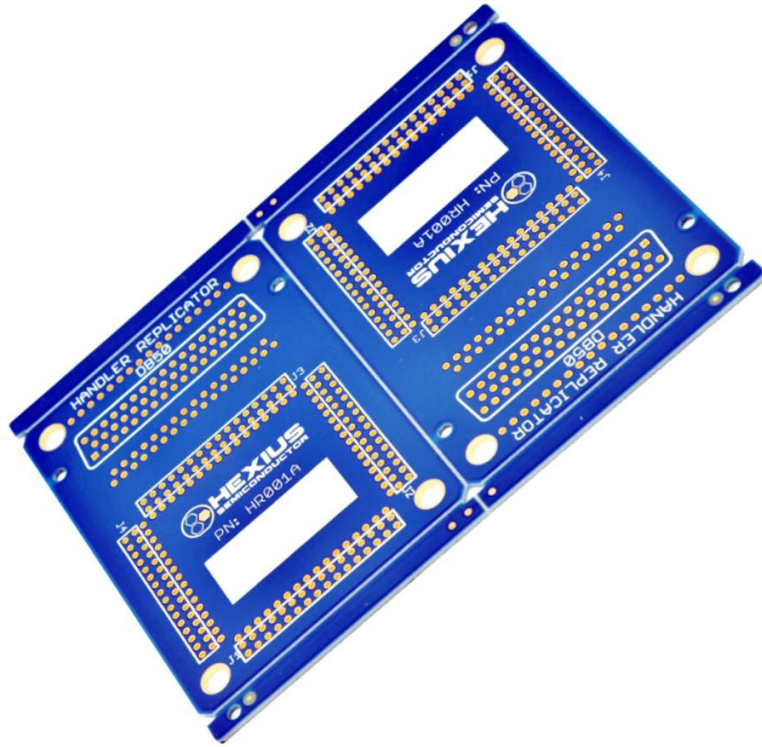
### Quick Details

Place of Origin	Guang dong, China (Mainland)	Brand Name	O-Leading
Base Material	FR-4,,Aluminum	Copper Thickness	0.5oz-5oz
Min. Hole Size	0.2mm	Min. Line Width	0.1-5mm
Surface Finishing	immersion gold ,OSP,lead free HASL	Board Thickness	blue ,red ,green,black,yellow
applicable to	led,mobile phone,air conditioners,washing machines	character	Industrial Control pcb
certificates	ISO9001,UL,RoHS,SGS	Q/CTN	10PCS-100PCS
weight	0.01kg -5kg	MOQ	10pcs
Model Number	power bank pcb assembly pcba manufacturer	Min. Line Spacing	0.2mm
color	blue ,red ,green,black,yellow	price	\$0.1-\$10
design type	client requirement	size	0.01m3-10m3

## 16 years professional OEM pcb board manufacture

item	2014		2015~2016		2017~2018	
	Volume	Sample	Volume	Sample	Volume	Sample
Layer count	32	42	38	44	42	48
Min Line/space (μm)	50/50	40/45	40/45	40/40	35/40	35/35
Min drill hole diameter (mm)	0.15	0.10	0.15	0.10	0.15	0.10
Aspect ratio of PTH	14:1	16:1	16:1	18:1	18:1	20:1
N+C+N	4+C+4	5+C+5	5+C+5	6+C+6	5+C+5	6+C+6
Any layer interconnection	5+2+5	6+2+6	5+2+5	6+2+6	5+2+5	6+2+6
Plate filling via	YES	--	YES	--	YES	--
Min. core thickness (exclude copper) (μm)	50	40	40	30	40	30
Min. Laser Drill diameter (μm)	75	65	65	50	50	40
Via on buried hole/stacked via	YES	--	YES	--	YES	--
Material	FR4, Megtron, Nelco, Rogers, Heavy Copper, etc.					
Embedded capacitor PCB	YES	--	YES	--	YES	--
Surface Process	Lead-free HASL, ENIG, OSP, Immersion silver, Immersion tin, Flash gold, Gold finger plating, Selective hard gold plating, Peelable solder mask, Carbon ink					





[www.o-leading.com](http://www.o-leading.com)

Small volume pcb manufacturer

Our Team







Certifications



2017/26 2016VZL430354 - Wiring, Printed - Component

**ONLINE CERTIFICATIONS DIRECTORY**

**ZPMV2.E490354**  
Wiring, Printed - Component

For enhanced search functionality, please visit UL's [eCRP Family of Databases](#).  
Click on a product designation for complete information.

[Page Bottom](#)

#### Wiring, Printed - Component

See General Information for Wiring, Printed - Components

**O-LEADING SUPPLY CHAIN CO LIMITED**  
Fortune Building, Nanheng West Road  
Room 1313  
Huizhou, Guangdong 516211, CHINA

E490354

	Cond Width				Max				Max			
	Min	Min	Cond		SS/	Area	Solder		Oper	Flame	Heat	
	Min	Edge	Thk	DS/	Diam	Limits	Temp			UL796		
Type	mm(In)	mm(In)	mic(mil)	DSO	mm(In)	C	sec	C	Class	DSR	I	
<b>HullBayer (mass laminate) printed wiring boards.</b>												
<b>O-LEADING-401</b>												
	0.2 (0.004)	0.3 (0.012)	34 (1.34)	D6	12.7 (0.5)	260	10	230	V-0	-	-	
<b>O-LEADING-407</b>												
	0.08 (0.003)	0.2 (0.008)	17 (0.67)	D5	9.7 (0.4)	260	10	170	V-0	AB	-	
<b>HullBayer printed wiring boards.</b>												
<b>O-LEADING-408</b>												
	0.125 (0.005)	0.125 (0.005)	12 (0.47)	D6	50.8 (2.0)	260	20	130	V-0	AB	-	
<b>Single layer printed wiring boards.</b>												
<b>O-LEADING-002</b>												
	0.76 (0.015)	1.14 (0.045)	34 (1.34)	D5	19.1 (0.8)	260	10	105	V-0	AB	-	
<b>O-LEADING-003</b>												
	0.38 (0.015)	1.14 (0.045)	34 (1.34)	D5	19.1 (0.8)	260	10	130	V-0	AB	-	
<b>O-LEADING-033</b>												
	0.15 (0.006)	0.3 (0.012)	34 (1.34)	D5	25.4 (1.0)	260	10	120	V-0	AB	-	
<b>O-LEADING-205</b>												
	0.2 (0.004)	0.3 (0.012)	34 (1.34)	D6	69.8 (2.7)	260	10	130	V-0	AB	-	
<b>O-LEADING-206</b>												
	0.15 (0.006)	0.33 (0.013)	17 (0.67)	D5	69.8 (2.7)	260	10	130	V-0	AB	-	

\* - CTI marking is optional and may be marked on the printed wiring board.

Making: Company name or file number and type designation. May be followed by a suffix to denote factory identification or burning test designation.  
Last updated on 2017-01-27

Questions? Print this page Terms of Use Page Top

Implications: Using this information to identify the product is not a warranty. ZPMV2.E490354 is a wiring, printed - component. 10



#### Test Report

No. CAVE1805164701

Date: 03 Apr 2018

Page 2 of 8

Test Results:

Test Part Description:

Specimen No. **SGS Sample ID** **Description**  
SN1 CAN18-051647.001 Green "PCB"

Remarks:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

Test Method: With reference to IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017, IEC 62321-6:2015 and IEC 62321-8:2017, analyzed by ICP-OES, UV-Vis and GC-MS.

Test Item(s)	Limit	Unit	MDL	Det
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	9
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	1,000	mg/kg	8	ND
Sum of PBBs	1,000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND
Pentabromodiphenyl ether	-	mg/kg	5	ND
Hexabromodiphenyl ether	-	mg/kg	5	ND
Heptabromodiphenyl ether	-	mg/kg	5	ND
Octabromodiphenyl ether	-	mg/kg	5	ND
Nonabromodiphenyl ether	-	mg/kg	5	ND
Decabromodiphenyl ether	-	mg/kg	5	ND
Sum of PBDEs	1,000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND
Pentabromodiphenyl ether	-	mg/kg	5	ND



SGS is a global leader in testing, inspection and certification services. We are committed to providing our clients with the highest quality of service and the most reliable results. Our services are recognized by the international community and are a key factor in the success of many of the world's leading companies. SGS is a member of the ISO 9001:2015 standard and is committed to continuous improvement. For more information, please visit our website at [www.sgs.com](http://www.sgs.com).



## Packaging & Delivery

Packaging Details	16 years professional OEM pcb board manufacturer
Delivery Detail	7-12days



## FAQ

**1. How do O-Leading ensure quality?**

Our high quality standard is achieved with the following.

**1.The process is strictly controlled under ISO 9001:2008 standards.**

**2.Extensive use of software in managing the production process**

**3.State-of-art testing equipments and tools. E.g. Flying Probe, X-ray Inspection, AOI (Automated Optical Inspector) and ICT (in-circuit testing).**

**4.Dedicated quality assurance team with failure case analysis process**



## **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, Telfon, aluminum/copper-based boards, PI, etc.**

### **4. What data are needed for PCB production?**

**It is best to provide data in Gerber 274-X format. In addition, Cam350, CAD, Protel 99se, PADS, DXP and Eagle can also be processed.**

### **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.**