

# 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

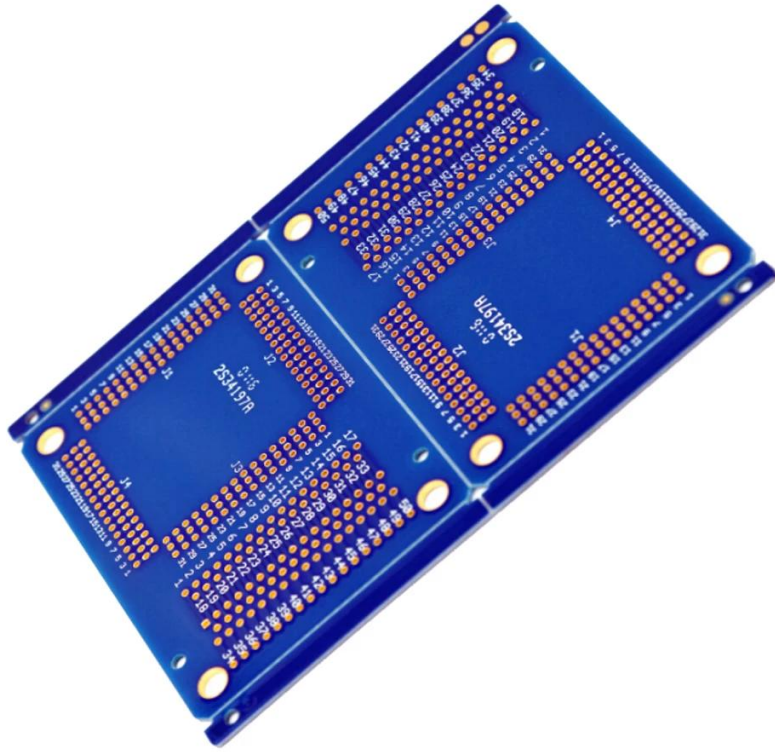
### Quick Details

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 pcha manufacturer	Min. Line Spacing	0.2mm
color	blue ,red ,green,black,yellow	price	\$0.1-\$10
design type	client requirement	size	0.01m3-10m3

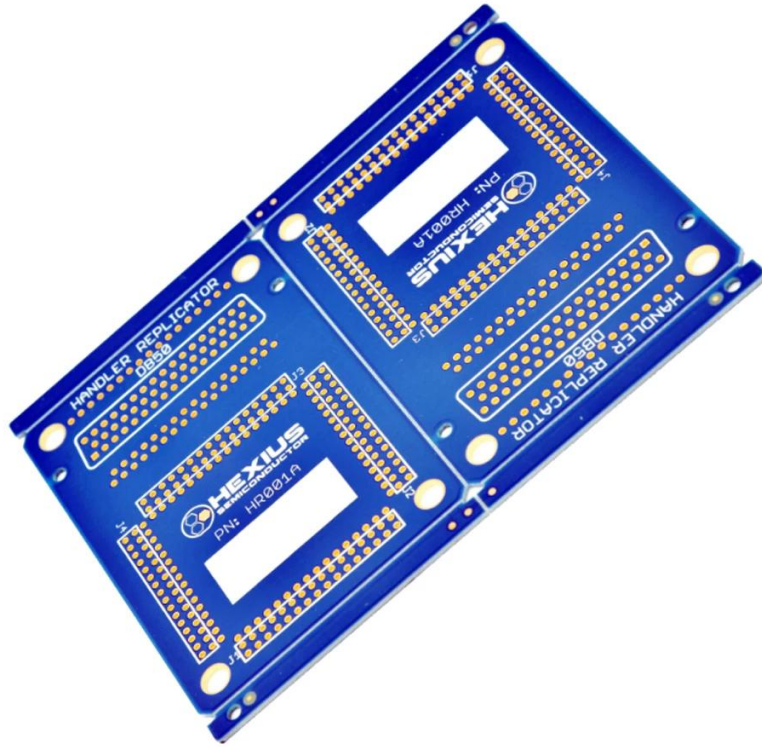
## 16 years professional OEM pcb board manufacture

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					

**O-LEADING**  
To Be **Reliable**, To Be **Valuable**



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



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

[Small volume pcb manufacturer](#)

Our Team







Certifications



**QUALITY MANAGEMENT SYSTEM CERTIFICATE**  
 Certificate No: 16118Q10347R05

**We hereby certify that**  
**O-LEADING SUPPLY CHAIN(HK) CO.,LIMITED**  
 Credit No: 61691591-000-07-17-2  
 Registration Add: ROOM 603D 6/F HANG PONT COMMERCIAL BUILDING,31 TONKIN ST,CHEUNG SHA WAN,KL, HK  
 Business Add: 1313 Floor 13 Fortune Building, Danstui Town Huiyang District, Huizhou, Guangdong, China

Has implemented and maintains a **Quality Management System**  
 Which fulfills the requirements of the following standards  
 GB/T19001-2016 idt ISO9001:2015

**Scope of certification**  
 Sales of printed circuit boards

Initial Issuance period: February 27, 2018  
 This certificate is valid during: February 27, 2018 -- February 26, 2021  
 This certificate is invalid without CICC qualified label in the following period

First supervision and audit	Qualified mark	Second supervision and audit	Qualified mark
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The certification registration scope shall include those production services scope which fall to be covered by the relevant effective administrative permission and qualification permission required by the state. The effectiveness of this certificate shall be evaluated by annual surveillance audit of CICC. The certificate shall be valid when used together with the surveillance audit conclusion. The related information of this certification can be searched at the public website of company www.cicc.com.cn.

201726 201VZL430354 - Wiring, Printed - Component

**UL ONLINE CERTIFICATIONS DIRECTORY**

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

For enhanced search functionality, please visit [UL's Global Databases](#).  
 Click on a product designation for complete information.  
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**Wiring, Printed - Component**

See General Information for Wiring, Printed - Components

**O-LEADING SUPPLY CHAIN CO LIMITED** E490354  
 Fortune Building, Nanheng West Road  
 Room 1313  
 Huizhou, Guangdong 516211, CHINA

	Cond Width			SS/ DS/ Diam	Area	Solder		Diper		Flame	RoHS	C
	Min	Max	Edge			Min	Max	Temp	Class			
Typ	max(in)	mm(in)	mic(mil)	DS0	mm <sup>2</sup> (in <sup>2</sup> )	C	sec	C	Class	DSR	I	
<b>Multi-layer (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	130	V-0	-	-	
<b>O-LEADING-407</b>												
	0.08 (0.003)	0.2 (0.008)	17 (0.67)	D5	9.2 (0.4)	260	10	130	V-0	NI	-	
<b>Multi-layer printed wiring boards.</b>												
<b>O-LEADING-408</b>												
	0.125 (0.005)	0.125 (0.005)	12 (0.47) 31(1.25)	D6	50.8 (2.0)	260	20	130	V-0	NI	*	
<b>Single layer printed wiring boards.</b>												
<b>O-LEADING-002</b>												
	0.76 (0.015)	1.14 (0.045)	34 (1.34)	S5	19.1 (0.8)	260	10	105	V-0	NI	-	
<b>O-LEADING-003</b>												
	0.38 (0.015)	1.14 (0.045)	34 (1.34)	S5	19.1 (0.8)	260	10	130	V-0	▲	-	
<b>O-LEADING-033</b>												
	0.15 (0.006)	0.3 (0.012)	34 (1.34)	S5	25.4 (1.0)	260	10	120	V-0	NI	-	
<b>O-LEADING-205</b>												
	0.1 (0.004)	0.3 (0.012)	34 (1.34)	D6	69.6 (2.7)	260	10	130	V-0	NI	-	
<b>O-LEADING-206</b>												
	0.15 (0.006)	0.33 (0.013)	17 (0.67)	D5	69.6 (2.7)	260	10	130	V-0	NI	-	

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

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

Questions? [Print this page](#) [Terms of Use](#) [Page Top](#)

[http://www.ul.com/ulcertification/60354/201VZL430354/Wiring,Printed-Component](#)



**Test Report** No. CANEC1805164701 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 62321-4:2014+A1:2017, IEC62321-5:2013, IEC62321-7-2:2017, IEC 62321-6:2015 and IEC62321-8:2017, 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
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	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 pleased to announce the launch of its new online platform for the provision of test results. The platform is designed to provide a secure and efficient way for clients to access their test results. The platform is available in English, French, German, Italian, Japanese, Korean, Spanish, and Chinese. For more information, please contact your local SGS office or visit [www.sgslab.com](#).

Member of the SGS Group (SGL SA)



## 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.**