

# 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. ([china pcb manufacturer](#))

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. ([power bank pcb board Printed](#))

## Product Description

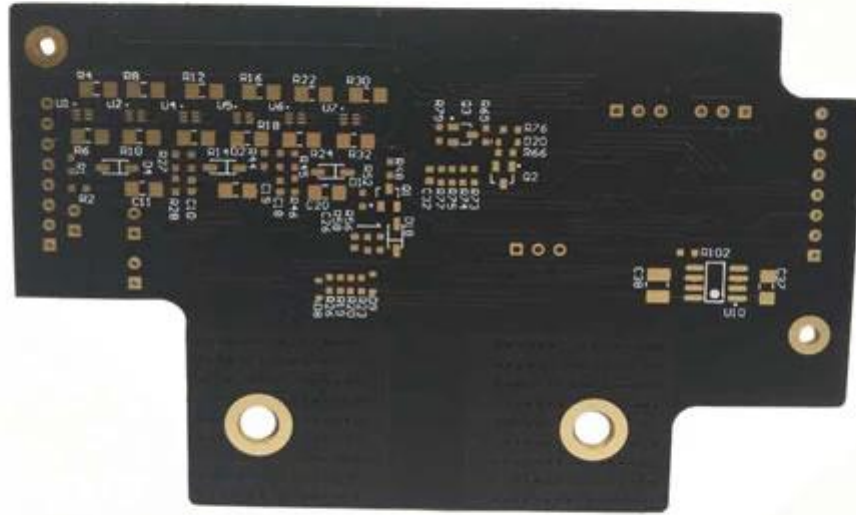
Place of Origin	Guang dong, China (Mainland)	Brand Name	O-Leading
Base Material	FR-4,,Aluminum	Copper Thickness	0.5oz-5oz
Min. Hole Size	0.2mm	Min. Line Width	0.2mm
Surface Finishing	immersion gold ,OSP,lead free HASL	Min. Line Spacing	0.2mm
applicable to	led,mobile phone,air conditioners,washing machines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

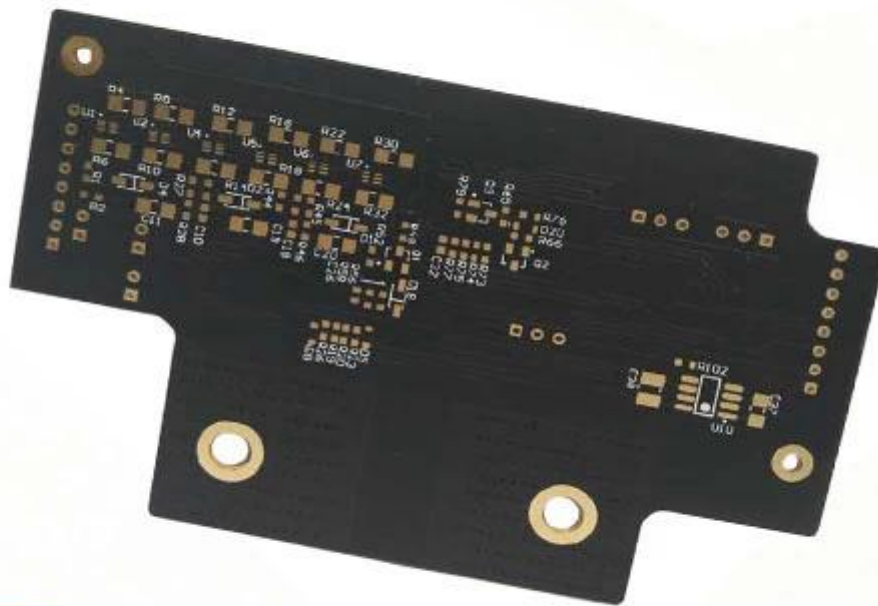
## Production Capability

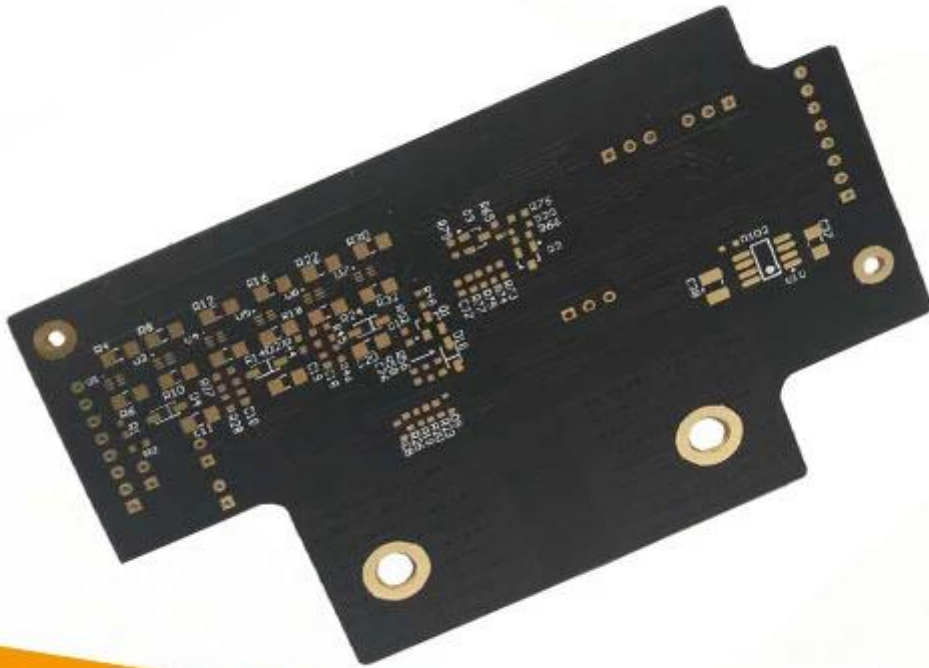
### 16 years professional OEM pcb board manufacture

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)

[HDI pcb Printed circuit board](#)

Our Team





---

Factory PCB

---



Automatic vacuum press machine



Drilling Machine



Pattern Plating Machine



Scrubbing Machine



Developing Machine



Routing Machine



High-speed flying probe machine



E-test Machine

---

Factory SMT

---



# Certifications

CICC INSPECTION CERTIFICATION



**嘉泰认证**

**QUALITY MANAGEMENT SYSTEM CERTIFICATE**

Certificate No: 18118Q10347R05

**We hereby certify that**

**O-LEADING SUPPLY CHAIN(HK) CO.,LIMITED**

Credit No: 61691591-000-07-18-7

Registration Add: FLAT/RM 1205 12/F TAI SANG BANK BUILDING 130-132 DES VODEUS ROAD CENTRAL HK

Business Add: 1213, Floor 13, Fortune Building, Danshui 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  
Renewal date: April 22, 2019  
This certificate is valid during: April 22, 2019 – February 26, 2021  
This certificate is invalid without CICC qualified label in the following period

First supervision and audit	Second supervision and audit	Qualified mark
-----------------------------	------------------------------	----------------

The certification registration number does not include those production stages which fail to be covered by the relevant effective administrative procedures and qualification procedures stipulated by the state. The effectiveness of this certificate shall be restricted to those activities which are covered by the certification. The actual information of this certification can be searched on the internet of CICC www.cicc.com.cn by the site of internet www.cicc.com.cn.






CICC INSPECTION CERTIFICATION



**嘉泰认证**

**质量管理体系认证证书**

证书号: 18118Q10347R05

**兹证明**

**诚领供应链(香港)有限公司**

统一社会信用代码: 61691591-000-07-18-7

注册地址: 香港中環德輔道中130-132號大生銀行大廈1205室

经营地址: 广东惠州惠阳淡水南亨西路财富大厦13楼1313

**建立的质量管理体系符合**  
GB/T19001-2016 idt ISO9001:2015 质量标准适用条款的要求

**认证范围**  
印刷线路板的销售

初次获证日期: 2018年02月27日  
换证日期: 2019年04月22日  
证书有效期: 自2019年04月22日至2021年02月26日  
在下列期限内, 未经CICC黏贴合格标贴, 本证书无效

第一次监督	第二次监督	黏贴处
-------	-------	-----

本证书认证范围不包括未取得有效的国家规定的行政许可、资质许可的产品/服务范围; 本证书通过CICC定期监督审核保持, 与年度《保持认证通知书》共同方为有效; 本证书信息可在国家认监委网站: www.cnca.gov.cn及CICC网站www.cicc.com.cn查询。










Test Report

No. SZXEC1900530401 Date: 30 Mar 2019 Page 1 of 6

O-LEADING SUPPLY CHAIN (HK) CO., LIMITED

1313.FLOOR 13, FORTUNE BUILDING, DANSHUI TOWN, HUIYANG DISTRICT, HUIZHOU, GUANGDONG, CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as : OSP

SGS Job No. : RP19-005089 - SZ
Date of Sample Received : 22 Mar 2019
Testing Period : 22 Mar 2019 - 30 Mar 2019
Test Requested : Selected test(s) as requested by client.
Test Method : Please refer to next page(s).
Test Results : Please refer to next page(s).

Conclusion : Based on the performed tests on submitted sample(s), the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP) , Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) , and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Tina
Tina Fan
Approved Signatory



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms-and-conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/terms-and-conditions/ElectronicDocuments.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that unless he/she expressly agrees to the Company's liability in the event of its interest only and within the limits of Client's instructions, it is the Company's sole responsibility to its Client and this document does not constitute a contract. In the absence of such agreement, all legal rights and obligations under the transaction documents, including but not limited to a transaction document, shall remain unaffected by the Company's liability. Any disclaimer, limitation, waiver or indemnification to the contrary appearing in this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this report refer only to the samples tested.

Member of the SGS Group (SGS SA)



Test Report

No. SZXEC1900530401 Date: 30 Mar 2019 Page 2 of 6

Test Results :

Test Part Description :

Table with 3 columns: Specimen No., SGS Sample ID, Description. Row 1: SN1, SZX19-005304.001, 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.

Table with 5 columns: Test Item(s), Limit, Unit, MDL, 0/1. Lists various substances like Cadmium, Lead, Mercury, Hexavalent Chromium, Sum of PBBs, Monobromobiphenyl, etc.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms-and-conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/terms-and-conditions/ElectronicDocuments.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that unless he/she expressly agrees to the Company's liability in the event of its interest only and within the limits of Client's instructions, it is the Company's sole responsibility to its Client and this document does not constitute a contract. In the absence of such agreement, all legal rights and obligations under the transaction documents, including but not limited to a transaction document, shall remain unaffected by the Company's liability. Any disclaimer, limitation, waiver or indemnification to the contrary appearing in this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this report refer only to the samples tested.

Member of the SGS Group (SGS SA)



# ZPMV2.E490354 - WIRING, PRINTED - COMPONENT

## Wiring, Printed - Component

See General Information for Wiring, Printed - Component

**O-LEADING SUPPLY CHAIN (HK) CO LTD**  
 ROOM 1205, 12/F  
 TAI SANG BANK BLDG  
 130-132 DES VOEUS ROAD  
 CENTRAL, HONG KONG

E490354

Type	Cond Width		Cond Thk	SS/ DS/ DSO	Max	Max		Meets	C			
	Min	Edge			Area	Solder Limits	Oper Temp			Flame		
	mm(in)	mm(in)	mic(mil)		mm(in)	C	sec	C	Class	UL796	DSR	I
<b>Multilayer (mass laminate) printed wiring boards.</b>												
<b>O-LEADING-401</b>	0.1 (0.004)	0.3 (0.012)	34 (1.34)	DS	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)	DS	9.7 (0.4)	260	10	130	V-0	All	-	
<b>Multilayer printed wiring boards.</b>												
<b>O-LEADING-408</b>	0.125 (0.005)	0.125 (0.005)	12 (0.47) Int:136	DS	50.8 (2.0)	280	20	130	V-0	All	*	
<b>Single layer printed wiring boards.</b>												
<b>O-LEADING-002</b>	0.38 (0.015)	1.14 (0.045)	34 (1.34)	SS	19.1 (0.8)	260	10	105	V-0	All	-	
<b>O-LEADING-003</b>	0.38 (0.015)	1.14 (0.045)	34 (1.34)	SS	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)	SS	25.4 (1.0)	260	10	120	V-0	All	-	
<b>O-LEADING-205</b>	0.1 (0.004)	0.3 (0.012)	34 (1.34)	DS	69.6 (2.7)	260	10	130	V-0	All	-	
<b>O-LEADING-206</b>	0.15 (0.006)	0.33 (0.013)	17 (0.67)	DS	69.6 (2.7)	260	10	130	V-0	All	-	
<b>O-LEADING-D01</b>	0.14 (0.006)	0.15 (0.006)	33 (1.30)	DS	25.4 (1.0)	260	10	130	V-0	All	*	
<b>O-LEADING-S01</b>	0.25 (0.010)	0.25 (0.010)	17 (0.67)	SS	25.4 (1.0)	260	4	130	V-0	All	*	

WIRING, PRINTED - COMPONENT | UL Product iQ

<b>O-LEADING-S02</b>	0.2 (0.008)	0.2 (0.008)	17 (0.67)	SS	25.4 (1.0)	260	4	130	HB	▲	*	
<b>O-LEADING-S03</b>	0.25 (0.010)	0.25 (0.010)	34 (1.34)	SS	25.4 (1.0)	260	4	130	V-0	All	*	

\* - 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.

并不是所有出现在本数据库中的公司名称和产品都满足了UL跟踪检验服务的要求。只有带有UL标志的产品，才应该被视为经过UL认证，并满足UL跟踪检验服务的要求。注意查看产品上的标志。

UL 允许在线认证目录中所含材料的复制遵循以下条件：1.指南信息、装配、构造、设计、系统和/或认证（文件）必须在不篡改任何数据（或图纸）的情况下完整且无误导性地呈现。2.经 UL 允许从在线认证目录转载“声明必须出现在所摘录材料的邻近位置。此外，转载材料必须包含以下格式的版权声明：“© 2019 UL LLC”

# Packaging & Delivery

## Shipping service



Quick Turn Lead Time		
Layer Count:	Lead Tim	Special Requirement
1L/2L	2-3days	24 Hours,48 Hours
4L	3-4days	48 Hours
6L	4-5days	72 Hours
8L	5-6days	NA
10L	6-7days	NA
12L	7-8days	NA
14L	8-9days	NA

Standard Lead Time		
Layer Count:	Sample Lead Time	Volume order lead time
2L	4 days	10 days
4L	5 days	11 days
6L	6 days	12 days
8L	8 days	14 days
10L	10 days	16 days
12L	12 days	18 days
14L	14 days	20 days
16-32L	18 days	24 days

## 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  
Max PCB size: 510x460mm  
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