## Welcome to O-leading

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.

HDI PCB manufacturer china

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

PLEASE CLICK HERE FOR MORE INFORMATION [High Frequency PCB wholesales china

## **Product Description**

PCB P/N	LC057-V1
Layer Count	1L
Material	Base Ceramics
Board thk	1.6mm
copper thk	11oz
Smallest hole size	/
No. of holes (pcs)	/
line w/s	15mil
Impedance control. Y / N (Tol %)	N
Surface Finishing	ENIG( Au:0.05um)
Solder Mask Silkscreen	White / N/A
Single board size	Dim X (mm):89;Dim Y (mm):175
Panelisation	Dim X (mm):89;Dim Y (mm):175;No Of UPS:1
Special	N
Routing/Punching	CNC

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Halogen Free PCB manufacturer china

## 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.

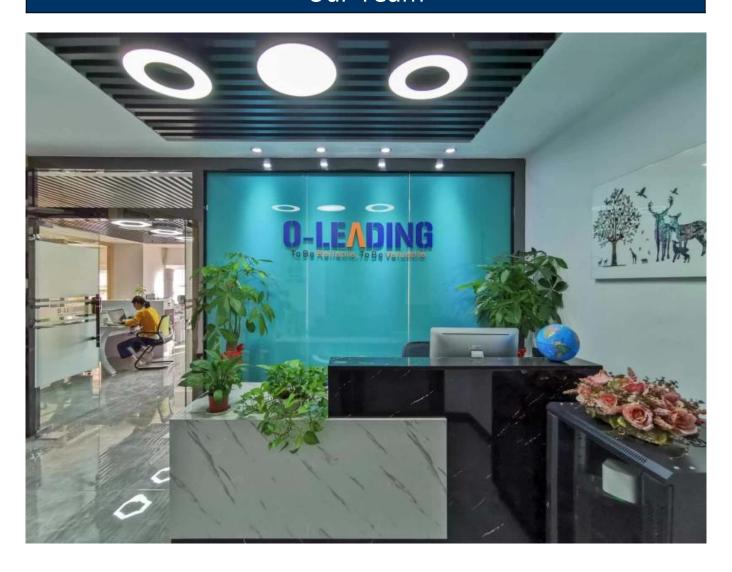
We believe in a win-win partnership with our customers. Our partnership will be mutually beneficial if we can provide you an edge on cost and quality.

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

## 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







Test Report

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

No. SZXEC1900530401

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

Date: 30 Mar 2019 Page 1 of 6

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

Test Results :

Test Part Description :

 Specimen No.
 SGS Sample ID
 Description

 SN1
 SZX19-005304.001
 Green\*PCB\*\*

(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, IEC682321-5:2013, 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	001
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	8
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1,000	mg/kg	8	ND
Sum of PBBs	1.000	mg/kg		ND
Monobromobiphenyl		mg/kg	5	ND
Dibromobiphenyl	12	mg/kg	5	ND
Tribromobiphenyl	15	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	6	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	12	mg/kg	5	ND
Tribromodiphenyl ether	2	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND
Pentabromodiphenyl ether		mg/kg	5	ND



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- Remark (14.0 post-times-days-scene)
(2586g to 4.1 post-times-form) (14.0 post-times-for

Member of the SGS Group (SGS SA)

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

22 Mar 2019 - 30 Mar 2019 Testing Period :

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 chiromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBBcs) and Phthalates such as Bis(2-ethylbexyl) phthalate (DBFP). Bibutyl phthalate (DBFP). To butyl phthalate (DBFP), and Diisobutyl phthalate (DBFP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/85/EU.

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

lina

Tina Fan Approved Signatory



Max

Max

#### UL Product iQ™



### ZPMV2.E490354 - WIRING, PRINTED - COMPONENT

#### Wiring, Printed - Component

See General Information for Wiring, Printed - Component

**Cond Width** 

#### O-LEADING SUPPLY CHAIN (HK) CO LTD

E490354

ROOM 1205, 12/F TAI SANG BANK BLDG 130-132 DES VOEUS ROAD CENTRAL, HONG KONG

		Min	Cond	SS/	Area	Solo	der	Oper		Meets	c
	Min	Edge	Thk	DS/	Diam	Lim	its	Temp	Flame	<b>UL796</b>	T
Type	mm(in)	mm(in)	mic(mil)	DSO	mm(in)	c	sec	c	Class	DSR	1
Multilayer (m	Multilayer (mass laminate) printed wiring boards.										
O-LEADING- 401	0.1 (0.004)	0.3 (0.012)	34 (1.34)	DS	12.7 (0.5)	260	10	130	V-0	3	50
O-LEADING- 407	0.08 (0.003)	0.2 (0.008)	17 (0.67)	DS	9.7 (0.4)	260	10	130	V-0	All	-
Multilayer pri	nted wiring bo	ards.	<del></del>						3		
O-LEADING- 408	0.125 (0.005)	0.125 (0.005)	12 (0.47) Int:136	DS	50.8 (2.0)	280	20	130	V-0	All	*
Single layer p	rinted wiring b	oards.							3 77	7.57	
O-LEADING- 002	0.38 (0.015)	1.14 (0.045)	34 (1.34)	SS	19.1 (0.8)	260	10	105	V-0	All	-
O-LEADING- 003	0.38 (0.015)	1.14 (0.045)	34 (1.34)	SS	19.1 (0.8)	260	10	130	V-0	<b>A</b>	-
O-LEADING- 033	0.15 (0.006)	0.3 (0.012)	34 (1.34)	SS	25.4 (1.0)	260	10	120	V-0	All	*
O-LEADING- 205	0.1 (0.004)	0.3 (0.012)	34 (1.34)	DS	69.6 (2.7)	260	10	130	V-0	All	-
O-LEADING- 206	0.15 (0.006)	0.33 (0.013)	17 (0.67)	DS	69.6 (2.7)	260	10	130	V-0	All	-
O-LEADING- D01	0.14 (0.006)	0.15 (0.006)	33 (1.30)	DS	25.4 (1.0)	260	10	130	V-0	All	*
O-LEADING- S01	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

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

 $<sup>\</sup>mbox{\ensuremath{\star}}$  - 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.

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# 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-4.5m

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