

# Welcome to O-leading

We are professional PCB manufacturers with more than ten years experience. Product range: single, double side, multilayer PCB, flexible PCB and MCPCB. We can provide a rapid prototyping service: S / S in 24 hours, 4-8 units in 48-96 hours of production.

[\(Golden Fingers PCB manufacturer china\)](#)

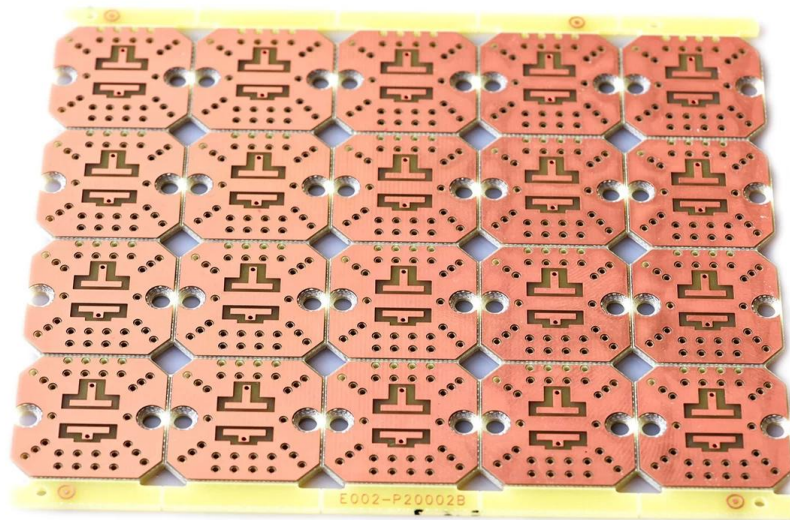
COPPER PLATE HOLES MINIMUM .025 AVG, .020 MIN .. HOLES CAN NOT BE CONNECTED

Package with colorless transparent bubble film, 25 pieces / bag, put the desiccant on the side, put the humidity indicator board on the upper side

CLICK THIS FOR FURTHER INFORMATION:

## Product description

PCB P / N	LE-500V1
Counting layers	1L
Material	Basic ceramics
Board of Directors	1.6 mm
thk of copper	1 oz
Smallest hole size	2.0 mm
Number of holes (pcS)	16
line w / S	20 / 20mil
S / N impedance check (Tol%)	N
Surface finish	ENIG (Au: 0.05um)
Silkscreen welding mask	White black
Single dimensions	Dim X (mm): Dim X (mm): 100; Dim Y (mm): 115
Panelisation	Dim X (mm): 100; Dim Y (mm): 115; UPS no: 1
Special: peelable mask	N
Routing / Punching	Countersunk CNC screw +



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

[Porcelain prototype for PCB assembly](#)

## FAQ

1. How does O-Leading guarantee quality? [Supplier of hard gold plating](#)

Our high quality standard is obtained with the following.

1. The process is strictly controlled according to ISO 9001: 2008 standards.
2. Extensive use of software in the management of the production process
3. Cutting-edge testing tools and tools. For example. Flying Probe, X-ray Inspection, AOI (Automated Optical Inspector) and ICT (in-circuit test).
4. Specified quality assurance team with failure case analysis process
5. Training and continuous training of personnel

2. How does O-Leading keep the competitive price?

In the last decade, the prices of many raw materials (eg copper, chemicals) had doubled, tripled or quadrupled; The RMB Chinese currency had appreciated 31% against the US dollar; And our labor costs have also increased significantly. However, O-Leading has kept our prices constant. This is all about our innovations in reducing costs, avoiding waste and improving efficiency. Our prices are very competitive in the industry at the same level of quality.

We believe in a win-win partnership with our customers. Our partnership will be mutually beneficial if we are able to provide you with an advantage in terms of cost and quality.

3. What types of cards can the O-Leading process use?

FR4 common, high TG and halogen-free boards, Rogers, Arlon, Telfon, aluminum / copper boards, PI, etc.

4. What data are needed for PCB production?

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

5. What is the typical process flow for multilayer PCBs?

Cutting material → Internal dry film → Internal etching → Internal AOI → Multi-bond → Layer overlapping Pressing → Drilling → PTH → Plating → External dry film → Plating → External engraving → External AOI → Welding mask → Component mark → Finishing surface → Routing → E / T → 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

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 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> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/terms-and-conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions. If any, the Company's sole responsibility is to the Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced or used, without prior written approval of the Company, for any advertisement, marketing, or for any other purpose. The content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

www.sgs.com/terms-and-conditions  
SGS (UK) Ltd, Regent House, 40 Abchurch Lane, London EC4N 3DF, United Kingdom. Tel: 5181200 / 86-755-25328888 / 86-755-83106190 www.sgs.com.cn  
中國·深圳·支那區新區中區40號支那區工業區408室 郵政編碼: 518120 電話: 755-25328888 傳真: 755-83106190 e: sgs.china@sgs.com

Member of the SGS Group (SGS SA)



## 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"

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	Q/Z
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	-	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



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> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/terms-and-conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions. If any, the Company's sole responsibility is to the Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced or used, without prior written approval of the Company, for any advertisement, marketing, or for any other purpose. The content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

www.sgs.com/terms-and-conditions  
SGS (UK) Ltd, Regent House, 40 Abchurch Lane, London EC4N 3DF, United Kingdom. Tel: 518120 / 86-755-25328888 / 86-755-83106190 www.sgs.com.cn  
中國·深圳·支那區新區中區40號支那區工業區408室 郵政編碼: 518120 電話: 755-25328888 傳真: 755-83106190 e: sgs.china@sgs.com

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**

E490354

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

Type	Cond Width		Cond Thk mic(mil)	SS/ DS/ DSO	Max		Max		Meets UL796 Class	C T DSR	I
	Min	Min			Area	Solder	Oper	Flame			
	mm(in)	mm(in)			Diam	Limits	Temp	Temp			
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	-	-
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 printed wiring boards.											
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 printed wiring boards.											
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	▲	-
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

<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取材料的邻近位置。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