# 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.

PLEASE CLICK THESE FOR MORE INFORMATION

## **Product Description**

Layers: 2 Material: FR4 Finished Thickness: 1.57mm +/- 10% Outer Layer Copper Thickness: 1oz Finish: ENIG (Au:2-5u") Soldermask (Color): Both Sides, LPI (Black) Silkscreen (Color): Both Sides, White

### **Electrical test**

FINISH: THIS BOARD SHALL BE IMMERSION GOLD PLATED ACCORDING TO IPC-6012. THICKNESS SHALL BE .050uM OVER 3-6uM NICKEL.

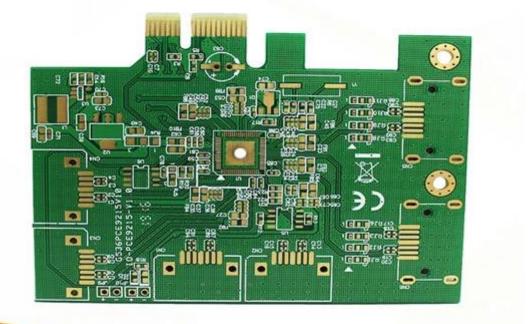
COPPER PLATE HOLES MINIMUM .025 AVG, .020 MIN.. HOLES MAY NOT BE PLUGGED, EXCEPT VIAS .500 FINISH OR SMALLER.

### Layer Key:

- \_\_\_\_\_
- \*.GM4: Board Outline
- \*.TXT: NC Drill File
- \*.GTP: Top Paste
- \*.GTO: Top Silkscreen
- \*.GTS: Top Soldermask
- \*.GTL: Top Copper Layer
- \*.GBL: Bottom Copper Layer
- \*.GBS: Bottom Soldermask
- \*.GBO: Bottom Silkscreen
- \*.GBP: Bottom Paste











www.o-leading.com



Mobile phone pcb board manufacture china





### Factory PCB





Drilling Machine



Pattern Plating Machine



Scrubbing Machine



Developing Machine



Routing Machine



High-speed flying probe machine



E-test Machine

- Factory SMT











# Certifications





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

Test Report

# SGS

#### Test Report

### No. SZXEC1900530401

Date: 30 Mar 2019 Page 2 of 6

#### Test Part Description :

Test Results :

## Specimen No. SGS Sample ID Description SN1 SZX19-005304.001 Green"PCB"

Date: 30 Mar 2019 Page 1 of 6

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

No. SZXEC1900530401

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, Marcury, Cadmium, Horavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Big2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dbutyl phthalate (DBP), and Disbotyl phthalate (DBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/85/EU.

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

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

Tina

Tina Fan Approved Signatory



Member of the SGS Group (SGS SA)

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 2011/85/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	001
Cadmium (Cd)	100	mg/kg	2	ND
_ead (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		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
Dibromodiphen yl ether		mg/kg	5	ND
Tribromodiphenyl ether		mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND
Pentabromodiphenyl ether	-	mg/kg	5	ND



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### UL Product iQ™



E490354

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

	Cond	Width			Max			Max			
		Min	Cond	SS/	Area	Solo	der	Oper		Meets	с
	Min	Edge	Thk	DS/	Diam	Lim	its	Temp	Flame	UL796	т
Туре	mm(in)	mm(in)	mic(mil)	DSO	mm(in)	с	sec	с	Class	DSR	L
Multilayer (m	ass laminate) p	rinted wiring l	ooards.								
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 pri	nted wiring bo	ards.	A.,								
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

O-LEADING- S02	0.2 (0.008)	0.2 (0.008)	17 (0.67)	SS	25.4 (1.0)	260	4	130	НВ		*
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	*

\* - 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-4.5mm 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