## 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 Oleading 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. Engine Power Module manufacturer china

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

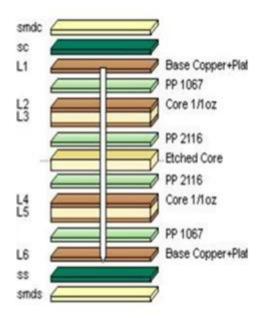
## **Product Description**

Layer Count	6L MLB
Material	Mid-Tg EM-370(5)
Board thk	1.27+/-0.1mm
line w/s	inn 75/75um; out 75/100um
Min drill size [FHS/DHS]	0.25/0.50mm
Surface finish	Au Plating + OSP
Other	HF

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

Layer structure





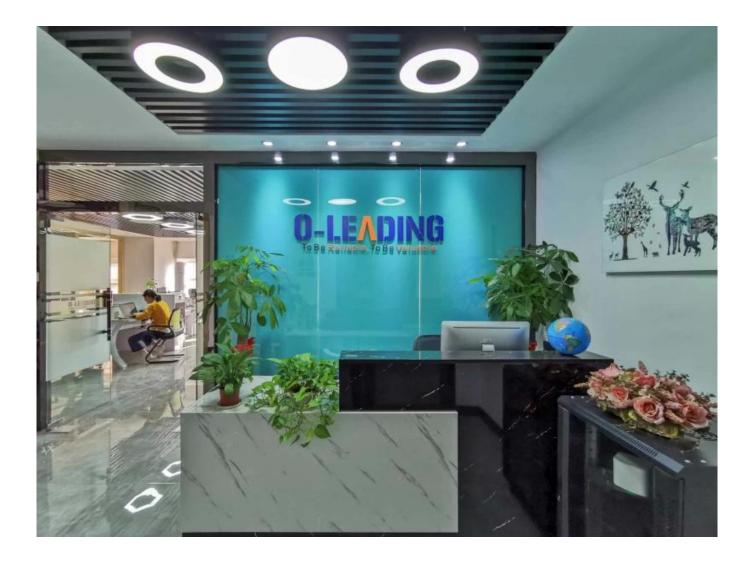


		1-11

www.o-leading.com

Printed circuit board supplier, Multilayer pcb Printed company





### 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 Disobutyl 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



events, bit devices is a local to the Q-market particle in the General Conditions of the Server constraints of the General Conditions of the Gene n contained any The I ising all the an annual CNLDescharscharges.com 1058 (st. 4.) 現代の日本語が予約、960、別本作品 briefs Lingges (bend. Sredier Dire 518129 (186-755) [25328888 f 186-755) [25106190 Winkerspaperoid com on 今回 予約1. 其形反何正言を指示430年11回工业近日格SGS大衛 載6載、518129 t 186-755) [2328888 f 186-755) [33106190 P sign: AnnualBega.com Member of the SGS Group (SGS SA)

### 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 p	rinted wiring b	oards.	n.					600	3 7	200	
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.

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