



# Production Process

18 years experience in one-stop PCB and PCBA, we can make your idea come true,



CONSUMER ELECTRONICS

AUTOMOTIVE ELECTRONICS

INDUSTRIAL CONTROL

INTELLECTUALIZED HOUSEHOLD CONTROL

OTHER



30%  
CONSUMER ELECTRONICS



18%  
INTELLECTUALIZED HOUSEHOLD CONTROL

20%  
AUTOMOTIVE ELECTRONICS



12%  
OTHER



20%  
INDUSTRIAL CONTROL







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Factory PCB

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Automatic vacuum press machine



Drilling Machine



Pattern Plating Machine



Scrubbing Machine



Developing Machine



Routing Machine



High-speed flying probe machine

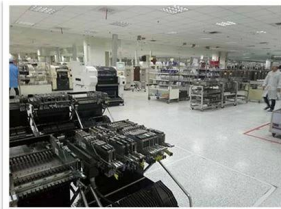


E-test Machine

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Factory SMT

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Skyworth 创维

HET 和而泰  
HET INTELLIGENT CONTROL

dongweikeji  
东威科技

美的 Midea

STAR-NET  
星网锐捷

FORYOU  
ADAYO 华阳集团

EDIFIER®

Cultraview 金锐显

3nod 三诺

T&W

TCL

AcBel 康舒科技  
ACBEL POLYTECH INC.

Honeywell

Schneider  
Electric

ZTE中兴

EMERSON

BYD

PHILIPS

TE  
connectivity

VIDEOTON



**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 tests(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



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**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, IEC62321-5:2013, 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	0/1
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



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## 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	SS/ DS/ DSO	Max	Max		Meets	C		
	Min	Edge			Area	Solder	Oper			Flame	
	mm(in)	mm(in)	mic(mil)		Diam	Limits	Temp	Class	UL796	T	
<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.

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<b>PCB 规格</b>	
层数	1-32
铜厚	1 / 3oz-12oz
外层铜厚 / 内层铜厚	3.0mil / 3.0mil
外层铜厚 / 内层铜厚	4.0mil / 4.0mil
孔径	10 : 1
板厚	0.2mm-5.0mm
板宽 * 板长 (mm)	635 * 1500mm
表面处理	4mil
Plated 厚度	+/- 3mil
Blind / Buried Vias (All)	□
表面处理 (铜厚, 铜厚)	□
材料	FR-4, FR-4high Tg. 铜厚 铜厚, 铜厚, 铜厚铜厚, 铜厚 铜厚
表面处理	HASL, OSP, ENIG, HAL-LF, 铜厚, 铜厚 铜厚, □ 铜厚, 铜厚

<b>SMT 规格</b>	
PCB 材料	FR-4, CEM-1, CEM-3, 铜厚 铜厚
PCB 尺寸	510x460mm
PCB 尺寸	50x50mm
PCB 厚度	0.5mm-4.5mm
孔径	0.5-4mm
孔径 铜厚 铜厚	0201
孔径 铜厚 铜厚 铜厚	0603 铜厚
孔径 铜厚 铜厚	15mm
孔径 铜厚	0.3mm
孔径 BGA 铜厚	0.4mm
孔径 铜厚	+/- 0.03mm



# 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

## O-LEADING

### 1. O-Leading 100% 100% 100%?

100% 100% 100% 100% 100%.

1.1 100% ISO 9001 : 2008 100% 100% 100%.

1.2 100% 100% 100% 100% 100%

1.3 100% 100% 100% 100% : 100% 100%, X-ray 100%, AOI (Automated Optical Inspector) 100% ICT (in-circuit testing).

1.4 100% 100% 100% 100% 100% 100%

1.5. 100% 100% 100%

### 2. O-Leading 100% 100% 100%?

100% 100% 100% (100% : 100%, 100% 100%) 100% 100%, 100% 100% 100% 100%. 100% 100% 100% 100% 31% 100%. 100% 100% 100%.

100% O-Leading 100% 100% 100%. 100% 100%, 100% 100% 100% 100% 100% 100%. 100% 100% 100% 100% 100% 100% 100% 100%.

100% 100% 100% 100%. 100% 100% 100% 100% 100% 100% 100% 100% 100% 100%.

### 3. O-Leading 100% 100% 100% 100%?

100% FR4, 100% TG 100% 100% 100%, Rogers, Arlon, Telfon, 100% / 100% 100%, PI 100%



**4. PCB 及 PCBA 的製造過程是什麼?**

- 4.1 物料清單 BOM (Bill of Materials) : 物料清單, 物料清單表 及 物料清單.
- 4.2 PCB Gerber 檔.
- 4.3 PCB 的製造及 PCBA 的製造.
- 4.4 物料清單.
- 4.5 物料清單 及 物料清單 的製造 及 物料清單.

**5. PCB 的製造過程是什麼?**

物料清單 → 物料清單表 → 物料清單 → PCB AOI → 物料清單 → 物料清單 及 物料清單 → 物料清單 → PTH → 物料清單 → 物料清單 及 物料清單 → 物料清單 → 物料清單 → PCB AOI → 物料清單 → 物料清單 及 物料清單 → 物料清單 → 物料清單 → E / T → 物料清單.

**6. HDI 的製造過程是什麼?**

物料清單 及 物料清單 : 物料清單 及 物料清單, VCP 物料清單, 物料清單 及 物料清單, LDI 物料清單 及 物料清單 物料清單 物料清單, 物料清單 物料清單 Mitsubishi Hitachi物料清單, LDI 物料清單 Screen (Japan)物料清單, 物料清單 物料清單 Hitachi物料清單 物料清單, 物料清單 物料清單 物料清單 物料清單 物料清單.

**7. O-lead 的製造過程是什麼?**

O-lead 物料清單 ENIG, OSP, LF-HASL, 物料清單 (物料清單 / 物料清單), 物料清單, 物料清單, 物料清單 物料清單, 物料清單 物料清單 物料清單 物料清單 物料清單. HDI物料清單 物料清單 物料清單 OSP, ENIG, OSP + ENIG, BGA PAD 物料清單 0.3mm 物料清單 物料清單 物料清單 OSP OSP + ENIG物料清單 物料清單 物料清單.

**8. FPC 的製造過程是什麼? O-Leading 及 SMT 的製造過程是什麼?**

O-Leading物料清單 物料清單 8 物料清單 FPC物料清單 物料清單 物料清單, 物料清單 物料清單 2000mm \* 240mm物料清單 物料清單. 物料清單 物料清單 "Flex Capability"物料清單 物料清單 物料清單. 物料清單 物料清單 SMT 物料清單 物料清單 物料清單.

**9. PCB 的製造過程是什麼?**

- 物料清單;
- 物料清單;
- 物料清單;
- 物料清單 物料清單;
- PCB 物料清單;
- 物料清單;
- 物料清單 物料清單.

**10. PCB, PWB 及 FPC 的製造過程是什麼?**

PCB物料清單 物料清單 物料清單 物料清單.  
PWB物料清單 物料清單 物料清單 物料清單 物料清單 物料清單 物料清單.  
FPC物料清單 Flexible Printed Board物料清單 物料清單.

**11. PCB 的製造過程是什麼?**

PCB 物料清單 物料清單 物料清單 物料清單 物料清單.  
物料清單 Tg 物料清單 物料清單 物料清單.  
物料清單 CTE 物料清單 物料清單 物料清單 物料清單;  
物料清單 物料清單 : 物料清單 PCB物料清單 物料清單 50 物料清單 250 °C物料清單 物料清單.  
物料清單 物料清單; 物料清單 物料清單 物料清單 / 物料清單 物料清單 物料清單 PCB物料清單 物料清單. 物料清單 PCB物料清單 物料清單 物料清單 物料清單 物料清單; 物料清單 物料清單 物料清單 物料清單 物料清單 物料清單 物料清單.

**12. O-leading 的製造過程是什麼?**

O-leading物料清單 物料清單 PCB物料清單 FPC物料清單 PCB物料清單 物料清單 物料清單 物料清單 物料清單 物料清單 物料清單. 物料清單 物料清單 物料清單 物料清單 物料清單 物料清單 物料清單 物料清單 物料清單 物料清單.

**13. 物料清單 物料清單 物料清單?**

SI6000 soft POLAR INSTRUMENTS CITS 500s  
POLAR INSTRUMENTS CITS 500s