

Welkom bij O-leading

O-Leading streeft ernaar uw one-stop-oplossingspartner te zijn in de toeleveringsketen van EMS, inclusief PCB-ontwerp, PCB-fabricage en PCB-assemblage. We bieden enkele van de meest geavanceerde PCB-technologie, waaronder HDI-PCB's, meerlagige PCB's, Rigid-Flexible PCB's. ondersteuning van quick turn prototype tot medium & massaproductie. **[P.rofessional Rigid Flexible PCB-leverancier voor Raspberry Pi 4 ABS-behuizing](#)**

Over het algemeen zijn onze wereldwijde klanten erg onder de indruk van onze diensten: snelle respons, concurrerende prijs en kwaliteitsbewustzijn. Het bieden van waardevollere technische service en algehele oplossing is de weg die O-leidend is.

Kijkend naar de toekomst, zal O-leading zich zoals altijd concentreren op de innovatie en ontwikkeling van elektronica-productietechnologie en aanhoudende inspanningen leveren op het gebied van PCB & PCBA one-stop-service om eersteklas services te bieden en meer waarde voor onze klanten te creëren.

KLIK OP DEZE VOOR MEER INFORMATIE: **[Goedkope PCB-fabricage POE OEM-fabricage](#)**

O-LEADING
To Be **Reliable**, To Be **Valuable**

WE ALWAYS PROVIDE YOU

BEST HIGH DENSITY INTERCONNECT PCB

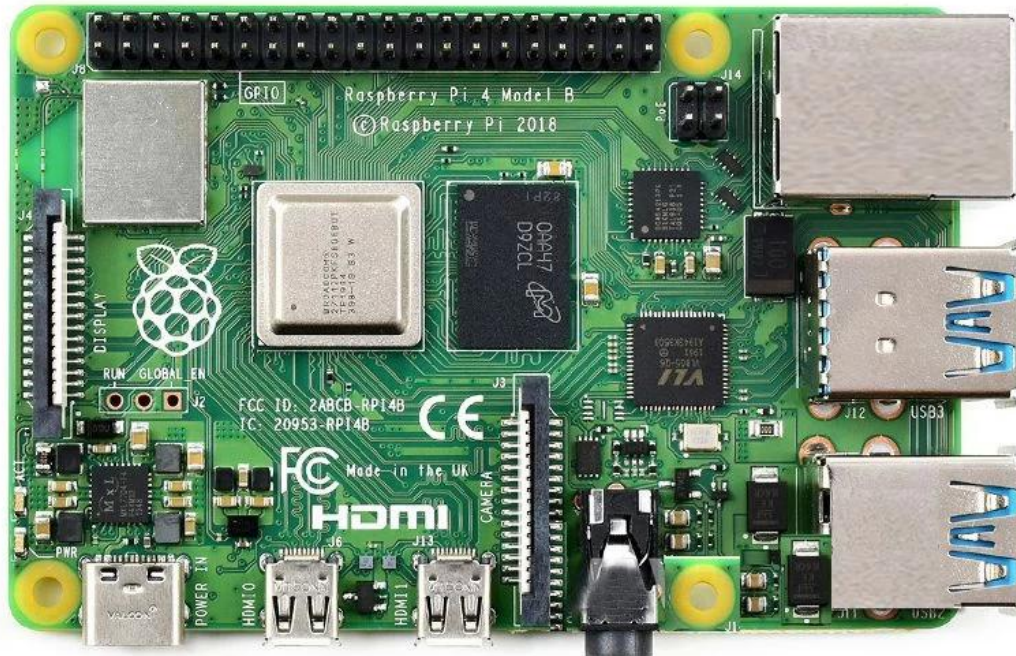
WE ALWAYS PROVIDE YOU

BEST RIGID-FLEXIBLE CIRCUIT

Productomschrijving

Raspberry Pi 4 8GB RAM

More Powerful Processor, Richer Multi-Media Capability, Faster Networking



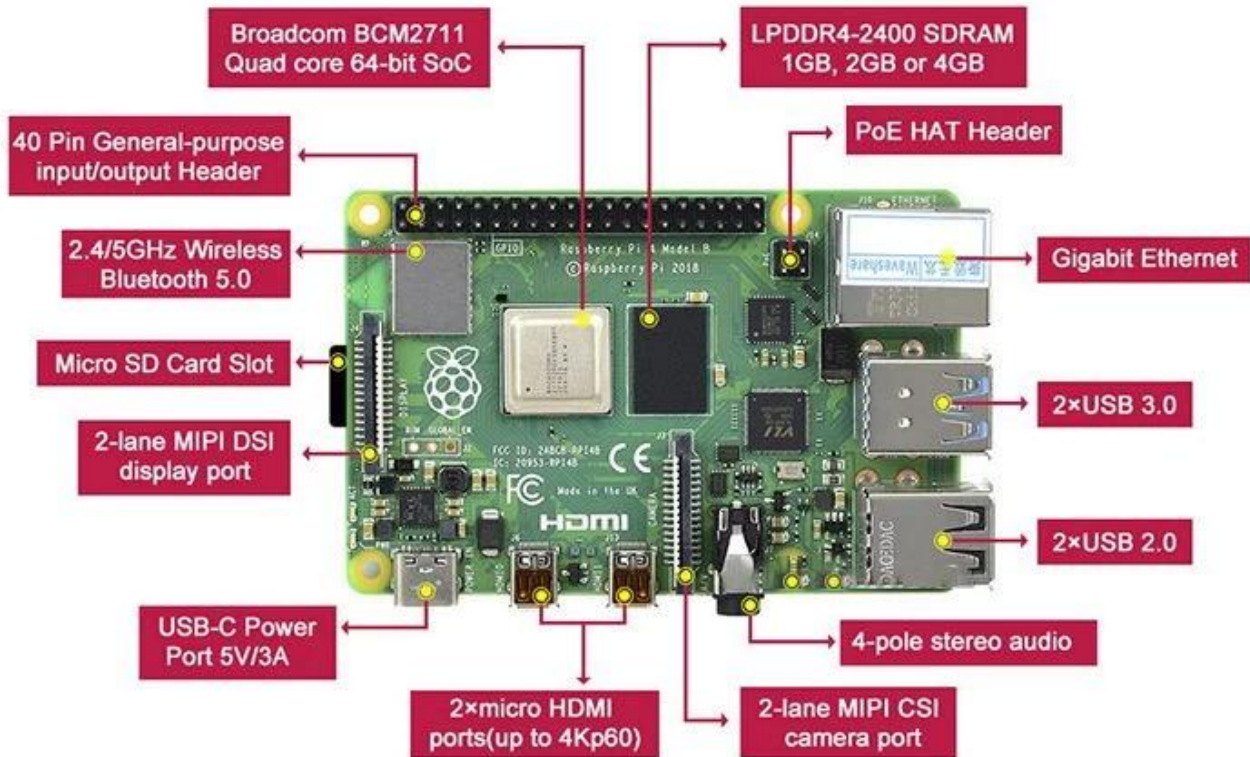
IMPROVEMENTS OF V1.2

1. In addition to the official USB Type-C cable, Pi 4B V1.2 now supports more other USB Type-C cables
2. Relocates the WLCSP SD card voltage switch, to protect the Pi 4B better
3. Optimizes silkscreen printing, to minimize the soldering and bridging in manufacturing process

* The Raspberry Pi 4 is optional, up to your choice.

Raspberry Pi 4 Completely Upgraded

More Powerful Processor, Richer Multi-Media Capability, Faster Networking



BCM2711B0

64-bit 1.5GHz Quad-core Processor

Choice Of RAM

2GB / 4GB / 8GB

4K Dual HDMI

4K High Resolution Dual Displays

Faster Networking

Gigabit ETH, Bluetooth 5.0, Dual-band WiFi

New USB3.0

2xUSB3.0 + 2xUSB2.0

USB-C Power

Upgraded Power Supply, More Powerful

BCM2711B0

64-Bit Quad-Core Processor

Cortex-A72
ARM Architecture

64-bit
Quad-core

1.5GHz
Frequency

Faster, more powerful CPU
Provides smooth experience like X86 desktop PC



4K Ultra High Definition

Dual Micro HDMI

Upgrade to dual micro HDMI instead of a full size HDMI
Dual displays, up to 60fps refreshing rate

Bluetooth 5.0 BLE

2.4G / 5G Dual-Band WIFI

Upgraded Bluetooth 5.0 BLE, better performance
Dual-band WIFI, along with the Gigabit Ethernet
Better connectivity, faster and more stable networking



New USB3.0 Ports

Faster Data Transmission

2xUSB 3.0 + 2xUSB 2.0
No more trouble when connecting with high speed devices

Raspberry Pi Versions Comparing

| | ZERO | ZEROW/ WH | 3A+ | 3B | 3B+ | 4B |
|--------------------|------------------------------|---------------|---|-----------------|---------------|------------------------------------|
| SOC | BCM2835 | | BCM2837B0 | | | BCM2711B0 |
| CPU | ARM11 Single-core 700MHz | | ARM Cortex-A53 Quad-core (3B 1.2GHz, 3A+/3B+ 1.4GHz) | | | ARM Cortex-A72 Quad-core 1.5GHz |
| GPU | Broadcom VideoCore IV@400MHz | | | | | Broadcom VideoCore IV@500MHz |
| RAM | 512MB | | 512MB | 1GB | | Choice of 2GB/4GB/8GB |
| USB | 1x micro USB | | 1x USB2.0 | 4x USB2.0 | | 2x USB2.0 + 2x USB3.0 |
| HDMI | Micro HDMI | | HDMI | | | Mini HDMI |
| Bluetooth | N/A | Bluetooth 4.1 | Bluetooth 4.2 | Bluetooth 4.1 | Bluetooth 4.2 | Bluetooth 5.0 |
| WiFi | N/A | 802.11 b/g/n | 3B: 802.11 b/g/n, others: 802.11 b/g/n/ac 2.4GHz/5GHz dual band | | | |
| Ethernet | N/A | | 100Mbps | | 300Mbps (USB) | 1000Mbps |
| PoE | N/A | | | | | Yes |
| Power Input | Micro USB (5V 2.5A) | | | | | USB Type-C (5V 3A) |
| Dimensions | 65 × 30 x 5 mm | | 65 × 56 mm | 85 x 56 x 17 mm | | |

2GB/4GB/8GB WHICH SHOULD I CHOOSE?

2GB

Suitable for running lots apps while GUI is not required, e.g. robot controller and smart car.

4GB

Suitable for graphic task or Internet application, e.g. watching video as normal PC, or deploying a network server.

8GB

Suitable for complicate multi-tasking, heavy server workloads e.g. dual display 4K video playing, AI depth vision learning.

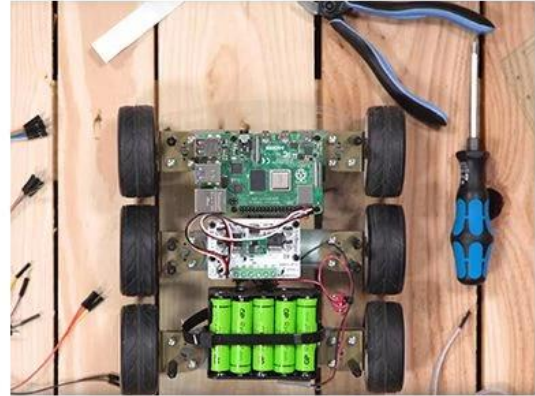
The total operational performance of Pi 4B is more than triple the 3B+'s, even the 2GB variant. Larger RAM has minor impact on performance if the RAM is just enough, therefore, we should choose the RAM capacity that best fits the target project. It is unnecessary to always choose the largest RAM.

Applications

Your Tiny, Dual-Display, Desktop Computer
...And Robot Brains, Smart Home Hub, Media Center, Game Console...



tiny dual-display desktop (balance work and life)



Raspberry Pi smart robot (try the AI magic)



Raspberry Pi game console (relive retro games)



Study and development (DIY endless possibilities)

Ons team

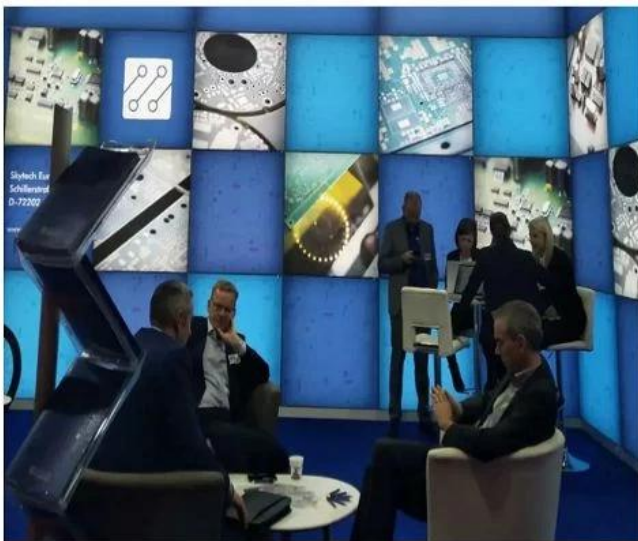
O-LEADING CUSTOMER

To be **RELIABLE**

- Q**uality first ,
- C**ustomer supreme ,
- S**cientifically management ,
- S**triving for famous brand



THE CUSTOMER IS KING



To be **VALUABLE**

- S**cience and technology keeps head ,
- P**ut people first ,
- B**e precise and practical ,
- C**ontribute sincerely

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



HOW O-LEADING MAKE A PROJECT FOR YOU

Hardware Dispenser Application Not

Automatic Dispenser Application Not

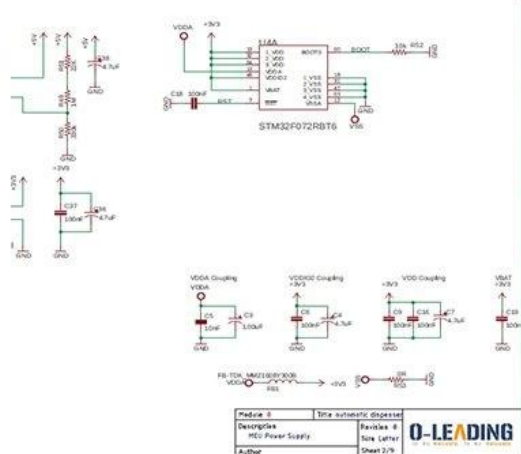
Voltage Table

| Volt Pin Number | Description |
|-----------------|-----------------|
| VDD | Battery voltage |
| +3V3 | +3.3V |
| +5V | +5V |
| USB +5V | USB 5V input |
| +5V/2 | Isolated +5V |
| +12V | 12V DC Drive |

STM32F072 PINOUT table

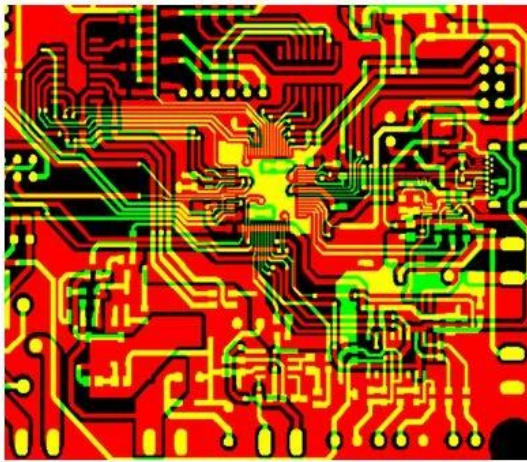
| Wire Name | Description | DIO | Mode | Note |
|-------------|--|-----|----------|-----------------------|
| SMTN_TOF | Shutdown Time of flight sensor | | Output | Logic '0' to shutdown |
| I2C_SCL_TOF | I2C communication with time of flight sensor | | I2C1 SCL | |
| I2C_SDA_TOF | I2C communication with thermopile sensor | | I2C1 SDA | |
| I2C_SCL_IR | I2C communication with thermopile sensor | | I2C2 SCL | |
| I2C_SDA_IR | I2C communication with thermopile sensor | | I2C2 SDA | |
| RATE_LC | Load cell control pins | | Output | |
| DOUT_LC | Load cell control pins | | Output | |

O-LEADING
TO BE RELIABLE, TO BE AVAILABLE

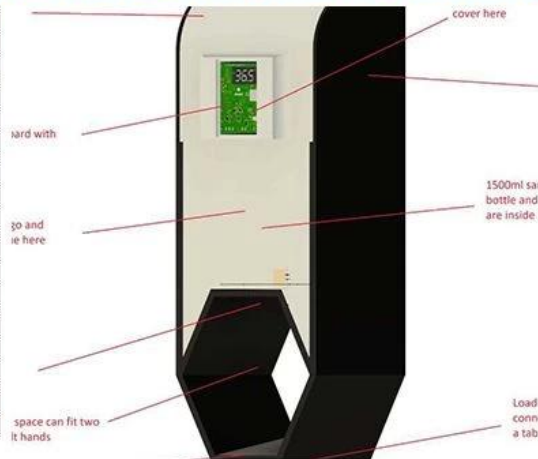


HARDWARE schematics

PCB PRODUCTION COMPONENTS SOURCING



| Qty | Value | Device | Parts | Description |
|-----|---------|---------------|---------|---------------------------------|
| 4 | AK500/2 | AK500/2 | X1, X2 | CONNECTOR |
| 1 | AK500/3 | AK500/3 | X7 | CONNECTOR |
| 1 | 1241148 | MA04-2 | SV2 | |
| 1 | PPPC04 | MA04-2 | SV1 | 8 POS, 4*2 FEMALE PIN HEAD |
| 1 | ML10 | ML10 | SV4 | HARTING |
| 1 | 8MHZ | XTALL_CSTCE8M | X5 | STCE8M00G52-R0 RESONATOR |
| 1 | 0R | R-0603 | R53 | Thick Film Resistors - SMD 0603 |
| 2 | 10R | R-0603 | R12, R5 | Thick Film Resistors - SMD 0603 |
| 8 | 100R | R-0603 | R1, R2 | Thick Film Resistors - SMD 0603 |
| 1 | 270R | R-0805 | R15 | Thick Film Resistors - SMD 0605 |
| 1 | 330R | R-0603 | R11 | Thick Film Resistors - SMD 0603 |
| 9 | 680R | R-0603 | R20, R3 | Thick Film Resistors - SMD 0603 |
| 17 | 1k | R-0603 | R9, R10 | Thick Film Resistors - SMD 0603 |
| 2 | 4.7k | R-0603 | R17, R6 | Thick Film Resistors - SMD 0603 |
| 2 | 5.1k | R-0603 | R18, R1 | Thick Film Resistors - SMD 0603 |
| 9 | 10k | R-0603 | R16, R3 | Thick Film Resistors - SMD 0603 |



PCB Assembly MECHANICAL DESIGN

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

CUSTOMER VOICE IS **EXTREMELY IMPORTANT** TO US

订单编号: 49335463501024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)




High quality usb power pcb , pcba manufacturer

★★★★★

Fancy has done an excellent job, whenever we write, she answered us within 1 second, O-leading is very perfect with fast delivery, fast logistics, the most important thing is good quality, good packaging, thank you!

[回复该评论](#)



oem customized rohs pcb drawing schematic s...

★★★★★


We received the boards, the quality is very good, the price is very reasonable, Fancy is very nice & smart & experienced, the logistics is super fast, I will come to see more in the future.

[回复该评论](#)

订单编号: 490224962001024670

United States


供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



High TG180 FR-4 Circuit HDI PCB 94V0 Board...

★★★★★

This is a very difficult PCB design, but we are lucky to find O-leading to support the PCB for us very good to a PCB supplier.




universal FR4 Multilayer PCB washing machine...

★★★★★

Fancy gives us very excellent service, very professional and experienced, O-leading is the best one of our suppliers, very happy to work with them.

订单编号: 49298271001024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)




High TG180 FR-4 Circuit HDI PCB 94V0 Board ...

★★★★★

perfect product, perfect PCB supplier!

[回复该评论](#)




oem customized rohs pcb drawing schematic s...

★★★★★

Very good and professional PCB product as usual!

[回复该评论](#)



Strip LED Aluminum FR-4 lighting PCB board 9...


★★★★★

High quality, fast delivery, good service, competitive price, lucky and happy to purchase from O-leading!

[回复该评论](#)

订单编号: 4939862201024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)




High quality Keyboard pcb & pcba Factory SMT...

★★★★★

Top quality, it's the right choice to choose O-leading to make the PCB & PCBA

[回复该评论](#)




Professional Printed Circuit Board Manufactur...

★★★★★

Very high quality PCB products, O-leading is the best PCB supplier that we have ever worked with.

订单编号: 44068794501034670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



High TG180 FR-4 Circuit HDI PCB 94V0 Board ...


★★★★★

We bought two batches, one by DHL, the other one by air, good quality and fast delivery!

LISTEN TO **CUSTOMER VOICE**

订单编号: 40903347501024670


供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



Strip LED Aluminum FR-4 lighting PCB board 9...

★★★★★

Very fast delivery! Fantastic, good job!!




Professional Printed Circuit Board Manufactur...

★★★★★

Very happy to great support from O-leading, they are not only professional on the PCB, but also provide good PCB products, very good supplier!

订单编号: 36919647001024670


供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



AML-S802 Quad-core Android embedded boar...

★★★★★

Good products




Fast delivery low cost pcb fabrication O-leadi...

★★★★★

Good supplier

订单编号: 37378603001024670


供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



hot sale rigid-flexible PCB with 0.2mm BGA an...

★★★★★


very professional supplier



High Quality custom FPCB/Flex PCB/FPC/Flexi...

★★★★★


Good product



OEM ODM PCBA Bluetooth Wireless Marking G...

★★★★★

high soldering quality




Electronic parts haptic pcba Circuit Board asse...

★★★★★

Very Good product

订单编号: 36919647001024670


供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



Lidar IR Sensor board pcba(H08R6x)

★★★★★


perfect product



Customized PCBA design PCB design

★★★★★

perfect




Audio Speaker and Headphone Jack (H07R3x)

★★★★★

High quality, good

订单编号: 37378603001024670


供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



Raspberry pi 0 Zero Raspberry Pi Zero P1 W ver...

★★★★★

Fantastic products!!




double layer pcb with red S/M and LF-HASL su...

★★★★★

Good!

订单编号: 36919647001024670


供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)



half hole pcb, half hole pcb module, half hole m...

★★★★★


Top half hole pcb supplier, very perfect goods



High Quality custom FPCB/Flex PCB/FPC/Flexi...

★★★★★

this rigid-flexible pcb quality is perfect!



Electronic parts haptic pcba Circuit Board asse...

★★★★★

Very satisfied with O-leading products and quality, especially their on-time delivery, fantastic!

Be kind to your client, because he has many choices, but he chooses you instead.

Certificaten

O-LEADING *TRAINING*



Keep *LEARNING*

There's a phrase in Buddhism, 'Beginner's mind.'

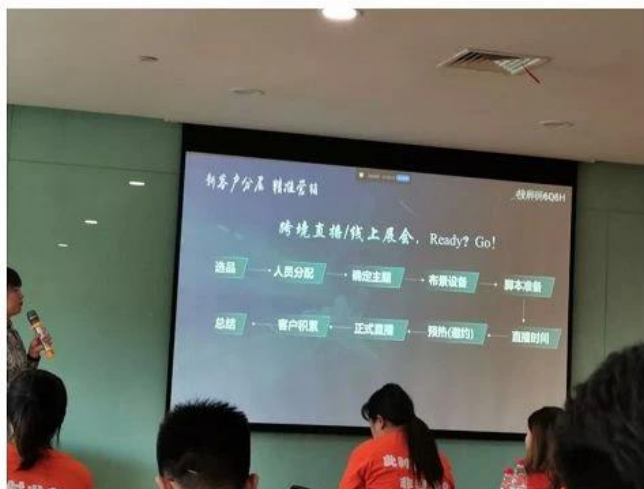
It's wonderful to have a beginner's mind

WE HAVE A *DREAM*

Keep *RUNNING*

I would like to live to study, and not study to live.

----Bacon





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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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, 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 mic(mil) | SS/ DS/ DSO | Max | Max | | Meets UL796 | C | | |
|--|---------------|---------------|----------------------|-------------------|--------------|------------------|--------------|----------------|-------|-------|---|
| | Min | Edge | | | Area Diam | Solder Limits | Oper Temp | | | Flame | |
| | mm(in) | mm(in) | | | mm(in) | C | sec | C | Class | DSR | I |
| 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

| | | | | | | | | | | | |
|----------------------|--------------|--------------|-----------|----|------------|-----|---|-----|-----|-----|---|
| O-LEADING-S02 | 0.2 (0.008) | 0.2 (0.008) | 17 (0.67) | SS | 25.4 (1.0) | 260 | 4 | 130 | HB | ▲ | * |
| 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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Procesmogelijkheden

PCB-productiemogelijkheden

| | |
|---|--|
| Lagen tellen | 1Layer-32Layer |
| Afgewerkt koperdikte | 1 / 3oz-12oz |
| Min Lijnbreedte / interne afstand | 3.0mil / 3.0mil |
| Min Lijnbreedte / externe afstand | 4,0 ml / 4,0 ml |
| Max. Beeldverhouding | 10: 1 |
| Board dikte | 0,2 mm - 5,0 mm |
| Max. Paneelgrootte (inch) | 635 * 1500 mm |
| Minimale boorgatgrootte | 4mil |
| Gepatenteerde gatentolerantie | +/- 3mil |
| Blind / begraven via's (All-typen) | JA |
| Via vulling (geleidend, niet-geleidend) | JA |
| Basis materiaal | FR-4, FR-4high Tg, Halogeenvrij materiaal, Rogers, Aluminium basis, Polyimide, zwaar koper |
| Oppervlakteafwerkingen | HASL, OSP, ENIG, HAL-LF, Immersion zilver, Immersion Tin, Gouden vingers, Carbon inkt |

SMT-productiemogelijkheden

| | |
|---------------------------------|--|
| PCB-materiaal | FR-4, CEM-1, CEM-3, plaat op aluminiumbasis, FPC |
| Max PCB-afmeting | 510x1500mm |
| Min PCB-afmeting | 50x50mm |
| PCB-dikte | 0,5 mm - 4,5 mm |
| Board dikte | 0,5-4 mm |
| Min componenten grootte | 0201 |
| Standaard chipformaat component | 0603 en groter |
| Max. Hoogte onderdeel | 15 mm |
| Min. Voorsprong | 0,3 mm |
| Min BGA-balhoogte | 0,4 mm |
| Plaatsingsprecisie | +/- 0,03 mm |

Verpakking en levering

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 |

FAQ

1. Hoe zorgt O-Leading voor kwaliteit?

Onze hoge kwaliteitsstandaard wordt bereikt met het volgende.

- 1.1 Het proces wordt strikt gecontroleerd volgens de ISO 9001: 2008-normen.
- 1.2 Uitgebreid gebruik van software bij het beheer van het productieproces
- 1.3 State-of-art testapparatuur en gereedschappen. Bijv. Flying Probe, X-ray Inspection, AOI (Automated Optical Inspector) en ICT (in-circuit testing).
- 1.4 Specifiek kwaliteitsborgingsteam met analyseproces voor foutgevallen
- 1.5. Permanente opleiding en scholing van personeel

2. Hoe houdt O-Leading uw prijs concurrerend?

In het afgelopen decennium zijn de prijzen van veel grondstoffen (bijv. Koper, chemicaliën) verdubbeld, verdrievoudigd of verviervoudigd; De Chinese munteenheid RMB was 31% gestegen ten opzichte van de Amerikaanse dollar; En onze arbeidskosten zijn ook aanzienlijk gestegen.

O-Leading heeft onze prijzen echter stabiel gehouden. Dit is volledig te danken aan onze innovaties in het verlagen van kosten, het vermijden van verspilling en het verbeteren van de efficiëntie. Onze prijzen zijn zeer concurrerend in de branche op hetzelfde kwaliteitsniveau.

Wij geloven in een win-win-samenwerking met onze klanten. Ons partnerschap zal voor beide partijen voordelig zijn als we u een voorsprong op kosten en kwaliteit kunnen bieden.

3. Welke soorten borden kan O-Leading verwerken?

Gangbare FR4-, high-TG- en halogeenvrije borden, Rogers, Arlon, Telfon, aluminium / koper-gebaseerde borden, PI, enz.

4. Welke gegevens zijn nodig voor de productie van PCB's en PCBA's?

4.1 BOM (Bill of Materials) met referentie-aanduidingen: componentbeschrijving, naam van de fabrikant en onderdeelnummer.

4.2 PCB Gerber-bestanden.

4.3 PCB-fabricagetekening en PCBA-montagetekening.

4.4 Testprocedures.

4.5 Eventuele mechanische beperkingen, zoals vereisten voor montagehoogte.

5. Wat is de typische processtroom voor meerlagige PCB's?

Materiaal snijden → Binnenste droge film → binnenste ets → Binnenste AOI → Multi-binding → Laagopbouw Persen → Boren → PTH → Paneelbeplating → Buitenste droge film → Patroonbeplating → Buitenste etsing → Buitenste AOI → Soldeermasker → Componentmarkering → Oppervlakteafwerking → Routing → E / T → Visuele inspectie.

6. Wat is de belangrijkste uitrusting voor HDI-productie?

De belangrijkste apparatuurlijst is als volgt: laserboormachine, persmachine, VCP-lijn, automatische belichtingsmachine, LDI en etc.

De apparatuur die we hebben is de beste in de branche, laserboormachines zijn van Mitsubishi en Hitachi, LDI-machines zijn van Screen (Japan), automatische belichtingsmachines zijn ook van Hitachi, ze zorgen er allemaal voor dat we kunnen voldoen aan de technische eisen van de klant.

7. Hoeveel soorten oppervlakteafwerking kan O-lead doen?

O-the leader heeft de volledige reeks oppervlakteafwerking, zoals: ENIG, OSP, LF-HASL, gold plating (zacht / hard), immersion silver, tin, silver plating, immersion tin plating, carbon inkt en etc. .. OSP, ENIG, OSP + ENIG dat gewoonlijk wordt gebruikt op de HDI, raden we u meestal aan om een client of OSP OSP + ENIG te gebruiken als de BGA PAD-grootte kleiner is dan 0,3 mm.

8. Wat is uw vermogen voor FPC? Kan O-Leading ook SMT-service verlenen?

O-Leading kan FPC fabriceren van enkele laag tot 8 lagen, het werkpaneel kan zo groot zijn als 2000 mm * 240 mm, de details vindt u op de pagina "Flex-capaciteit"

We bieden ook SMT one-stop-service aan de klant.

9. Wat zijn de belangrijkste factoren die de prijs van PCB's beïnvloeden?

Materiaal;

Oppervlakteafwerking;

Technologie moeilijkheid;

Verschillende kwaliteitscriteria;

PCB-kenmerken;

Betaalvoorwaarden;

Verschillende productielanden.

10. Wat is de definitie van PCB, PWB en FPC en wat is het verschil?

PCB is een afkorting voor Printed Circuit Board;

PWB is een afkorting van Printed Wire Board, dezelfde betekenis als Printed Circuit Board;

FPC is de afkorting van Flexible Printed Board.

11. Met welke factoren moet rekening worden gehouden bij het kiezen van het materiaal voor een printplaat?

De onderstaande factoren moeten in overweging worden genomen bij het kiezen van het materiaal voor

PCB's:

De Tg-waarde van het materiaal moet hoger zijn dan de bedrijfstemperatuur;

Laag CTE-materiaal heeft goede prestaties van thermische stabiliteit;

Goede prestaties op het gebied van thermische weerstand: Normaal gesproken moeten PCB's gedurende ten minste 50 seconden bestand zijn tegen 250 s.

Goede vlakheid; Met het oog op de elektrische eigenschappen wordt materiaal met laag verlies / hoge permittiviteit gebruikt op hoogfrequente PCB's; Polyimide glasvezelsubstraat gebruikt voor flexibele printplaten; Metalen kern wordt gebruikt wanneer het product strikte eisen stelt aan warmteafvoer.

12. Wat zijn de voordelen van de stevige flexibele printplaat van O-leading?

De rigid-flex PCB van O-leading heeft de karakters van zowel FPC als PCB, en kan dus in sommige speciale producten worden gebruikt. Een deel is flexibel en het andere stijf, het kan helpen om de binnenruimte van het product te besparen, het productvolume te verminderen en de prestaties te verbeteren.

13. Hoe maakt u de impedantieberekening?

Het impedantiecontrolesysteem wordt gedaan met behulp van enkele testcoupons, de SI6000-soft en de CITS 500s-apparatuur van POLAR INSTRUMENTS.

De apparatuur meet de impedantie op een representatieve trackconfiguratiecoupon waarvan de klant ons een bepaalde waarde en tolerantie heeft gegeven.