APPLICANT: FANVIL TECHNOLOGY CO., LTD.
ADDRESS: ROOM 401-403, BUILDING 1, BLOCK 2, GAOXINQI INDUSTRY PARK,67TH DISTRICT, BAO'AN, SHENZHEN, 518100 P.R. CHINA.

MANUFACTURE : FANVIL TECHNOLOGY CO., LTD.
ADDRESS: ROOM 401-403, BUILDING 1, BLOCK 2, GAOXINQI INDUSTRY PARK,67TH DISTRICT, BAO'AN, SHENZHEN, 518100 P.R. CHINA.

Report on the submitted sample said to be IP PHONE BRAND NAME: FANVIL
MODEL: X1,X1P,X2C,X2,X2P,X3S,X3SP,X3G,X4,X4G,X5S,X5G,X6

Test Required: 1)As required by client to determine the Lead,Cadmium,Mercury,Chrimium and Bromine content in the submitted sample.

Test Method:

Testing Item	Testing method	Limit
Lead (Pb)	With reference to IEC62321/2nd CDV (111/95/CDV) ICP-OES	1000ppm
Cadmium (Cd)	With reference to IEC62321/2nd CDV (111/95/CDV) ICP-OES	100ppm
Mercury (Hg)	With reference to IEC62321/2nd CDV (111/95/CDV) ICP-OES	1000ppm
Hexavalent Chromium (Cr6+)	With reference to IEC62321/2nd CDV (111/95/CDV) ICP-VIS	1000ppm
Polybrominated Biphenyls (PBBs)	With reference to IEC62321/2nd CDV (111/95/CDV) GC-MS	1000ppm
Polybrominated Diphenylethers (PBDEs)	With reference to IEC62321/2nd CDV (111/95/CDV) GS-MS	1000ppm

Results : Please refer to next pages

Conclusion : When tested as specified,the results shown on the report do not exceed the limit in commission decision of 8 June 2011 Directive 2011/65/EU (RoHS 2) on the restriction of the use of certain hazardous substances in electrical and electronic equipment.All data in this report is provided by the manufacture.

Signed for Shenzhen PZD Technology Co.,Ltd.

APPROVED PZD Technology

Mark Yan/ Manager

RESULT SUMMARY

Note:
ND=Not Detected ,less than the value of Detection limit
ppm=mg/kg,based on the dry weight of tested sample

	Detected content (grade) – See below marks						
	Parts description	Cr6+	Cd	Pb	Hg	Br	Conclusion
1	MLCC NPO	ND	ND	ND	ND	ND	Declaration
2	MLCC X7R	ND	ND	ND	ND	ND	Declaration
3	MLCC Y5V	ND	ND	ND	ND	ND	Declaration
4	MLCC X5R	ND	ND	ND	ND	ND	Declaration
5	Resistor	ND	ND	16572*	ND	ND	Fulfilled
6.1	TVS-METAL	ND	ND	20343*	ND	ND	Fulfilled
6.2	TVS-BODY	ND	ND	7	ND	ND	Fulfilled
7	DIODE SS14170	ND	ND	8	ND	ND	Fulfilled
8.1	DIODE KLL	ND	ND	20343*	ND	ND	Fulfilled
8.2	BODY	ND	ND	7	ND	ND	Fulfilled
9	TRANSITOR	ND	ND	ND	ND	ND	Fulfilled
10	BEAD	ND	ND	ND	ND	ND	Fulfilled
11.1	POWER INDUCTOR-SOLDER	ND	ND	15	ND	---	Fulfilled
11.2	WIRE	ND	ND	ND	ND	---	Fulfilled
11.3	MAGNETIC BODY	ND	ND	ND	ND	ND	Fulfilled
11.4	RUBBER	ND	ND	ND	ND	ND	Fulfilled
11.5	INK	ND	ND	ND	ND	ND	Fulfilled
12.1	TRANSFORMER -HEADER	ND	ND	22	ND	ND	Fulfilled
12.2	CORE	ND	ND	ND	ND	ND	Fulfilled
12.3	SOLDER	ND	ND	75	ND	ND	Fulfilled
12.4	VARNISH	ND	ND	ND	ND	ND	Fulfilled
12.5.1	WIRE	ND	ND	ND	ND	ND	Fulfilled
12.5.2	GREEN WIRE	ND	ND	ND	ND	ND	Fulfilled

Note:
ND=Not Detected ,less than the value of Detection limit
ppm=mg/kg,based on the dry weight of tested sample

	Detected content (grade) – See below marks						
	Parts description	Cr6+	Cd	Pb	Hg	Br	Conclusion
12.5.3	BLACK WIRE	ND	ND	ND	ND	ND	Fulfilled
12.5.4	RED WIRE	ND	ND	ND	ND	ND	Fulfilled
13.1	FPC-LCP	ND	ND	ND	ND	ND	Fulfilled
13.2	BRASS COPPER	ND	ND	210	ND	---	Fulfilled
13.3	COPPER	ND	ND	18	ND	---	Fulfilled
14	CPU	---	---	---	---	---	Declaration
15	POWER IC	---	---	---	---	---	Declaration
16.1	SDRAM-DIE	ND	ND	ND	ND	ND	Fulfilled
16.2	ASHESIVE	ND	ND	ND	ND	ND	Fulfilled
16.3	GOLD WIRE	ND	ND	ND	ND	ND	Fulfilled
16.4	MOLD COMPOUND	ND	ND	ND	ND	ND	Fulfilled
16.5	SOLDER	ND	ND	93.2	ND	ND	Fulfilled
16.6	LAMINATE NPG-200	ND	ND	ND	ND	ND	Fulfilled
17.1	AMP IC-PIN	ND	ND	8	ND	---	Fulfilled
17.2	BODY	ND	ND	ND	ND	ND	Fulfilled
18	NAND FLASH	---	---	---	---	---	Declaration
19	AP DRIVER IC	ND	ND	ND	ND	ND	Fulfilled
20	DC-DC IC	---	---	---	---	---	Declaration
21.1	POE POWER IC-DIE	ND	ND	ND	ND	ND	Fulfilled
21.2	EPOXY	ND	ND	ND	ND	ND	Fulfilled
21.3	BOND WIRE	ND	ND	ND	ND	ND	Fulfilled
21.4	MOLD COMPOUND	ND	ND	ND	ND	ND	Fulfilled
21.5	LEADFRAME	ND	ND	ND	ND	ND	Fulfilled
21.6	INNER PLATE	ND	ND	ND	ND	ND	Fulfilled

Note:
ND=Not Detected ,less than the value of Detection limit
ppm=mg/kg,based on the dry weight of tested sample

	Detected content (grade) – See below marks						
	Parts description	Cr6+	Cd	Pb	Hg	Br	Conclusion
21.7	EXPLATE	ND	ND	18.6	ND	ND	Fulfilled
22	OPTICAL COUPLER	ND	ND	ND	ND	ND	Fulfilled
23	TLV POWER IC	---	---	---	---	---	Declaration
24	CRYSTAL	ND	ND	ND	ND	ND	Fulfilled
25.1	CEP-PET	ND	ND	11	ND	ND	Fulfilled
25.2	PVC	ND	ND	ND	ND	---	Fulfilled
25.3	SMD CAP	ND	ND	44	ND	---	Fulfilled
26.1	RJ45 RJ9 CONNECTOR-PBT	ND	ND	11	ND	ND	Fulfilled
26.2	WIRE	ND	ND	ND	ND	---	Fulfilled
26.3	COPPER	ND	ND	44	ND	---	Fulfilled
27.1	2.54 CONNECTOR-PLASTIC	ND	ND	ND	ND	ND	Fulfilled
27.2	COPPER	ND	ND	44	ND	---	Fulfilled
28.1	TERMINAL-PBT BK	ND	ND	6.46	ND	ND	Fulfilled
28.2	PBT NC	ND	ND	5.9	ND	ND	Fulfilled
28.3	PLASTIC	ND	ND	ND	ND	ND	Fulfilled
28.4	LCP	ND	ND	5	ND	ND	Fulfilled
28.5	COPPER	ND	ND	30	ND	---	Fulfilled
28.6	TIN PLATING	ND	ND	12	ND	---	Fulfilled
28.7	NI LAYER	ND	ND	13	ND	---	Fulfilled
28.8	GOLD LAYER	ND	ND	ND	ND	---	Fulfilled
29.1	DC INLET-PBT	ND	ND	ND	ND	ND	Fulfilled
29.2	COPPER	ND	ND	27	ND	ND	Fulfilled
29.3	IRON	ND	ND	ND	ND	---	Fulfilled
30.1	PCB-HAL PCB	ND	ND	ND	ND	ND	Fulfilled
30.2	IMMERSION PCB	ND	ND	ND	ND	ND	Fulfilled
30.3	OSP PCB	ND	ND	ND	ND	ND	Fulfilled
31	LABLE PAPER	ND	ND	ND	ND	ND	Fulfilled

Note:
ND=Not Detected ,less than the value of Detection limit
Ppm=mg/kg,based on the dry weight of tested sample

	Detected content (grade) – See below marks						
	Parts description	Cr6+	Cd	Pb	Hg	Br	Conclusion
32	KB PCB	ND	ND	ND	ND	ND	Fulfilled
33	MLCC Y5V 0603	ND	ND	ND	ND	ND	Fulfilled
34	RESISTOR	ND	ND	1572*	ND	---	Fulfilled
35	LED	ND	ND	ND	ND	ND	Fulfilled
36.1	USB CONNECTOR-PBT BK	ND	ND	6.46	ND	ND	Fulfilled
36.2	PBT NC	ND	ND	5.9	ND	ND	Fulfilled
36.3	PA6T PLASTIC	ND	ND	10	ND	ND	Fulfilled
36.4	LCP	ND	ND	5	ND	ND	Fulfilled
36.5	TERMINAL COPPER	ND	ND	30	ND	---	Fulfilled
36.6	SN PLATING	ND	ND	12	ND	---	Fulfilled
36.7	NI LAYER	ND	ND	13	ND	---	Fulfilled
36.8	GOLD	ND	ND	19	ND	---	Fulfilled
37	ENCLOSURE PLSTIC	ND	ND	ND	ND	ND	Fulfilled
38	CONDUCTIVE RUBBER	ND	ND	ND	ND	ND	Fulfilled
39.1	LCD COVER-PC	ND	ND	ND	ND	ND	Fulfilled
39.2	3M GLUE	ND	ND	ND	ND	ND	Fulfilled
39.3	STEEL LH	ND	ND	ND	ND	ND	Fulfilled
39.4	304 STEEL	ND	ND	ND	ND	ND	Fulfilled
40	LCD MODULE	---	---	---	---	---	Declaration
41	SPEAKER SEAL RING	ND	ND	ND	ND	ND	Fulfilled
42.1	DUST NET-EVA	ND	ND	11	ND	ND	Fulfilled
42.2	PVC	ND	ND	ND	ND	ND	Fulfilled
42.3	PROTECTIVE FILM	ND	ND	ND	ND	ND	Fulfilled
42.4	SILICON PLATE	ND	ND	ND	ND	ND	Fulfilled
42.5	SPONGE	ND	ND	ND	ND	ND	Fulfilled
42.6	RUBBER PLATE	ND	ND	33	ND	ND	Fulfilled
43.1	MIC-WIRE	ND	ND	ND	ND	ND	Fulfilled
43.2	PAD SHEET	ND	ND	ND	ND	ND	Fulfilled
43.3	NET	ND	ND	ND	ND	ND	Fulfilled

Note:
ND=Not Detected ,less than the value of Detection limit
Ppm=mg/kg,based on the dry weight of tested sample

	Detected content (grade) – See below marks						
	Parts description	Cr6+	Cd	Pb	Hg	Br	Conclusion
43.4	FET	ND	ND	ND	ND	ND	Fulfilled
43.5	CASING RING	ND	ND	130	ND	---	Fulfilled
43.6	FED FILM	ND	ND	ND	ND	ND	Fulfilled
43.7	ENCLOSURE CASE	ND	ND	6	ND	---	Fulfilled
43.8	PCB	ND	ND	23	ND	ND	Fulfilled
44.1	SCREW-ZN SCREW	ND	ND	ND	ND	---	Fulfilled
44.2	COLOR ZN SCREW	ND	ND	ND	ND	---	Fulfilled
44.3	NI SCREW	ND	ND	ND	ND	---	Fulfilled
45	MARKING LABEL	ND	ND	ND	ND	ND	Fulfilled
46	PACKAGE BAG	ND	ND	ND	ND	ND	Fulfilled
47.1	INTERNAL CARD-CARD	ND	ND	7	ND	ND	Fulfilled
47.2	BLACK INK	ND	ND	ND	ND	ND	Fulfilled
47.3	RED INK	ND	ND	ND	ND	ND	Fulfilled
47.4	YELLOW INK	ND	ND	ND	ND	ND	Fulfilled
47.5	BLUE INK	ND	ND	ND	ND	ND	Fulfilled
48.1	CARTOON BOX-PAPER BOARD	ND	ND	7	ND	ND	Fulfilled
48.2	WHITE VARNISH	ND	ND	ND	ND	ND	Fulfilled
48.3	VARNISH	ND	ND	ND	ND	ND	Fulfilled
48.4	BLACK INK	ND	ND	ND	ND	ND	Fulfilled
48.5	RED INK	ND	ND	ND	ND	ND	Fulfilled
48.6	YELLOW INK	ND	ND	ND	ND	ND	Fulfilled
48.7	BLUE INK	ND	ND	ND	ND	ND	Fulfilled
49	HANDSET WIRE	ND	ND	ND	ND	ND	Fulfilled
50.1	NETCABLE-BRASS SHIELD	ND	ND	16.7	ND	ND	Fulfilled
50.2	IRON SHIELD	ND	ND	ND	ND	ND	Fulfilled
50.3	COPPER CONTACT	ND	ND	24.7	ND	ND	Fulfilled
50.4	PVC	ND	ND	ND	ND	ND	Fulfilled
50.5	HDPE	ND	ND	ND	ND	ND	Fulfilled

*According to the declaration from the client, Lead (Pb) in No.018 is exempted by EU RoHS directive 2011/65/EU based on |ANNEX III 7(c)-I|: Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.

Remark
1. Refer to client information SGS:KA/2017/10460
2. Refer to client information SGS:KA/2017/10461
3. Refer to client information SGS:KA/2017/10464
4. Refer to client information SGS:KA/2017/10462
5. Refer to client information SGS:SHAEC1626338409
6. Refer to client information SGS:CANEC1705579001
7. Refer to client information SGS:CANEC1705579802
8. Refer to client information SGS:CANEC1705579001
9. Refer to client information SGS:CANEC1625876701
10. Refer to client information SGS:CE/201794123
11.1 Refer to client information SGS:CANEC1701060901
11.2 Refer to client information SGS:CE/2017/40923
11.3 Refer to client information CTI:SCL01I117882002ER1
11.4 Refer to client information SGS:CANML1702728101
11.5 Refer to client information SGS:CE/2017/21949C
12.1 Refer to client information CTI:SCL01I11731901E
12.2 Refer to client information SGS:CKGEC1600368802
12.3 Refer to client information SGS:CANEC1610788403
12.4 Refer to client information CTI:SCL01I009454006
12.5.1 Refer to client information CTI:SCL01I010053006E
12.5.2 Refer to client information CTI:SCL01I010053008E

12.5.3 Refer to client information CTI:SCL01I010053009E
12.5.4 Refer to client information CTI:SCL01I010053007E
13.1 Refer to client information CTI:ECL01J026645004E
13.2 Refer to client information CTI:ECL01J026645009E
13.3 Refer to client information CTI:ECL01J026645011E
14. Refer to client information from supplier BROADCOM
15. Refer to client information from supplier ALPHA&OMEGA
16.1 Refer to client information ETC:16-09-QAC-107
16.2 Refer to client information SGS:CE/2016/C0804
16.3 Refer to client information SGS:KA/2016/B0096
16.4 Refer to client information SGS:CE/2017/32817H
16.5 Refer to client information SGS:KA/2016/C1752
16.6 Refer to client information SGS:CE/2016/75234
17. Refer to client information SGS:SHAEC1701699711
18. Refer to client information from supplier WINBOND
19. Refer to client information SGS:SHAEC1625511111
20. Refer to client information from supplier ALPHA&OMEGA
21.1 Refer to client information SGS:CE/2016/91783
21.2 Refer to client information SGS:CE/2016/24599
21.3 Refer to client information SGS:CE/2016/91776
21.4 Refer to client information SGS:KA/2017/61203
21.5 Refer to client information SGS:F690101/LF-CTSAYGA16-01440
21.6 Refer to client information SGS:F690101/LF-CTSAYGU16-08783
21.7 Refer to client information SGS:CE/2015/A3402
22. Refer to client information SGS:CE/2016/132050A
23. Refer to client information from supplier ON SEMICONDUCTOR
24. Refer to client information SGS:CANEC1700332404

25.1 Refer to client information SGS:CANEC1703297106
25.2 Refer to client information SGS:CANEC1703297101
25.3 Refer to client information SGS:CANEC1703297111
26.1 Refer to client information SGS:CANEC1621913101
26.2 Refer to client information CTI:ECL01I023689001C
26.3 Refer to client information SGS:SHAEC1604685002
27.1 Refer to client information CTI:SCL01I050998001C
27.2 Refer to client information SGS:SHAEC1604685002
28.1 Refer to client information SGS:CE/2016/C4307
28.2 Refer to client information SGS:CE/2016/C4308
28.3 Refer to client information SGS:CANEC1700176603
28.4 Refer to client information SGS:CANEC1625330601
28.5 Refer to client information SGS:SZXEC1700063401
28.6 Refer to client information SGS:CANEC1617440601
28.7 Refer to client information SGS:SZXEC1700197201
28.8 Refer to client information CTI:SCL01I068889001E
29.1 Refer to client information SGS:CE/2016/C0129
29..2 Refer to client information SGS: SHAEC1618888201
29.3 Refer to client information CTI:ECL01J009007001
30.1 Refer to client information SGS:CANEC1610529601
30.2 Refer to client information SGS:CANEC1610529603
30.3 Refer to client information SGS:CANEC1610529602
31. Refer to client information CTI:SCL03I00610002
32. Refer to client information SGS:CANEC1700304206
33. Refer to client information SGS:KA/2017/10464
34. Refer to client information SGS:SHAEC1626338409

35. Refer to client information NTEK:SZR20170228901101
36.1 Refer to client information SGS:CE/2016/C4307
36.2 Refer to client information SGS: CE/2016/C4308
36.3 Refer to client information SGS:CANEC1700176603
36.4 Refer to client information SGS CANEC1625330601
36.5 Refer to client informationSGS:SZXEC1700063401
36.6 Refer to client information SGS:CANEC16177440601
36.7 Refer to client information SGS:SZXEC1700197201
36.8 Refer to client information CTI:SCL01I06888901E
37. Refer to client information TUV:0114058887Q2001
38. Refer to client information SGS:XMNEC1600923001
39.1 Refer to client information SGS:CANEC1700692802
39.2 Refer to client information SGS:SHAEC1701446201
39.3 Refer to client information CTI:SCL01H091989004C
39.4 Refer to client information SGS:SZXEC1700698701
40. Refer to client information TCT: TCT170405C017
41. Refer to client information SGS: SHAEC1628402408
42.1 Refer to client information SGS:CANEC1702134503
42.2 Refer to client information SGS:SHAEC1704527001
42.3 Refer to client information SGS:CANEC1617724704
42.4 Refer to client information SGS:CANEC1701965504
42.5 Refer to client information SGS:CANEC1622469301
42.6 Refer to client information SGS: CANEC1701965503
43.1 Refer to client information SUMITOMO:SZ-EV-14003
43.2 Refer to client information SGS: SHAEC1512775804
43.3 Refer to client information CCIC:SET2015-17549

43.4 Refer to client information CTI:SCL01I039805001
43.5 Refer to client information SGS: NGBEC1503011001
43.6 Refer to client information SGS: TSNEC1501506402
43.7 Refer to client information SGS: SHAEC1515395905
43.8 Refer to client information SGS: CANEC16066222713A01
44.1 Refer to client information SGS: SZXEC1700246304
44.2 Refer to client information SGS: SZXEC1700246306
44.3 Refer to client information SGS: SZXEC1700246302
46.5 Refer to client information SGS: CANEC1604419410
45. Refer to client information CTI:SCL03I00610002
46. Refer to client information SGS:KA/2016/1012116
47.1 Refer to client information SGS:CANEC1702358501
47.2 Refer to client information SGS:CANEC1624574907
47.3 Refer to client information SGS:CANEC1624574903
47.4 Refer to client information SGS:CANEC1624574901
47.5 Refer to client information SGS:CANEC1624574905
48.1 Refer to client information SGS:SDHL17030037130T
48.2 Refer to client information SGS:CANEC1602977901
48.3 Refer to client information SGS:CANEC1608529001
48.4 Refer to client information SGS:CANEC1617999603
48.5 Refer to client information SGS:CANEC1617999605
48.6 Refer to client information SGS:CANEC1617999607
48.7 Refer to client information SGS:CANEC1617999601
49. Refer to client information CTI:SCL01I078727001
50.1 Refer to client information SGS:CE/2017/26827B
50.2 Refer to client information SGS:CE/2017/26829A

50.3 Refer to client information SGS:CE/2017/26831B
50.4 Refer to client information SGS:CANEC1701631613A01
50.5 Refer to client information SGS:CANEC1700829101

APPENDIX I

DECLARATION LETTER FROM WINBOND

RoHS and Halogen Free Compliance Report /不使用禁用物質證明書

PART NUMBER: W29N01GVSIAA **Document Date: 2016/07/14**

Winbond certifies that the above part number product is in compliance with Halogen Free (IEC 61249-2-21), European RoHS (EU Directive 2011/65/EU & 2015/863/EU), China RoHS, and Level 1 of SONY SS-00259 requirements.

華邦保證以上產品型號符合無鹵素(IEC 61249-2-21), 歐盟RoHS指令(指令 2011/65/EU & 2015/863/EU), 中國電子資訊產品污染控制管理辦法 及 索尼SS-00259第一級管理物質之規定

European Union's Restriction on Use of Hazardous Substances ("RoHS")

RoHS Restricted Substances	Threshold, Homogeneous Level
Cadmium (Cd)	< 100 ppm
Hexavalent Chromium (CrVI)	< 1000 ppm
Lead (Pb)	< 1000 ppm
Mercury (Hg)	< 1000 ppm
Polybrominated Biphenyls (PBBs)	< 1000 ppm
Polybrominated Diphenyl Ethers (PBDEs)	< 1000 ppm
Bis (2-ethylhexyl) phthalate (DEHP)	< 1000 ppm
Butyl benzyl phthalate (BBP)	< 1000 ppm
Dibutyl phthalate (DBP)	< 1000 ppm
Diisobutyl phthalate (DIBP)	< 1000 ppm

Halogen Free Specifications (IEC 61249-2-21,JPCA-ES01 2003, IPC 4101)

Halogen Restricted Substances	Threshold, Homogeneous Level
Chlorine (Cl)	< 900 ppm
Bromine (Br)	< 900 ppm
Total concentration of Bromine (Br) +Chlorine (Cl)	< 1500 ppm

* Third party analysis reports are available upon request through our sales representative
* 如您需要進一步分析報告, 請聯絡本公司銷售代表

Signature:

Name/Title: Jing-Fong Tsai
Vice-President, Quality Assueance and ESH Center

DECLARATION LETTER FROM ALPHA&OMEGA

ALPHA & OMEGA SEMICONDUCTOR
Alpha and Omega Semiconductor, Inc.
475 Oakmead Parkway, Sunnyvale, California 94085 USA

Alpha and Omega Semiconductor Statement on RoHS 2.0 Recast in 2016

Following is the statement from Alpha and Omega Semiconductor (hereinafter referred to as AOS) regarding Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of hazardous substances in electrical and electronic equipment (RoHS Recast).

AOS is aware that the RoHS exemptions that currently apply to some of our products are set to expire on July 21, 2016.

We are actively engaged in testing and qualifying viable alternatives to replace the exempted materials currently used in these affected products. The material currently use under.

Exemption 7(a) – lead in high melting temperature type solders (i.e. lead based alloys containing 85% by weight or more lead).

Exemption 15 – Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip packages.

AOS has been working diligently on possible solutions, but none exist today for the majority of these products.

In the event that alternative materials cannot be identified and qualified as suitable replacements for materials currently using exemption 7(a) and 15, AOS will, by February 1st 2015, prepare and submit an application for renewing exemptions as defined in Article 5 and Annex V of the RoHS Recast.

Tel: 408.830.9742 • Fax: 408.830.9749 • www.aosmd.com

ALPHA & OMEGA SEMICONDUCTOR

Environmental Compliance Statement

Dear Valued Customers,

Alpha and Omega Semiconductor (Hong Kong) Ltd. (AOS) is committed to fully support our customers about the environmental and green production requirements. This statement reiterates our compliance with EU Directive 2002/95/EC and it's recasting EU Directive 2011/65/EU on the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS). The statement also shows our compliance with Sony Technical Standard SS-00259 about the Management regulations for the Environment-related Substances to be Controlled which are included in Parts and Materials.

AOS assures that our products are in compliance with the RoHS Directive, as well as SONY SS-00259. Specifically, our products do not contain the substances listed in the table below in concentrations more than the Maximum Concentration Value in homogeneous material except Note 1 specified.

Substance	Maximum Concentration Value (PPM)
Cadmium (Cd) and its compounds	75*
Lead (Pb) and its compounds	1000
Mercury (Hg) and its compounds	1000
Hexavalent Chromium (Cr^{6+}) and its compounds	1000
Polybrominated biphenyls (PBBs)	1000
Polybrominated diphenylethers (PBDEs)	1000

* The Maximum Concentration Value of Cd is 75 PPM in Denmark. RoHS requirement is 100 PPM.

Note 1: Lead contained in soft solder or solder paste (die attach material) which is used to assemble some parts within DPAK (TO252/TO251/TO251A), D2PAK (TO263/TO262), UltraSO8, TO220, TO220F, TO262F, DFN, QFN, SO8 Package Type, etc. The Exemption clause "7.a Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead)." is applicable for such products.

Quality Assurance Department

Alpha and Omega Semiconductor (Hong Kong) Limited

11th January 2013

Quality Assurance Department

Declaration
Providing for limitations below, Alpha & Omega Semiconductor certifies that the information provided in this document is correct as of the date indicated on this page. The warranty provided herein shall be null and void if the information is revised in any format by any party without AOS's prior written authorization. In the event of any issues arising from information in this document, the warranty section of Alpha & Omega's standard terms and conditions of sale shall apply, unless alternate contracts have been agreed upon in writing by both parties.

DECLARATION LETTER FROM BROADCOM

BROADCOM

Broadcom Limited Product Material Environmental Specifications

Broadcom Limited's environmental objective is to provide products that are environmentally sound throughout their lifecycles and conduct operations worldwide in an environmentally responsible manner. It is also Broadcom Limited's policy to provide products and services that meet legal requirements and are safe for their intended markets and applications. We control certain materials by placing material limitation on our suppliers for the components and parts we purchase as listed in our General Specifications for the Environment (GSE). We specify that our material suppliers do not intentionally use any of the following material in the manufacture of our product components and parts:

Ozone Depleting Substance (ODS, or Ozone Depleting Compounds, ODC)

- Chlorofluorocarbons (CFC-11, -12, -113, -114, -115)
- Halogenated CFCs (CFC-13, -111, -112, -211 to –217)
- Hydrochlorofluorocarbons (HCFC-21, -22, etc)
- Halons (Halon-1211, -1301, -2402)
- Chlorinated hydrocarbons (Carbon tetrachloride, 1.1.1 trichloroethane)
- Hydrobromofluorocarbons (CHF2Br, etc)
- Methyl bromide

Persistent Bioaccumulative Toxins

- Polybrominated biphenyl (PBB) and Polybrominated diphenyl ether (PBDE) flame retardants, including **DecaBDE**.
- Polybrominated Biphenyls (PBB) and Polychlorinated Terphenyls (PCT)

Carcinogens

- Asbestos

Other restrictions

Various restrictions are also placed on the use of lead, cadmium, mercury, and hexavalent chromium in our products and packaging material. The restriction limits for these substances are specified in the General Specifications for the Environment (GSE) document. These toxic and bioaccumulative metals may be further restricted or phased out in future products as suitable substitutes with lesser environmental impact, are developed.

Restriction on Hazardous Substance (RoHS) Compliance

Broadcom Limited has introduced a full range of lead-free products compliant with the applicable European Union directives aimed at minimizing the environmental impact of electronic waste (RoHS directive). Certain product families classified within the RoHS Directive Annex of exempted applications (network infrastructure equipment for switching, signaling, transmission and network management for telecommunication) are exempted from lead restrictions in the RoHS directive. These products may contain compliant lead in accordance with the exemptions. Custom products may contain RoHS substances in accordance with customer specification.

Please note that if an order includes any non-lead-free products, they may not comply with the RoHS Directive. If non-compliant parts in end products are used and do not have an exemption available, that use could be a potential violation of the RoHS Directive. If Avago ships on request such non-compliant products pursuant to respective orders, Avago will not be liable for any RoHS Directive-related costs, damages, fines, fees or other costs of any kind incurred as a result of the incorporation of these products into end products.

For product technical information (e.g.termination finish, product substance content) or product availability and compliance information, you may contact our distributors, or Broadcom Limited Sales & Marketing via RoHS.Enquiry-SPG@broadcom.com. .

Broadcom Limited Product Stewardship

Rev D 12 February 2016

DECLARATION LETTER FROM ON SEMICONDUCTOR

ON Semiconductor

CERTIFICATE OF COMPLIANCE

RoHS & REACH Declaration

RoHS Compliance

ON Semiconductor hereby certifies that the ON Semiconductor products with "G" suffixed part numbers are in compliance with the European Union Directive 2011/65/EU on the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS).

Our RoHS compliant products do not contain:
Lead (Pb),
Mercury (Hg),
Cadmium (Cd),
Hexavalent Chromium (Cr+6),
Poly Brominated Biphenyls (PBB),
Poly Brominated Diphenyl Ethers (PBDE) including Deca-BDE,
(Hexabromocyclododecane (HBCDD),
Bis(2-ethylhexyl) phthalate (DEHP),
Butyl benzyl phthalate (BBP)
Dibutyl phthalate (DBP)
Diisobutyl phthalate (DIBP)

above the tolerated maximum concentration values (MCV). Some of our products contain Lead (Pb) in high melting temperature type die attach solders (containing >85% Pb) which is exempt under the current ROHS Directive.

REACH Compliance

ON Semiconductor supports the basic aim of REACH in improving the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances. ON Semiconductor meets all REACH requirements and is committed to provide our customers with information about substances in our products according to future REACH requirements. Under REACH, registration is required for substances which are used in the European Community for manufacturing of articles (e.g. manufactured goods such as cars, textiles, electronic chips); this requirement does not apply to our European Union ON Semiconductor operations.

All ON Semiconductor products are free of the currently listed Substances of Very High Concern (SVHC) under REACH.

ON Semiconductor is committed to meeting the needs of our customers as they transition to RoHS compliance.

Signature: /s/ *Mark Wasilewski* Date: March, 2016
(Authorized representative of ON Semiconductor)

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Title: Sr. Director, QA
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APPENDIX II

PHOTOGRAPHAS