

Report No.: ET-ROHS16125396 Page: 1 of 9

# **CONSOLIDATED TEST REPORT**

Applicant:	Guangzhou FriendlyElec Technology Co., Limited					
Address:	Room 4313, Block B, China Shine Plaza, No. 9 Lin He Xi Road, Tianhe District, Guangzhou, Guangdong, PR China					
EUT Name:	NanoPi M1					
Model No. :	NanoPi M1					
Brand Name:	N/A					
Issue Date:	2016-12-29					
	With reference to IEC 62321 Ed 1.0: 2013	MDL				
Test Method (If tested) :	Determination of Lead (Pb) by ICP-OES	2mg/kg				
	Determination of Cadmium (Cd) by ICP- OES	2mg/kg				
	Determination of Mercury (Hg) by ICP-OES	2mg/kg				
	Determination of Chromium (Cr <sup>6+</sup> ) by UV-VIS	2mg/kg				
	Determination of PBBs / PBDEs by GC-MS	5mg/kg				
Directive:	2011/65/EU					
Remark:	Based on the performed test on submitted sample(s),the results of Cadmium, Lead, Mercury, Hexavalent Chromium Cr(VI), PBBs and PBDEs comply with the limits as set by RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC and the tested submitted sample complied with the requirements of Directive					



2006/66/EC.

## **1** General Information

#### 1.1 Client Information

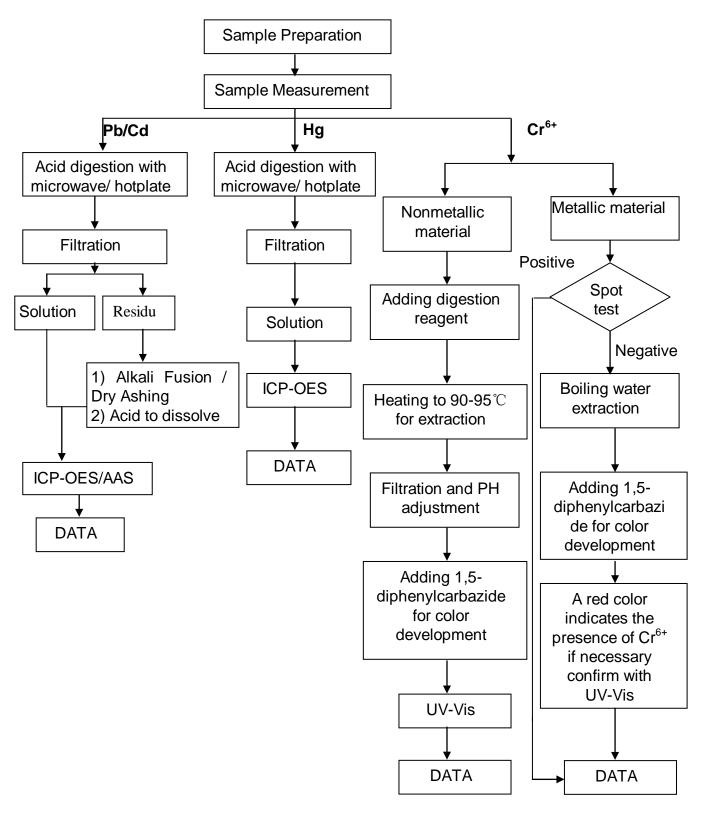
Applicant	: Guangzhou FriendlyElec Technology Co., Limited
Address	. Room 4313, Block B, China Shine Plaza, No. 9 Lin He Xi Road, Tianhe District, Guangzhou, Guangdong, PR China
Manufacturer	: Guangzhou FriendlyElec Technology Co., Limited
Address	. Room 4313, Block B, China Shine Plaza, No. 9 Lin He Xi Road, Tianhe District, Guangzhou, Guangdong, PR China
EUT Name	: NanoPi M1
Model No.	: NanoPi M1

#### 1.2 Test Facility

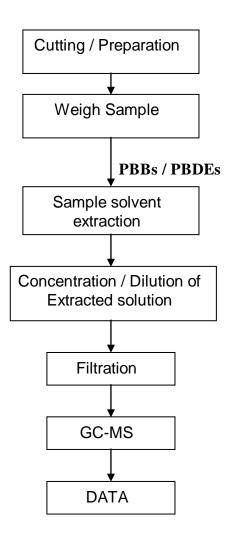
The testing report were performed by the Shenzhen ETR Standard Technology Co., Ltd., in their facilities located at 5/F, Bldg. A, The Third Industrial Zone Zhuao, No.1 Road Gushu, Xixiang Street, Bao'an District, Shenzhen, China.

## 2 Test Flow:

### 2.1 To Determine Lead/Cadmium/Mercury/ Hexavalent Chromium Content:



#### 2.2 To Determine PBBs/PBDEs Content:



# 3 Test Result:

		Form of evi			
No.	Part Of Sample	Test Laboratory	Report No.	Verdict	
1	Shell	SGS	SHAEC1605782313	Pass	
2	Switch Button	SGS	GZ1211302178/CHEM	Pass	
3	РСВ	SGS	SHAEC1600081702	Pass	
4	Plug-resistance	SGS	SHACE1522698102	Pass	
5	Chip Resistor	SGS	CANEC1317975404	Pass	
6	Chip Capacitors	SGS	KA/2015/10621	Pass	
7	Inductance	SGS	CANEC1301261603	Pass	
8	SMD crystal	SGS	CANEC1318423402	Pass	
9	SMD diode	SGS	SHAEC1321669505	Pass	
10	Wire	SGS	CANEC1400341301	Pass	
11	Ink	SGS	SHAEC1502300801	Pass	
12	Screw	SGS	CANEC1401667501	Pass	
13	Iron	SGS	CANEC1206728402	Pass	
14	USB interface steel section	SGS	CANEC1408645401	Pass	
15	Solder	SGS	CANEC1407966506	Pass	
16	Copper wire	SGS	JP/2014/041480	Pass	

Element	Pb	Cd	Cr <sup>6+</sup>	Hg	
Limit:	1000(mg/kg)	100(mg/kg)	1000(mg/kg)	1000(mg/kg)	
1	N.D.	N.D.	N.D.	N.D.	
2	N.D.	N.D.	N.D.	N.D.	
3	N.D.	N.D.	N.D.	N.D.	
4	N.D.	N.D.	N.D.	N.D.	
5	N.D.	N.D.	N.D.	N.D.	
6	N.D.	N.D.	N.D.	N.D.	
7	N.D.	N.D.	N.D.	N.D.	
8	N.D.	N.D.	N.D.	N.D.	
9	N.D.	N.D.	N.D.	N.D.	
10	N.D.	N.D.	N.D.	N.D.	
11	N.D.	N.D.	N.D.	N.D.	
12	N.D.	N.D.	N.D.	N.D.	
13	N.D.	N.D.	N.D.	N.D.	
14	N.D.	N.D.	N.D.	N.D.	
15	N.D.	N.D.	N.D.	N.D.	
16	N.D.	N.D.	N.D.	N.D.	

#### 3.1) Test Result: Heavy Metals (Pb, Cd, Cr6+, Hg) Tests

• "N.D." means "Not Detected ", method detection limit = 2mg/kg.

" \* " means be exempted from RoHS Directive.

#### Page : 7 of 9

### 3.2) Test Result: Brominated Flame Retardants (PBBs&PBDEs) Tests

PBBs	1	2	3	4	5	6	7
Monobromobiphenyl	N.D.						
Dibromobiphenyl	N.D.						
Tribromobiphenyl	N.D.						
Tetrabromobiphenyl	N.D.						
Pentabromoniphenyl	N.D.						
Hexqbromobiphenyl	N.D.						
Heptabromobiphenyl	N.D.						
Octabromobiphenyl	N.D.						
Nonabromobiphenyl	N.D.						
Decabromobiphenyl	N.D.						
Sum of PBBs	N.D.						
PBDEs	1	2	3	4	5	6	7
Monobromodiphenyl Ether	N.D.						
Dibromodiphenyl Ether	N.D.						
Tribromodiphenyl Ether	N.D.						
Tetrabromodiphenyl Ether	N.D.						
Pentabromoniphenyl Ether	N.D.						
Hexabromodiphenyl Ether	N.D.						
Heptabromodiphenyl Ether	N.D.						
Octabromodiphenyl Ether	N.D.						
Nonabromodiphenyl Ether	N.D.						
Decabromodiphenyl Ether	N.D.						
Sum of PBDEs	N.D.						

Report No.: ET-ROHS16125396

Page: 8 of 9

PBBs	8	9	10	11
Monobromobiphenyl	N.D.	N.D.	N.D.	N.D.
Dibromobiphenyl	N.D.	N.D.	N.D.	N.D.
Tribromobiphenyl	N.D.	N.D.	N.D.	N.D.
Tetrabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Pentabromoniphenyl	N.D.	N.D.	N.D.	N.D.
Hexqbromobiphenyl	N.D.	N.D.	N.D.	N.D.
Heptabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Octabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Nonabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Decabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Sum of PBBs	N.D.	N.D.	N.D.	N.D.
PBDEs	8	9	10	11
Monobromodiphenyl Ether	N.D.	N.D.	N.D.	N.D.
Dibromodiphenyl Ether	N.D.	N.D.	N.D.	N.D.
Tribromodiphenyl Ether	N.D.	N.D.	N.D.	N.D.
Tetrabromodiphenyl Ether	N.D.	N.D.	N.D.	N.D.
Pentabromoniphenyl Ether	N.D.	N.D.	N.D.	N.D.
Hexabromodiphenyl Ether	N.D.	N.D.	N.D.	N.D.
Heptabromodiphenyl Ether	N.D.	N.D.	N.D.	N.D.
Octabromodiphenyl Ether	N.D.	N.D.	N.D.	N.D.
Nonabromodiphenyl Ether	N.D.	N.D.	N.D.	N.D.
Decabromodiphenyl Ether	N.D.	N.D.	N.D.	N.D.
Sum of PBDEs	N.D.	N.D.	N.D.	N.D.

PBBs Limit = 1000 ppm, PBDEs Limit = 1000 ppm.

• "N.D." means "Not Detected ", method detection limit = 5mg/kg.

## **4** Photographs - Constructional Details



Photo Appearance of EUT

Photo Inside of EUT



END OF REPORT