

Test Report No.: SZRL2011100016 Date: Nov.4, 2011 Page 1 of 9

#### DARVEEN TECHNOLOGY LTD.

# ROOM 7F, WEST 210 BUILDING, NO.4 TAIRAN ROAD., CHEGONG MIAO, FUTIAN DISTRICT, SHENZHEN, CHINA

The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Description: Industrial Mobile Computer

Style/Item No.: VT-635-XXXXX

Manufacture: Darveen Technology Ltd.

Quantity: 2 PCS

Sample receiving Date: Oct.13, 2011

Test period: Oct.13, 2011 to Nov.4, 2011

Test Requested: 1. High and Low Temperature Test

2. Random Vibration Test

3. Mechanical Shock Test

Test Method: Refer to IEC 60068-2-1:2007 & IEC 60068-2-2:2007, IEC 60068-2-64:2008,

MIL-STD-810G: 2008 method 516.6 procedure I and client's requirements.

For further details, please refer to the following page(s)

Test Result(s): For further details, please refer to the following page(s)

Signed for and on behalf of

SGS-CSTC Ltd.

Reliability Lab

Kevin Yi

Engineer

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**Test Report** No.: SZRL2011100016 Date: Nov.4, 2011 Page 2 of 9

## 1. High and Low Temperature Test:

#### 1.1 Test Method/ Specification or Clients' Requirement:

a) Test Method/Specification:

Refer to IEC 60068-2-1:2007 and IEC 60068-2-2:2007 and client's requirements.

Test Condition:

Step 1: High Temperature Operating Test

A. Sample Status: Operating

60℃ B. Test Temperature:

C. Test Duration: 8 hours

Step 2: Low Temperature Operating Test

A. Sample Status: Operating

B. Test Temperature: -30℃

C. Test Duration: 8 hours

Step 3: Cold Start Test

A. Sample Status: Non-Operating

B. Test Temperature: -30℃ C. Test Duration: 2 hours

D. Test Method:

1	System power off 2 hours;
2	System power on, then 2 minutes later, system power off;
3	After 10 minutes, system power on again;

## b) Appearance and Function Inspection:

Appearance inspection should be done before and after test by SGS.

Function inspection should be done before and after test by SGS.

#### 1.2 Sample(s) Inspection before Test:

Sample(s) Description: Industrial Mobile Computer

2PCS Quantity:

No visual damage was found on samples before test. Appearance Inspection:

Function Inspection: The function of samples was normal before test.

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Test Report No.: SZRL2011100016 Date: Nov.4, 2011 Page 3 of 9

## 1.3 Test Result:

Sample No.	Test Step	Appearance and Function Inspection
	1	No visual damage was found on samples after test. The function of samples was normal during and after test.
#1 ~ #2	2	No visual damage was found on samples after test. The function of samples was normal during and after test
	3	No visual damage was found on samples after test. The function of samples was normal after test

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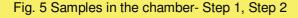
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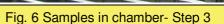


**Test Report** No.: SZRL2011100016 Date: Nov.4, 2011 Page 4 of 9

## 1.4 Test Photos:







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No.: SZRL2011100016 **Test Report** Date: Nov.4, 2011 Page 5 of 9

#### 2. Random Vibration Test

#### 2.1 Test Method/ Specification or Clients' Requirement:

a) Test Method/Specification:

Refer to IEC 60068-2-64:2008 and client's requirements.

Test Condition:

5~500Hz Frequency range:

Vibration Orientation: X, Y and Z axis

Vibration Duration: 1 hour/axis, total 3 hours

Vibration parameter table:

Frequency (Hz)	ASD (g <sup>2</sup> /Hz)			
5	0.032			
500	0.032			
Equivalent to 4 g <sub>rms</sub>				

# b) Appearance and Function Inspection:

Appearance inspection should be done before and after test by SGS.

Function inspection should be done before and after test by SGS.

#### 2.2 Sample(s) Inspection before Test:

Sample(s) Description: Industrial Mobile Computer

2PCS Quantity:

Appearance Inspection: No visual damage was found on samples before test.

**Function Inspection:** The function of samples was normal before test.

# 2.3 Test Result:

Sample No.	Appearance And Function Inspection
#1 ~ #2	No visual mechanical damage was found after test.  No crashes and power outages were found after test.  The samples could be rebooted normally after test.

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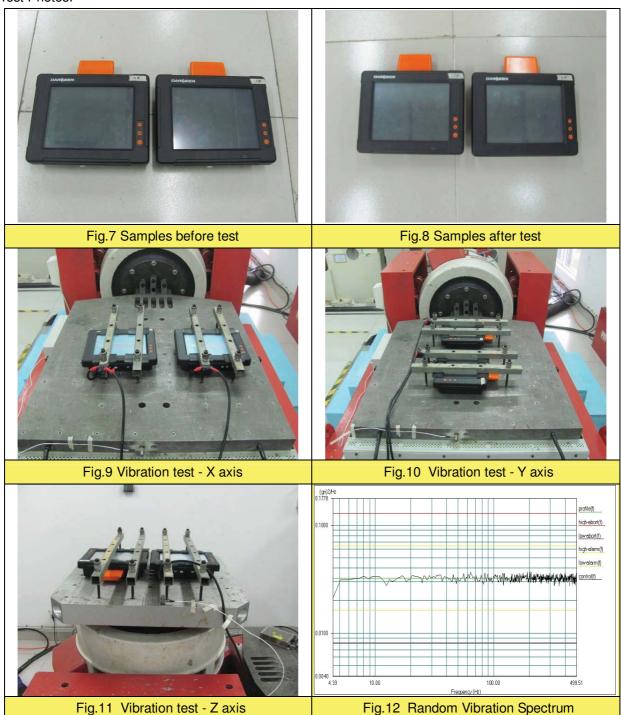
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Test Report No.: SZRL2011100016 Date: Nov.4, 2011 Page 6 of 9

#### 2.4 Test Photos:



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No.: SZRL2011100016 **Test Report** Date: Nov.4, 2011 Page 7 of 9

#### 3. Mechanical Shock Test

- 3.1 Test Method/ Specification or Clients' Requirement:
  - a) Test Method/Specification:

Refer to MIL-STD-810G: 2008 Method 516.6 & as per client's requirement.

Test Condition:

Shock waveform: Half-sine Waveform

Acceleration: 30G

Pulse Duration: 11ms

Shock direction: ±X, ±Y, ±Z axes Shock times: 3times/direction

b) Appearance and Function Inspection:

Appearance inspection should be done before and after test by SGS.

Function inspection should be done before and after test by SGS.

3.2 Sample(s) Inspection before Test:

Sample(s) Description: Industrial Mobile Computer

Quantity: 2 PCS

Appearance Inspection: No visual damage was found on samples before test.

**Function Inspection:** The function of samples was normal before test.

#### 3.3 Test Result:

Sample No.	Appearance And Function Inspection
#1 ~ #2	No visual mechanical damage was found after test.  No crashes and power outages were found after test.  The samples could be rebooted normally after test.

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**Test Report** No.: SZRL2011100016 Date: Nov.4, 2011 Page 8 of 9

#### 1.4 Test Photos:

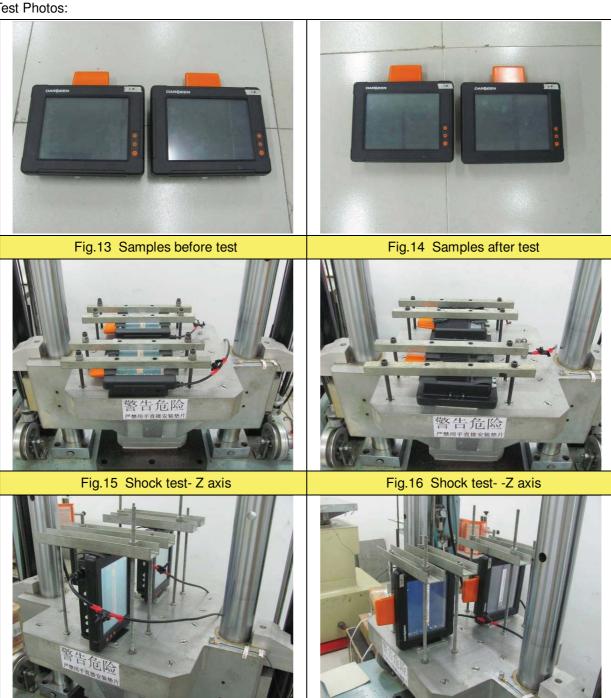


Fig.17 Shock test- Y axis

Fig.18 Shock test--Y axis

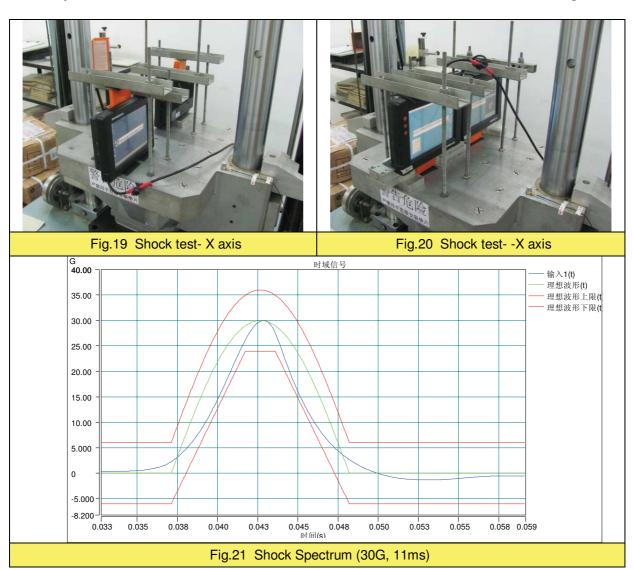
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Test Report No.: SZRL2011100016 Date: Nov.4, 2011 Page 9 of 9



\*\*\*End of Report\*\*\*

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