

Report No.: HC90053A/2016

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Date: November 1, 2016

VECOW CO., LTD. 12 F, NO. 111, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY, TAIWAN, R.O.C.

The following merchandise was submitted and identified by the vendor as:

Product <u>Description:</u> Expandable Robust Computing System

Style/ Item No.: RCS-9440/ No.3

Quantity: Total 1 set

<u>Testing Period:</u> Oct. 26, 2016 to Oct. 27, 2016

Note: (Client's declaration) The configuration of specimen(s) as shown below:

1. MB: RCS-9400 2. CPU: i7-6700

3. Memory: 8GB DDR4 (M4S0-8GSSOCRG)

We have tested the submitted sample(s) as requested and the following results were obtained:

<u>Test Required:</u> (According to client's test specification, please see following sheets in detail.)

1. Random Vibration Test

2. Mechanical Shock Test

Test Results: - PLEASE SEE ATTACHED SHEETS -

Signed for and on behalf of SGS TAIWAN Ltd.

Hank Chiou Supervisor

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### 1. Random Vibration Test:

### Test Equipment:

Name	Brand	Model	Serial No.	
Vibration Test System	King Design	EM-800F2K-50N120	RU104080389	
Controller	Dactron	COMET 200	10539718	
Control Accelerometer	PCB	353B34	143549	
Vibration Tester	King Design	EM-5000F2K-75N600	10923742	
Controller	Crystal	spider	1001664	
Control Accelerometer	WR	793-6	A4632	

#### Lab Environmental Conditions:

(25 ± 3) °C Ambient temperature:

Ambient humidity:  $(55 \pm 20) \% RH$ 

#### Test Method/ Specification:

Test Method: IEC 60068-2-64, Edition 2.0:2008 and client's request

Sample condition: Operating (execute Burn-In Test)

Wave form: Random

Frequency:  $(5 \sim 500) \text{ Hz}$ 

Frequency (Hz)	Left Slope (dB/Oct.)	PSD (G <sup>2</sup> /Hz)	Right Slope (dB/Oct.)
5	-	0.05	0
500	0	0.05	
equivalent to 5.0 Grms			

Direction: X, Y, Z axes (see photo  $3 \sim 5$ )

**Duration:** 30 minutes/axis

- Examine the appearance of specimen(s) by visual check and perform functional check after this test
- Functional check: Turn on the power of specimen then execute test program "Burn-In Test" while performing functional check.

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Specimen:

Style/ Item No.: RCS-9440/ No.3

Quantity: Total 1 set

### Test Result:

Check Item Style/ Item No.	Appearance check (Visual check)	Functional check
RCS-9440/ No.3	No visible damage	Normal

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### 2. Mechanical Shock Test:

### **Test Equipment:**

Name	Brand	Model	Serial No.
Shock Testing System	LANSMONT	65-81 TTSII	M-13418
Data Acquisition and Analysis System	LANSMONT	103570-2-В	0503-73
ICP Accelerometer	PCB	353B14	79347

#### Lab Environmental Conditions:

Ambient temperature: (25 ± 3) °C

Ambient humidity:  $(55 \pm 20) \% RH$ 

### Test Method/ Specification:

Test Method: IEC 60068-2-27, Edition 4.0:2008 and client's request

Specimen Condition: Operating (execute Burn-In Test)

Pulse shape: Half-sine

Acceleration: 50 G

Velocity Change: 11 ms

Shock direction: 6 faces ( $\pm X$ ,  $\pm Y$ ,  $\pm Z$  axes, see photo 6 ~ 11)

No. of shock: 3 shocks/ face (total 18 shocks)

- Examine the appearance of specimen(s) by visual check and perform functional check after this test
- Functional check: Turn on the power of specimen then execute test program "Burn-In Test" while performing functional check.

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Specimen:

Style/ Item No.: RCS-9440/ No.3

Quantity: Total 1 set

### Test Result:

Check Item Style/ Item No.	Appearance check (Visual check)	Functional check
RCS-9440/ No.3	No visible damage	Normal

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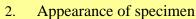
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### **Test Photos:**



Appearance of specimen

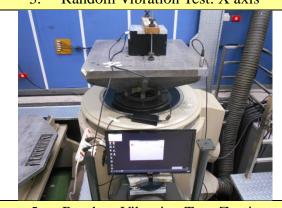






3. Random Vibration Test: X axis

4. Random Vibration Test: Y axis





5. Random Vibration Test: Z axis

Mechanical Shock Test: +X axis 6.

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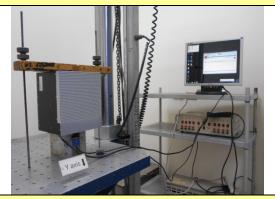
## Test Photos--Continued:



Mechanical Shock Test: -X axis



Mechanical Shock Test: +Y axis



Mechanical Shock Test: -Y axis



10. Mechanical Shock Test: +Z axis



Mechanical Shock Test: -Z axis



Functional check

# -The End of Test Report — -

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