

## TEST REPORT

Report No.: HC60265A/2013

Page: 1 of 7

Date: August 19, 2013

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 Description: Fanless, Extended-Temp Embedded Computing System  
Style/ Item No.: ECS-7000-6GDE610QW/ No.1  
Manufacturer/ Vendor: Vecow Co., Ltd.  
Country of Origin: Taiwan  
Quantity: Total 1 set  
Testing Period: Aug. 6, 2013 to Aug. 12, 2013

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

Test Required: (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 –

\* HC60265/2013, dated on August 14, 2013, is hereby canceled and replaced by HC60265A/2013.

Signed for and on behalf of  
SGS TAIWAN Ltd.



Winson Tseng  
Asst. Manager

# TEST REPORT

## 1. Random Vibration Test:

### Test Equipment:

Name	Brand	Model	Serial No.
Vibration Tester	King Design	EM-800F2K-50N120	RU104080389
Controller	Dactron	COM 200	10539718
Control Accelerometer	PCB	353B34	139174

### Lab Environmental Conditions:

Ambient temperature:  $(25 \pm 3) ^\circ\text{C}$

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

### Test Method/ Specification:

Test Method: IEC 60068-2-64 Edition 2.0:2008

Sample condition: Operating (Execute the test program "BurnIn Test")

Wave form: Random

Frequency: (5 ~ 500) Hz

Frequency (Hz)	Left Slope (dB/Oct.)	PSD $((\text{m/s}^2)^2/\text{Hz})$	Right Slope (dB/Oct.)
5	-	1.95	3.98
10	3.98	4.87	0
500	0	4.87	-

⇨ equivalent to 49 (m/s<sup>2</sup>)rms

Direction: X, Y, Z axes (see photo 2 ~ 4)

Duration: 30 minutes/ axis

- Examine the appearance of specimen(s) by visual check and perform functional check after this test.
- Functional check: Connect the specimen(s) with rated power, monitor, keyboard, and mouse separately then execute the test program "BurnIn Test" while performing functional check.

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# TEST REPORT

Report No.: HC60265A/2013

Page: 3 of 7

Specimen:

Style/ Item No.: ECS-7000-6GDE610QW/ No.1

Quantity: Total 1 set

Test Result:

Check Item Style/ Item No.	Appearance check (Visual check)	Functional check
ECS-7000-6GDE610QW/ No.1	No visible damage	Normal

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# TEST REPORT

Report No.: HC60265A/2013

Page: 4 of 7

## 2. Mechanical Shock Test:

### Test Equipment:

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

### Lab Environmental Conditions:

Ambient temperature:  $(25 \pm 3) ^\circ\text{C}$

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

### Test Method/ Specification:

Test Method: IEC 60068-2-27, Edition 4.0: 2008

Specimen Condition: Operating (Execute the test program "BurnIn 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 5 ~ 10)

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: Connect the specimen(s) with rated power, monitor, keyboard, and mouse separately then execute the test program "BurnIn Test" while performing functional check.

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# TEST REPORT

Report No.: HC60265A/2013

Page: 5 of 7

**Specimen:**

Style/ Item No.: ECS-7000-6GDE610QW/ No.1

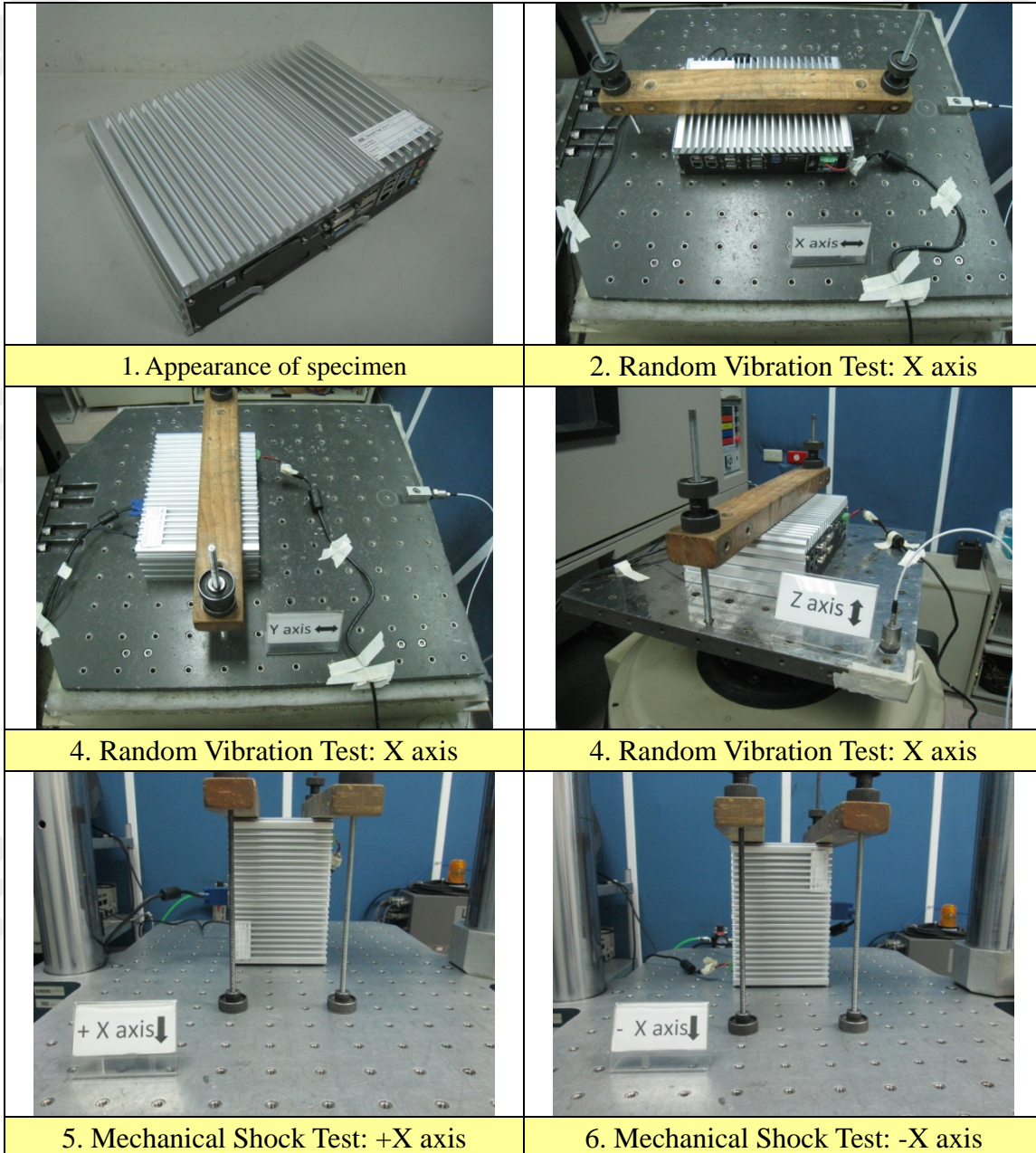
Quantity: Total 1 set

**Test Result:**

<div style="text-align: right; padding-right: 5px;"><b>Check Item</b></div> <div style="text-align: left; padding-left: 5px;"><b>Style/ Item No.</b></div>	<b>Appearance check (Visual check)</b>	<b>Functional check</b>
<b>ECS-7000-6GDE610QW/ No.1</b>	No visible damage	Normal

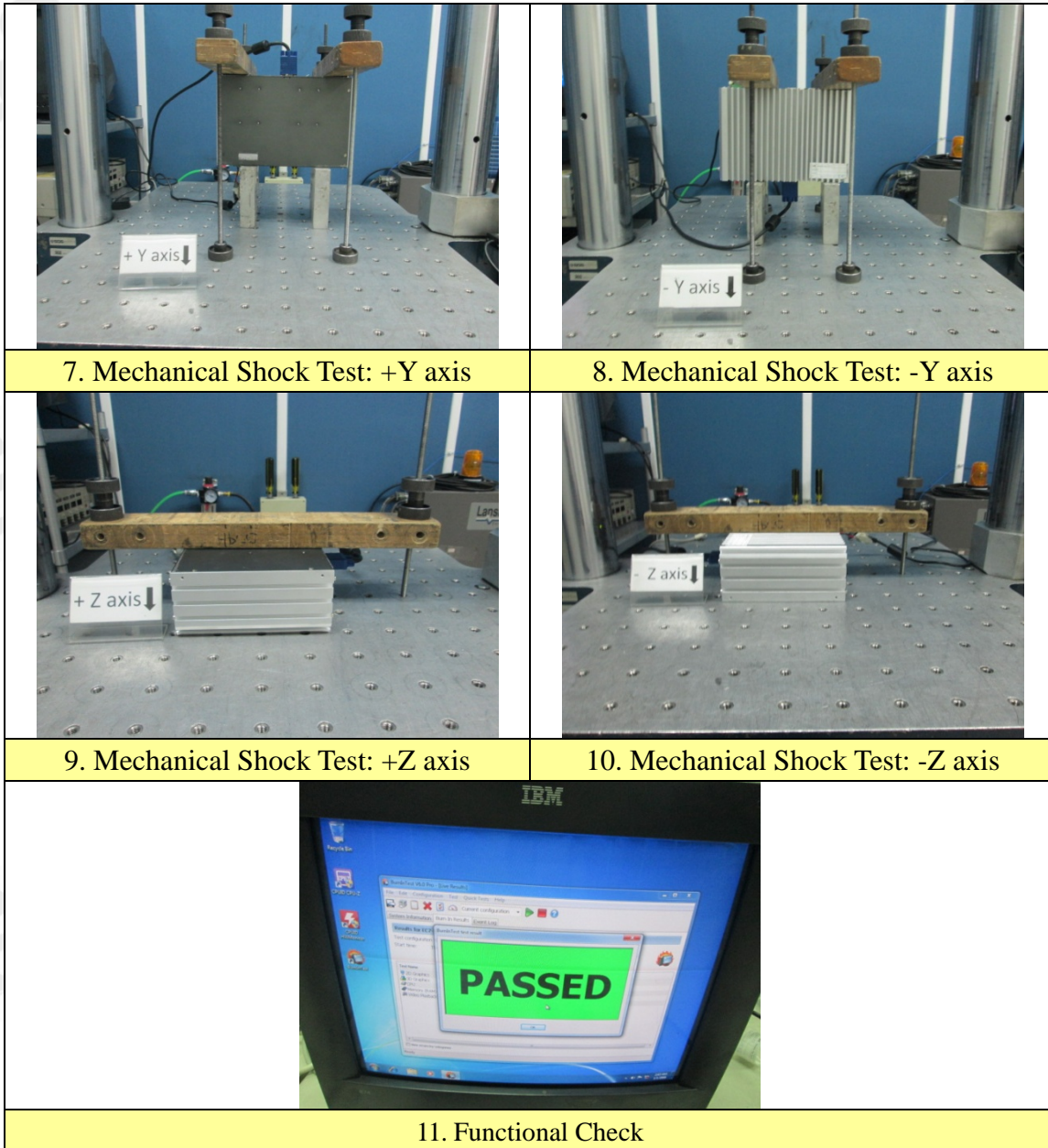
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Test Photos:



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Test Photos--Continued:



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