

TEST REPORT

Report No.: HC20122A/2017

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Date: March 3, 2017

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 Embedded System

Style/ Item No.: ECS-9000-PoER/ No.1

Quantity: Total 1 set

Testing Period: Mar. 2, 2017

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-

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 Tester	King Design	EM-800F2K-50N120	RU104080389
Controller	Dactron	COMET 200	10539718
Control Accelerometer	PCB	353B34	143549

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 "BurnIn Test")

Wave form: Random

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

Frequency (Hz)	Left Slope (dB/Oct.)	PSD (G^2/Hz)	Right Slope (dB/Oct.)
5	—	0.05	0
500	0	0.05	—

⇔ equivalent to 5.0 G_{rms}

Direction: X, Y, Z axes (see photo 3 ~ 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 examine the test program "BurnIn Test" could work normally or not.

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Specimen:

Style/Item No.: ECS-9000-PoER/ No.1

Quantity: Total 1 set

Test Result:

<div style="text-align: right;">Check Item</div> <div style="text-align: left;">Style/ Item No.</div>	Appearance check (Visual check)	Functional check
ECS-9000-PoER/ No.1	No visible damage	Normal

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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

Sample condition: Operating (execute "BurnIn Test")

Pulse shape: Half-sine

Acceleration: 50 G

Pulse duration: 11 ms

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

No. of shock: 3 shocks/ axis (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 examine the test program "BurnIn Test" could work normally or not.

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Specimen:

Style/Item No.: ECS-9000-PoER/ No.1

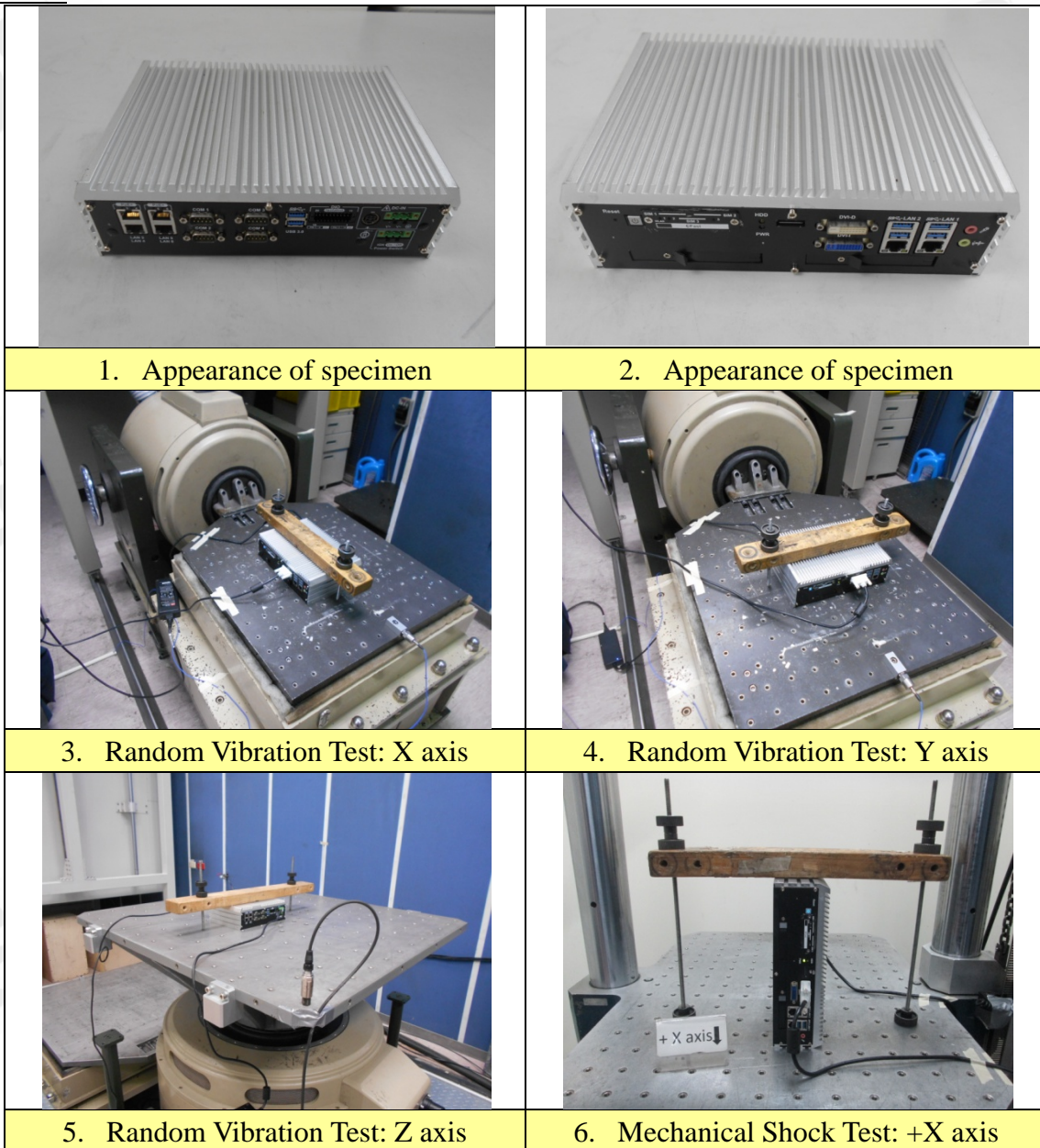
Quantity: Total 1 set

Test Result:

<div style="text-align: right;">Check Item</div> <div style="text-align: left;">Style/ Item No.</div>	Appearance check (Visual check)	Functional check
ECS-9000-PoER/ No.1	No visible damage	Normal

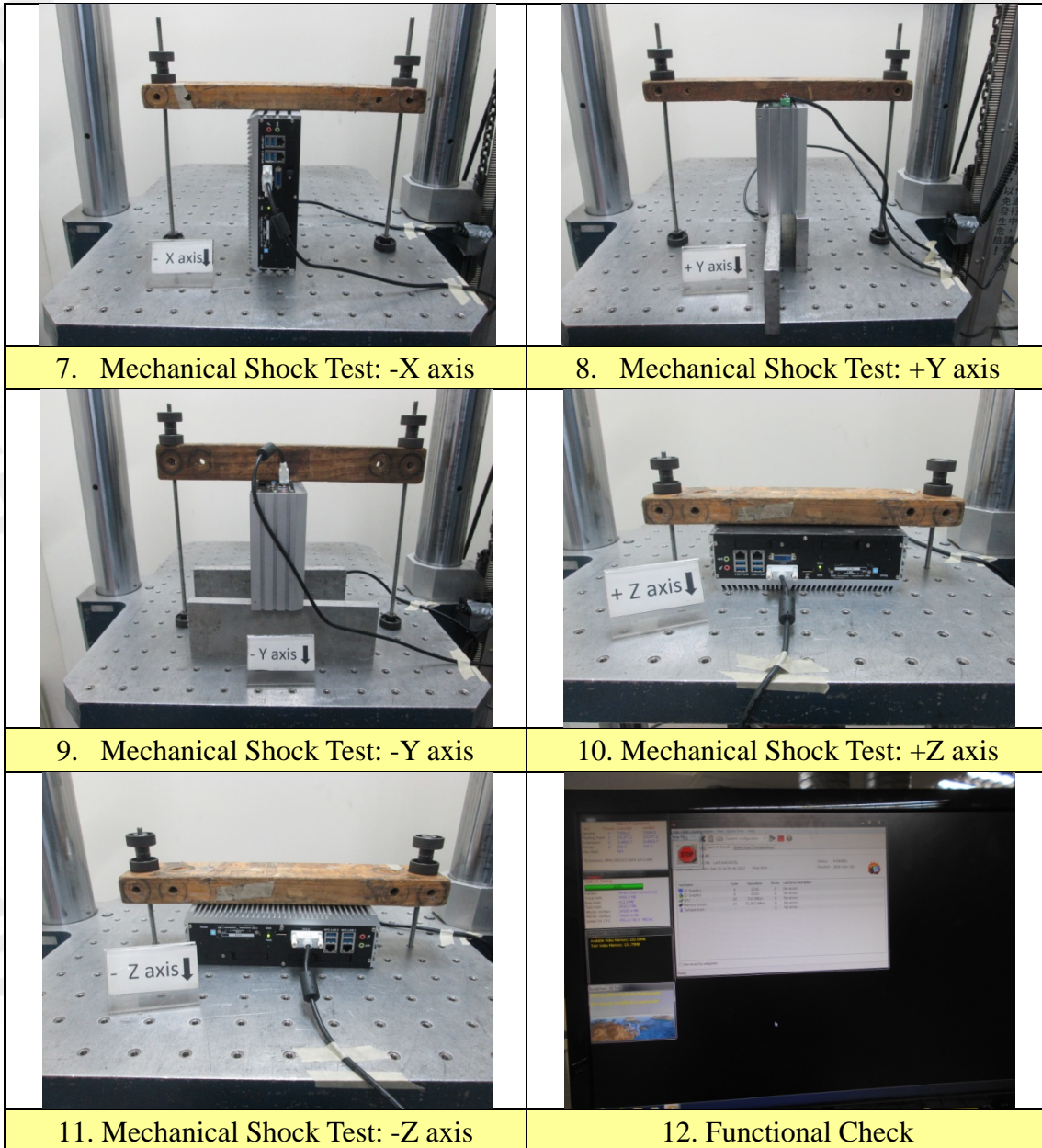
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Test Photos:



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Test Photos -- continued:



— — — The End of Test Report — — —

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