

TEST REPORT

Report No.: HC50005A/2019

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Date: June 6, 2019

VECOW CO., LTD.
3 F., NO. 10, JIANKANG RD.,
ZHONGHE DIST., NEW TAIPEI CITY,
TAIWAN, R.O.C.

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

Product Description: Expandable Fanless System
Style/ Item No.: ECX-1200/ No.1
Quantity: Total 1 set
Testing Period: May 24, 2019 to Jun. 6, 2019
Note: System Configuration of Equipment under measurement:
CPU: Intel(R) Core(TW):i7-8700T CPU@2.40 GHz
DDR: SLINK DDR4 4G 2666 SODIMM IT *2
Storage: Innodisk 2.5 SATA SSD 3MG2-P 64GB *1

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
Sr. Supervisor

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1. Random Vibration Test:

Test Equipment:

Name	Brand	Model	Serial No.
Vibration Tester	UNHOLTZ-DICKIE	SAI60-H560BAC/2/ST	474
Controller	Dactron	LASER	7110357
Control Accelerometer	PCB	353B34	LW213529

Lab Environmental Conditions:

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

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

Test Location:

No.31, Wu Chyuan Road, New Taipei Industrial Park, WuKu District,
New Taipei City, Taiwan

Test Method/ Specification:

Test method: IEC 60068-2-64, Edition 2.0: 2008

Sample condition: Operating (execute "BurnIn Test")

Wave form: Random

Frequency: (5 ~ 500) 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.: ECX-1200/ No.1

Quantity: Total 1 set

Test Result:

Check Item Style/ Item No.	Appearance check (Visual check)	Functional check
ECX-1200/ 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	95/115D	M-17656
Data Acquisition & Analysis System	LANSMONT	TP4 8A-CH SML 1115-001	1115-001
ICP Accelerometer	PCB	353M288	196438

Lab Environmental Conditions:

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

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

Test Location: No.33, Wu Chyuan Road, New Taipei Industrial Park, WuKu District, New Taipei City, Taiwan

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.: ECX-1200/ No.1



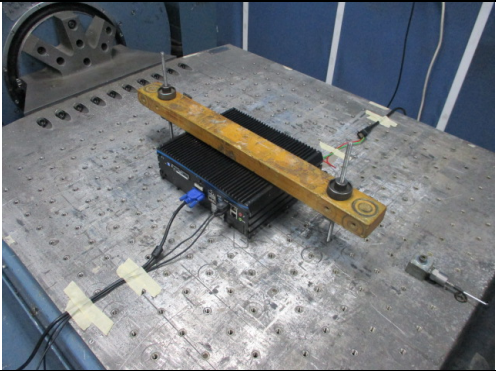
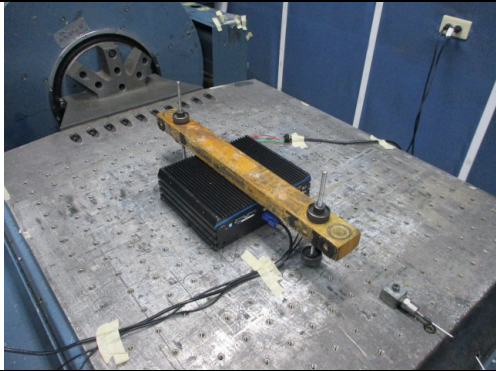
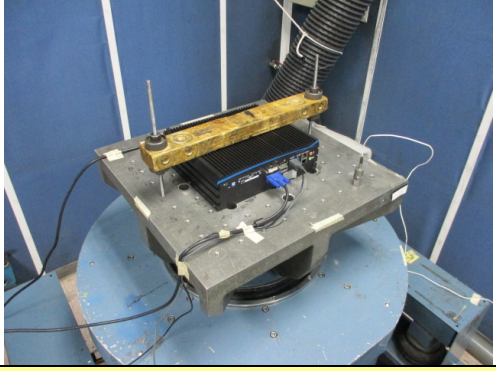
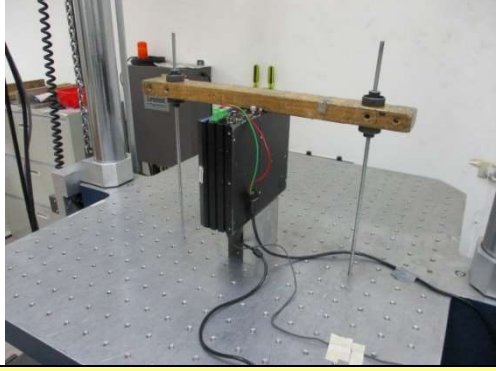
Quantity: Total 1 set

Test Result:

Style/ Item No.	Check Item	Appearance check (Visual check)	Functional check
	ECX-1200/ No.1		No visible damage

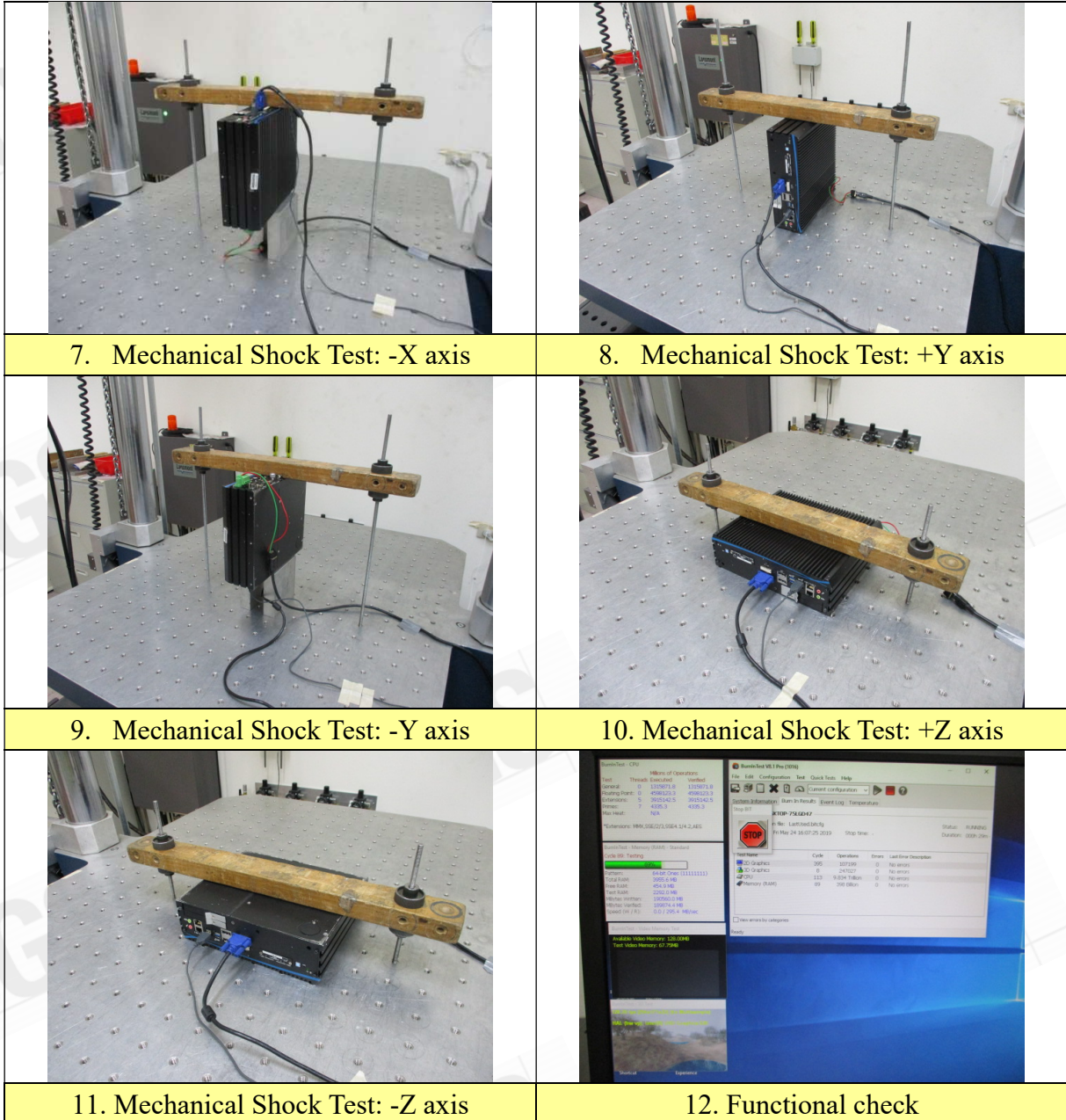
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Test Photos:

	
<p>1. Appearance of specimen</p>	<p>2. Appearance of specimen</p>
	
<p>3. Random Vibration Test: X axis</p>	<p>4. Random Vibration Test: Y axis</p>
	
<p>5. Random Vibration Test: Z axis</p>	<p>6. Mechanical Shock Test: +X axis</p>

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Test Photos--Continued:



7. Mechanical Shock Test: -X axis

8. Mechanical Shock Test: +Y axis

9. Mechanical Shock Test: -Y axis

10. Mechanical Shock Test: +Z axis

11. Mechanical Shock Test: -Z axis

12. Functional check

— — — The End of Test Report — — —

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