

TEST REPORT

Report No.: HC50005C/2019

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Date: June 20, 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-1400/ No.1
Quantity: Total 1 set
Testing Period: 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:

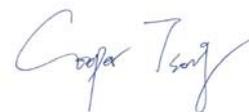
Test Required: (According to client's test specification, please see following sheets in detail.)

1. Random Vibration Test
2. Mechanical Shock Test

Test Results: – PLEASE SEE ATTACHED SHEETS –

*HC50005/2019, dated on June 10, 2019, 2014, is hereby canceled and replaced by HC50005C/2019.

Signed for and on behalf of
SGS TAIWAN Ltd.



Cooper Tseng
Team Leader

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1. Random Vibration Test:

Test Equipment:

Name	Brand	Model	Serial No.
Vibration Test System	UNHOLTZ-DICKI	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 61373, Edition 2.0:2010, Table 1, Class B - Body mounted

Sample condition: Operating (execute Burn-In Test)

Wave form: Random

Frequency: (5 ~ 150) Hz

Z axis (Vertical)		X axis (Transverse)		Y axis (Longitudinal)	
Frequency (Hz)	PSD $((\text{m/s}^2)^2 / \text{Hz})$	Frequency (Hz)	PSD $((\text{m/s}^2)^2 / \text{Hz})$	Frequency (Hz)	PSD $((\text{m/s}^2)^2 / \text{Hz})$
5	0.0301	5	0.0060	5	0.0144
20	0.0301	20	0.0060	20	0.0144
150	0.00054254	150	0.000108148	150	0.000259554
⇨ equivalent to 0.99 (m/s ²)rms		⇨ equivalent to 0.44 (m/s ²)rms		⇨ equivalent to 0.68 (m/s ²)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 during and 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.: ECX-1400/ No.1

Quantity: Total 1 set

Test Result:

Check Item Style/ Item No.	Appearance check (Visual check)	Functional check
ECX-1400/ No.1	No visible damage	Normal

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2. Mechanical Shock Test:**Test Equipment:**

Name	Brand	Model	Serial No.
Shock Test System	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 61373, Edition 2.0:2010, Table 3, Class A and Class B - Body mountedSample condition: Non-OperatingPulse shape: Half-sineAcceleration: Vertical-Z: 3 g;Transverse-X: 3 g;Longitudinal-Y : 5 gPulse duration: 30 msShock direction: 6 faces ($\pm X$, $\pm Y$, $\pm Z$ axes, see photo 3 ~ 5)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 "Burn-In Test" could work normally or not.

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Specimen:

Style/ Item No.: ECX-1400/ No.1

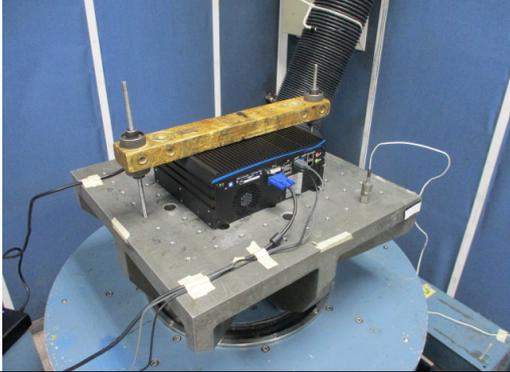
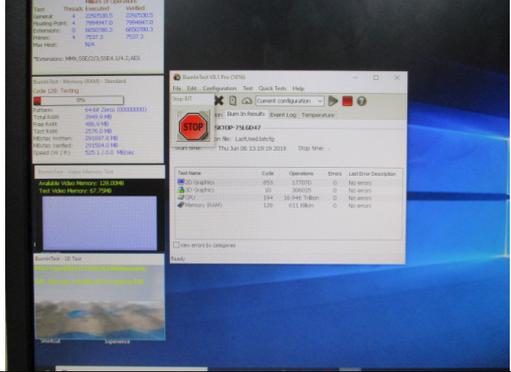
Quantity: Total 1 set

Test Result:

Check Item Style/ Item No.	Appearance check (Visual check)	Functional check
ECX-1400/ No.1	No visible damage	Normal

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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; Mechanical Shock Test ($\pm X$ axis)</p>	<p>4. Random Vibration Test: Y axis; Mechanical Shock Test ($\pm Y$ axis)</p>
	
<p>5. Random Vibration Test: Z axis; Mechanical Shock Test ($\pm Z$ axis)</p>	<p>6. Functional Check</p>

— — — The End of Test Report — — —

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