

Report No.: HCN0020A/2019

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November 27, 2019 Date:

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: **IPC** 

Style/ Item No.: SPC-4600/ No.1 Vecow Co., Ltd. Manufacturer/Vendor:

Quantity: Total 1 set

**Testing Period:** Nov. 20, 2019 to Nov. 22, 2019

Note: (Client's declaration)

System Configuration of Equipment under measurement:

CPU: Intel(R) Atom(TW): Processor E3950 CPU@1.60 GHz

DDR: Innodisk DDR3L 8G 1866 W/T SODIMM IT \*1 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 Test System	UNHOLTZ-DICKIE	SAI60-H560BAC/2/ST	474
Data Acquisition & Analysis System	Dactron	LASER	7110357
ICP Accelerometer	PCB	353B34	121615
Vibration Test System	King Design	EM-5000F2K-75N600	WR10923701
Data Acquisition & Analysis System	Crystal	spider	1001664
ICP Accelerometer	WR	793-6	A4938

Lab Environmental Conditions:

Ambient temperature: Ambient humidity:

No.31, Wu Chyuan Road, New Taipei Industrial Park, WuKu District, Test Location:

New Taipei City, Taiwan

## Test Method/ Specification:

Test method: IEC 60068-2-64, Edition 2.0: 2008 Operating (execute "BurnIn Test") Sample condition:

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	40
equivalent to 5.0 G <sub>rms</sub>			

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

**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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Reliability Laboratory/ No.31, Wu Chyuan Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan

可靠度實驗室/新北市五股區新北產業園區五權路31號



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Specimen:

Style/ Item No.: SPC-4600/ No.1

Quantity: Total 1 set

### Test Result:

Check Item Style/ Item No.	Appearance check (Visual check)	Functional check
SPC-4600/ 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: Ambient humidity:

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

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.: SPC-4600/ No.1

Quantity: Total 1 set

#### Test Result:

Check Item Style/ Item No.	Appearance check (Visual check)	Functional check
SPC-4600/ No.1	No visible damage	Normal

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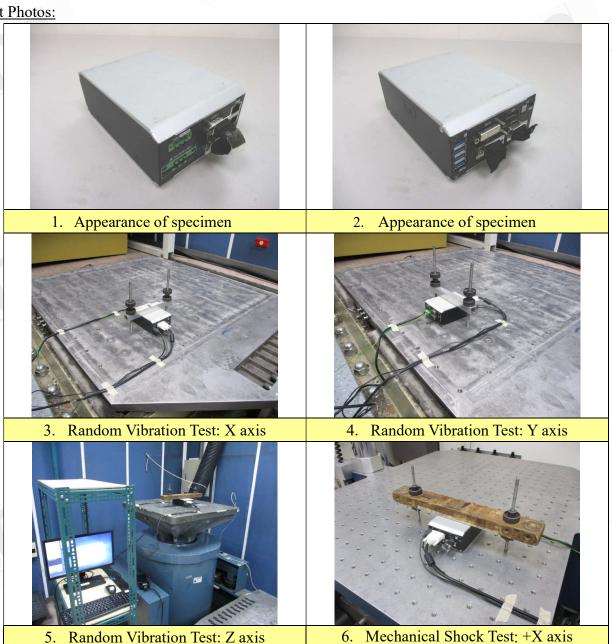
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### **Test Photos:**



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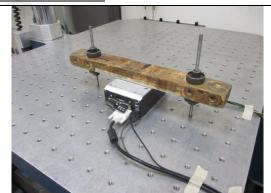
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## **Test Photos--Continued:**



Mechanical Shock Test: -X axis



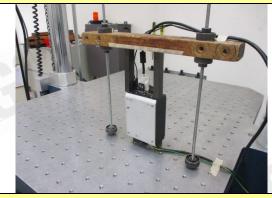
Mechanical Shock Test: +Y axis



Mechanical Shock Test: -Y axis



10. Mechanical Shock Test: +Z axis



11. Mechanical Shock Test: -Z axis



12. Functional check

The End of Test Report — -

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