

## TEST REPORT

Report No.: HC50117/2022

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Date: June 7, 2022

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

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

Product Description: Ultra-Compact Embedded System  
Style/ Item No.: PBC-1000/ No.1  
Manufacturer/ Vendor: Vecow Co., Ltd.  
Country of Origin: Taiwan  
Quantity: Total 1 piece  
Testing Period: May 26, 2022 to Jun. 6, 2022

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. High Temperature Test
2. Low Temperature Test
3. Vibration Test
4. Mechanical Shock Test

Test Results: - PLEASE SEE ATTACHED SHEETS -

Signed for and on behalf of  
SGS TAIWAN Ltd.



Alex Chen  
Asst. Supervisor

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## 1. High Temperature Test:

### Test Equipment:

Name	Brand	Model	Serial No.
Programmable Temperature & Humidity Chamber	KSON	THS-D6TS-150+LN2	A0347

### 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 60068-2-2, Edition 5.0: 2007 and client's request

Test Temperature: 70 °C

Test Humidity: 95 % RH

Test duration: 16 hours

- Sample condition: Operating.
- Examine the appearance of specimen by visual check and perform functional check after this test.
- Functional check: Connect the specimen with rated power and then examine whether the test program "BurnIn test" could be work normally or not.

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**Specimen:**

Style/ Item No.: PBC-1000/ No.1

Quantity: Total 1 piece

**Test Result:**

<b>Check Item</b> <b>Style/ Item No.</b>	<b>Appearance Check</b> <b>(Visual check)</b>	<b>Functional check</b>
<b>PBC-1000/ No.1</b>	No visible damage	Normal

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## 2. Low Temperature Test:

### Test Equipment:

Name	Brand	Model	Serial No.
Programmable Temperature & Humidity Chamber	KSON	THS-D6TS-150+LN2	A0347

### 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 60068-2-1, Edition 6.0: 2007 and client's request

Test Temperature: -40 °C

Test duration: 16 hours

- Sample condition: Operating.
- Examine the appearance of specimen by visual check and perform functional check after this test.
- Functional check: Connect the specimen with rated power and then examine whether the test program "BurnIn test" could be work normally or not.

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**Specimen:**

Style/ Item No.: PBC-1000/ No.1

Quantity: Total 1 piece

**Test Result:**

Check Item Style/ Item No.	Appearance Check (Visual check)	Functional check
<b>PBC-1000/ No.1</b>	No visible damage	Normal

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### 3. Vibration Test:

#### Test Equipment:

Name	Brand	Model	Serial No.
Vibration Test Controller	UNHOLTZ-DICKIE	SAI60-H560BAC/2/ST	474
Control Accelerometer	Dactron	LASER	7110357
	PCB	353B34	LW228242

#### 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 2.1: 2019 and client's request

Wave form: Random

Frequency: (5 ~ 500) Hz

Frequency (Hz)	Left Slope (dB/Oct.)	PSD ( $\text{g}^2/\text{Hz}$ )	Right Slope (dB/Oct.)
5	-	0.05	0
500	0	0.05	-

⇒ equivalent to 5.0  $\text{g}_{\text{rms}}$

#### Direction:

X, Y, Z axes (as show in photo 5 ~ 7)

#### Test duration:

30 minutes/ axis

- Sample condition: Operating.
- Examine the appearance of specimen by visual check and perform functional check after this test.
- Functional check: Connect the specimen with rated power and then examine whether the test program "BurnIn test" could be work normally or not.

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**Specimen:**

Style/ Item No.: PBC-1000/ No.1

Quantity: Total 1 piece

**Test Result:**

Check Item Style/ Item No.	Appearance Check (Visual check)	Functional check
PBC-1000/ No.1	No visible damage	Normal

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## 4. Mechanical Shock Test :

### Test Equipment:

Name	Brand	Model	Serial No.
Shock Test System	LANSMONT	95-115D	M17656
Data Acquisition & Analysis System	LANSMONT	TP4 8A-CH SML	1115-001
ICP Accelerometer	PCB	353M288	190564

### 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 and client's request

Pulse shape: Half-sine

Acceleration: 50 g

Pulse duration: 11 ms

Shock direction: 6 faces ( $\pm X, \pm Y, \pm Z$  axes, see photo 8 ~ 13)

No. of shock: 3 shocks/ axis (total 18 shocks)

- Sample condition: Non-Operating
- Examine the appearance of specimen by visual check and perform functional check after this test.
- Functional check: Connect the specimen with rated power and then examine whether the test program "BurnIn test" could be work normally or not.

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**Specimen:**

Style/ Item No.: PBC-1000/ No.1





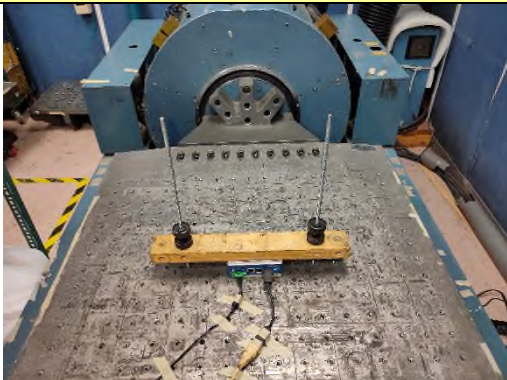
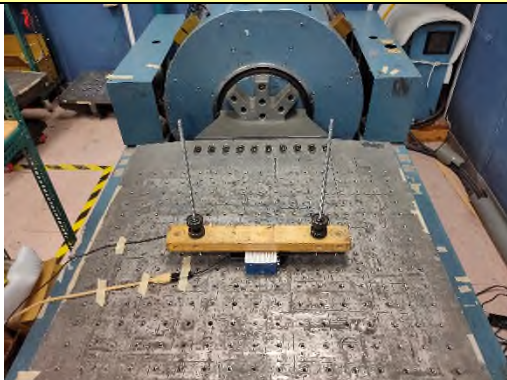
Quantity: Total 1 piece

**Test Result:**

<div style="text-align: center;"><b>Check Item</b></div> <div style="text-align: center;"><b>Style/ Item No.</b></div>	<div style="text-align: center;"><b>Appearance Check (Visual check)</b></div>	<div style="text-align: center;"><b>Functional check</b></div>
<div style="text-align: center;"><b>PBC-1000/ No.1</b></div>	<div style="text-align: center;">No visible damage</div>	<div style="text-align: center;">Normal</div>

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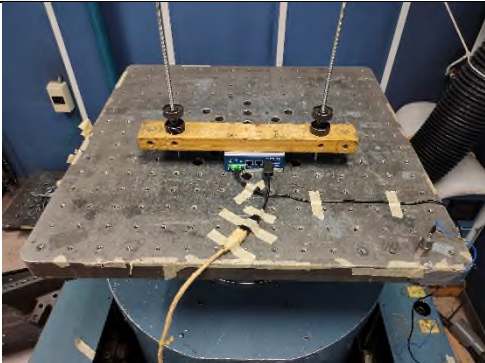
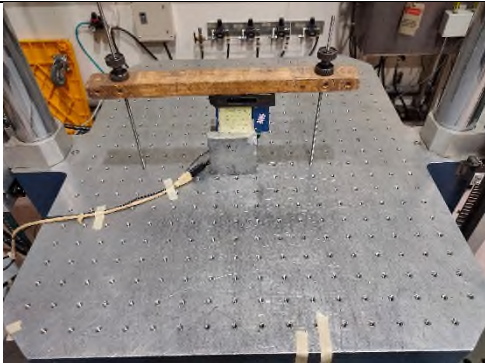
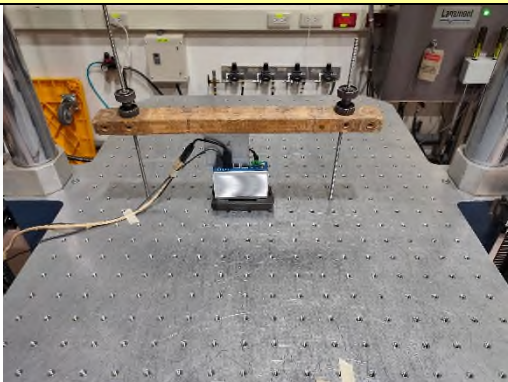
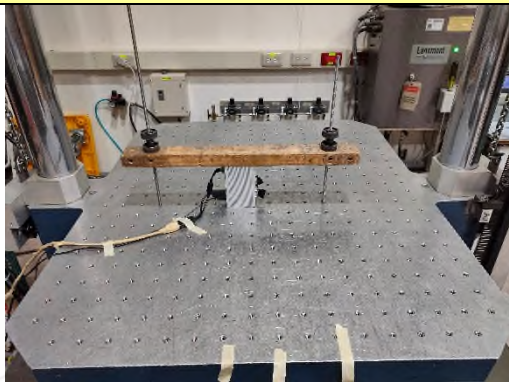
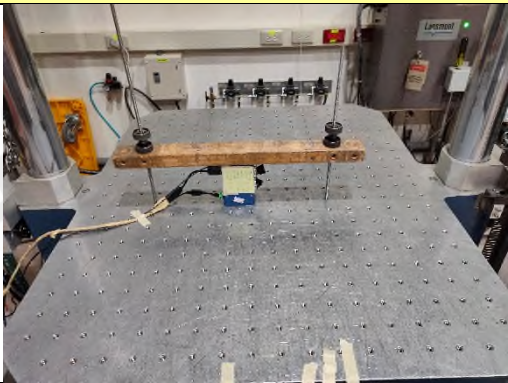
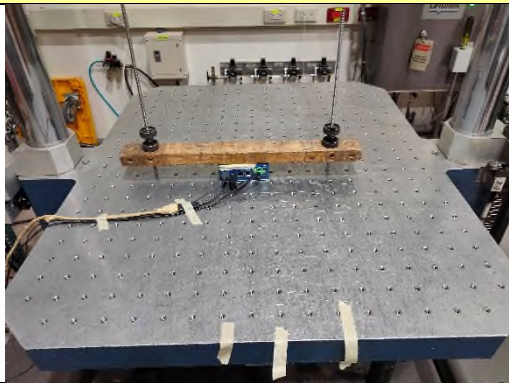
Test Photos:

	
<p>1. Appearance of specimen</p>	<p>2. Appearance of specimen</p>
	
<p>3. High/ Low Temperature Test</p>	<p>4. High/ Low Temperature Test</p>
	
<p>5. Vibration Test (X axis)</p>	<p>6. Vibration Test (Y axis)</p>

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Test Photos--Continued:

	
<p>7. Vibration Test (Z axis)</p>	<p>8. Mechanical Shock Test (+X axis)</p>
	
<p>9. Mechanical Shock Test (-X axis)</p>	<p>10. Mechanical Shock Test (+Y axis)</p>
	
<p>11. Mechanical Shock Test (-Y axis)</p>	<p>12. Mechanical Shock Test (+Z axis)</p>

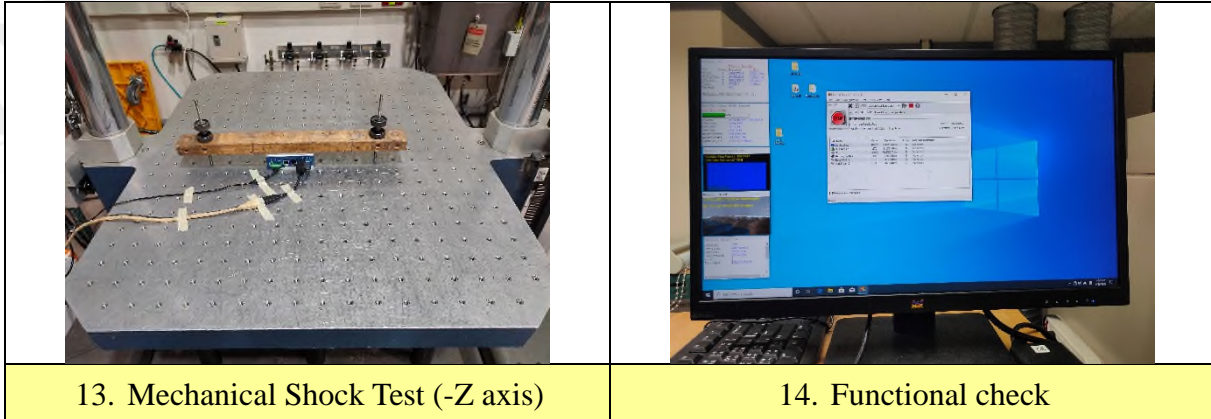
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### Test Photos--Continued:



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