

TEST REPORT

Report No.: HC80185/2021
Page: 1 of 6
Date: September 13, 2021

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: Expandable Embedded Box PC
Style/ Item No.: ECX-2200 PEG + NVIDIA GTX 1050 TI/ No.1
Quantity: Total 1 piece
Testing Period: Aug. 31, 2021 to Sep. 1, 2021
Note: (Client's declaration) The configuration of specimen(s) as shown below:
1. CPU: Intel i7-10700E: 2.9GHZ
2. RAM: SLINK DDR4 16GB 2666 SODIMM IT
3. SSD: innodisk 2.5" SATA SSD 3ME4 128GB
4. GPU: NVIDIA GTX 1050 TI

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.



Allen Wang
Asst. Supervisor

TEST REPORT

1. Random Vibration Test:

Test Equipment:

Name	Brand	Model	Serial No.
Vibration 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 1, Class B - Body mounted

Sample condition: Operating

Wave form: Random

Frequency: (5 ~ 150) Hz

Transverse - X axis		Longitudinal - Y axis		Vertical - Z axis	
Frequency (Hz)	PSD (m^2/s^3)	Frequency (Hz)	PSD (m^2/s^3)	Frequency (Hz)	PSD (m^2/s^3)
5	0.0060	5	0.0144	5	0.0301
20	0.0060	20	0.0144	20	0.0301
150	0.00010814	150	0.0002595	150	0.00054254
⇨ equivalent to 0.44 (m/s^2)rms		⇨ equivalent to 0.68 (m/s^2)rms		⇨ equivalent to 0.99 (m/s^2)rms	

Direction: X, Y, Z axes (as show in photo 3 ~ 5)

Test duration: 30 minutes/ axis

- Examine the appearance of specimen by visual check and perform functional check after this test.
- Functional check: Turn on the power of specimen then execute the test program “Burn-In Test” and “3D Mark” while performing functional check.

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TEST REPORT

Report No.: HC80185/2021

Page: 3 of 6

Specimen:

Style/ Item No.: ECX-2200 PEG + NVIDIA GTX 1050 TI/ No.1

Quantity: Total 1 piece

Test Result:

Style/ Item No.	Check Item Appearance Check (visual check)	Functional Check
ECX-2200 PEG + NVIDIA GTX 1050 TI/ No.1	No visible damage	Normal

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TEST REPORT

Report No.: HC80185/2021

Page: 4 of 6

2. Mechanical Shock Test:

Test Equipment:

Name	Brand	Model	Serial No.
Vibration 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 mounted

Sample condition: Non-Operating

Pulse shape: Half-sine

Acceleration: Vertical-Z: 3 g;

Transverse-X: 3 g;

Longitudinal-Y: 5 g

Pulse duration: 30 ms

Shock 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 by visual check and perform functional check after this test.
- Functional check: Turn on the power of specimen then execute the test program "Burn-In Test" and "3D Mark" while performing functional check.

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TEST REPORT

Report No.: HC80185/2021

Page: 5 of 6

Specimen:

Style/ Item No.: ECX-2200 PEG + NVIDIA GTX 1050 TI/ No.1






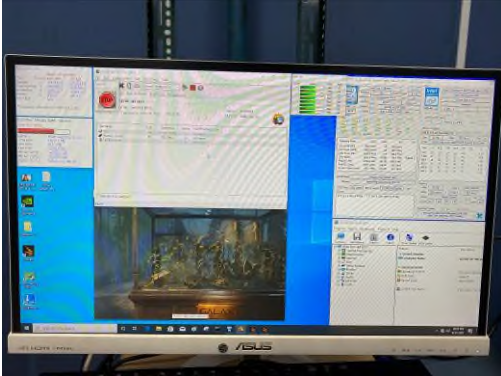
Quantity: Total 1 piece

Test Result:

<div style="text-align: right;">Check Item</div> Style/ Item No.	Appearance Check (visual check)	Functional Check
ECX-2200 PEG + NVIDIA GTX 1050 TI/ 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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