

TEST REPORT

Report No.: HX70019/2022

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Date: August 9, 2022

ELGENS CO., LTD.
7F-6., NO.492, BANNAN RD.,
ZHONGHE DIST., NEW TAIPEI CITY, TAIWAN

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

Product Description: Panel PC
Style/ Item No.: LPC-P156W-2VET7/ No.1
Manufacturer/Vendor: ELGENS CO., LTD.
Country of Origin: Taiwan
Quantity: Total 1 set
Testing Period: Jul. 27, 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. Functional Shock Test
2. Operating Vibration Test

Test Results: – PLEASE SEE ATTACHED SHEETS –

Signed for and on behalf of
SGS TAIWAN Ltd.



Sandra Chen
Team Leader-PM

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1. Functional 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.33, Wu Chyuan Road, New Taipei Industrial Park, WuKu District,
New Taipei City, Taiwan

Test Method/ Specification:

Test method: MIL-STD-810H: 2019, Method 516.8, Procedure I, Table 516.8-IV,
Terminal peak sawtooth pulse test parameters and client's request

Sample condition: OperatingPulse shape: SawtoothAcceleration: 20 gPulse duration: 11 msShock direction: 6 faces ($\pm X$, $\pm Y$, $\pm Z$ axes, see photo 3 ~ 5)No. of shock: 3 shocks/ face (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(s) then examine whether the booting function of specimen(s) could be work normally or not.

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Specimen:

Style/ Item No.: LPC-P156W-2VET7/ No.1

Quantity: Total 1 set

Test Result:

Style/ Item No.	Check Item	Appearance Check (Visual Check)	Functional Check
LPC-P156W-2VET7/ No.1		No visible damage	Normal

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2. Operating 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: MIL-STD-810H: 2019, Method 514.8, Procedure I, Table 514.8 C-VII.
Category 4 - Composite wheeled vehicle vibration exposure and client's request

Sample condition: OperatingWave form: RandomFrequency: (5 ~ 500) Hz (Test Spectrums as shown in the following sheets in detail)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(s) then examine whether the booting function of specimen(s) could be work normally or not.

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Test Method/ Specification--Continued:

Test Spectrums:

Vertical - Z axis		Transverse - X axis		Longitudinal - Y axis	
Frequency (Hz)	PSD(g^2/Hz)	Frequency (Hz)	PSD(g^2/Hz)	Frequency (Hz)	PSD(g^2/Hz)
5	0.12765	5	0.04070	5	0.01848
6	0.12926	6	0.04415	6	0.02373
7	0.30000	7	0.11000	7	0.05000
8	0.30000	8	0.11000	8	0.05000
9	0.10000	9	0.04250	9	0.02016
12	0.10000	12	0.04250	12	0.02016
14	0.15000	14	0.07400	14	0.05000
16	0.15000	16	0.07400	16	0.05000
19	0.04000	19	0.02000	19	0.01030
90	0.00600	100	0.00074	23	0.01030
125	0.00400	189	0.00130	25	0.00833
190	0.00400	350	0.00400	66	0.00114
211	0.00600	425	0.00400	84	0.00107
440	0.00600	482	0.00210	90	0.00167
500	0.00204	500	0.0142	165	0.00151
⇨ equivalent to 2.24 G_{rms}		⇨ equivalent to 1.45 G_{rms}		221	0.00333
				455	0.00296
				500	0.00204
				⇨ equivalent to 1.32 G_{rms}	

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Specimen:

Style/ Item No.: LPC-P156W-2VET7/ No.1Quantity: Total 1 set

Test Result:

Style/ Item No.	Check Item	Appearance Check (Visual Check)	Functional Check
	LPC-P156W-2VET7/ No.1	No visible damage	Normal

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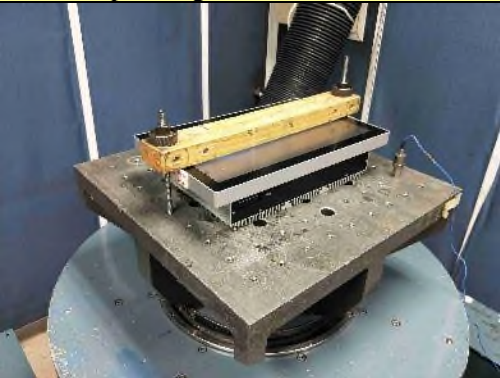

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Test Photos:

	
1. Appearance of specimen	2. Appearance of specimen
	
3. Functional Shock Test: $\pm X$ axis / Operating Vibration Test: X axis	4. Functional Shock Test: $\pm Y$ axis / Operating Vibration Test: Y axis
	
5. Functional Shock Test: $\pm Z$ axis / Operating Vibration Test: Z axis	6. Functional Check

— — — The End of Test Report — — —

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