

APACER TECHNOLOGY INC.  
1F, NO.32, ZHONGCHENG RD., TUCHENG DIST.,  
NEW TAIPEI CITY, TAIWAN, R.O.C.

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

Product Description: mSATA SSD  
Style/ Item No.: SX24D-300/ No.1  
Quantity: Total 1 piece  
Testing Period: Sep. 8, 2023 to Oct. 4, 2023

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. Non-Operating Mechanical Shock Test
2. Operating Mechanical Shock Test
3. Non-Operating Vibration Test
4. Operating Vibration Test

Test Results: -PLEASE SEE ATTACHED SHEETS-

Signed for and on behalf of  
SGS TAIWAN Ltd.



Alex Chen  
Asst. Supervisor

# TEST REPORT

Report No.: HC80201/2023

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## 1. Non-Operating Mechanical Shock Test:

### Test Equipment:

Name	Brand	Model	Serial No.
Shock Test System	LANSMONT	M-23D	M-15624
Data Acquisition & Analysis System	LANSMONT	103571-1-B	1011-85
ICP Accelerometer	PCB	350B04	35365

### 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-883K w/CHANGE 2, Method 2002.5

Sample condition: Non-Operating

Pulse shape: Half-sine

Acceleration: 1500 g

Pulse duration: 0.5 ms

Shock direction: 6 faces ( $\pm X, \pm Y, \pm Z$  axes, see photo 3 ~ 8)

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 then execute test program "Burn-In Test" while performing functional check.

## TEST REPORT

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**Specimen:**

Style/ Item No.: SX24D-300/ No.1

Quantity: Total 1 piece

**Test Result:**

Style/ Item No.	Check Item	Appearance check (Visual check)	Functional check
	SX24D-300/ No.1		No visible damage

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# TEST REPORT

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## 2. Operating 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	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: MIL-STD-202G, Method 213B  
 Sample condition: Operating  
 Pulse shape: Half-sine  
 Acceleration: 50 g  
 Pulse duration: 11 ms  
 Shock direction: 6 faces ( $\pm X, \pm Y, \pm Z$  axes, see photo 9 ~ 14)  
 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 then execute test program "Burn-In Test" while performing functional check.

# TEST REPORT

Report No.: HC80201/2023

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**Specimen:**

Style/ Item No.: SX24D-300/ No.1

Quantity: Total 1 piece

**Test Result:**

<div style="text-align: right;"><b>Check Item</b></div> <div style="text-align: left;"><b>Style/ Item No.</b></div>	<b>Appearance check (Visual check)</b>	<b>Functional check</b>
<b>SX24D-300/ No.1</b>	No visible damage	Normal

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# TEST REPORT

### 3. Non-Operating Vibration Test:

#### Test Equipment:

Name	Brand	Model	Serial No.
Vibration Tester	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-810G, Method 514.6, Category 7

Sample condition: Non-Operating

Wave form: Random

Frequency: (15 ~ 2000) Hz

Frequency (Hz)	Left Slope (dB/Oct.)	PSD ( $\text{g}^2/\text{Hz}$ )	Right Slope (dB/Oct.)
15	-	0.01	0
105.94	0	0.01	6
150	6	0.02	0
500	0	0.02	-6
2000	-6	0.0012	-

⇨ equivalent to 4.02 grms

Direction: X, Y, Z axes (see photo 15 ~ 17)

Test duration: 1 hour/ 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 execute test program "Burn-In Test" while performing functional check.

# TEST REPORT

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**Specimen:**

Style/ Item No.: SX24D-300/ No.1

Quantity: Total 1 piece

**Test Result:**

<div style="text-align: right;"><b>Check Item</b></div> <div style="text-align: left;"><b>Style/ Item No.</b></div>	<b>Appearance check (Visual check)</b>	<b>Functional check</b>
<b>SX24D-300/ No.1</b>	No visible damage	Normal

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## 4. Operating Vibration Test:

### Test Equipment:

Name	Brand	Model	Serial No.
Vibration Tester	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-810G, Method 514.6, Category 24

Sample condition: Operating

Wave form: Random

Frequency: (20 ~ 2000) Hz

Frequency (Hz)	Left Slope (dB/Oct.)	PSD ( $\text{g}^2/\text{Hz}$ )	Right Slope (dB/Oct.)
20	-	0.04	0
1000	0	0.04	-6
2000	-6	0.01	-

⇨ equivalent to 7.69 grms

Direction: X, Y, Z axes (see photo 18 ~ 20)

Test duration: 1 hour/ 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 execute test program "Burn-In Test" while performing functional check.

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## TEST REPORT

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**Specimen:**

Style/ Item No.: SX24D-300/ No.1



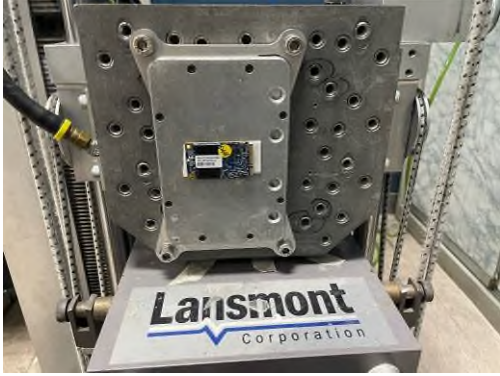
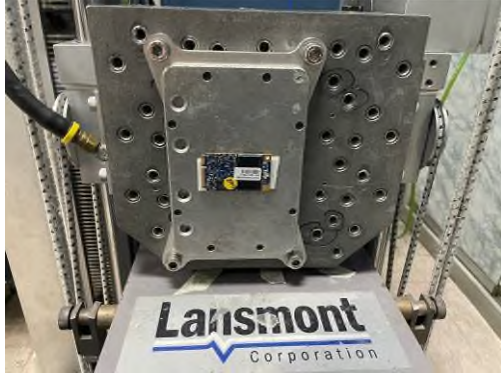

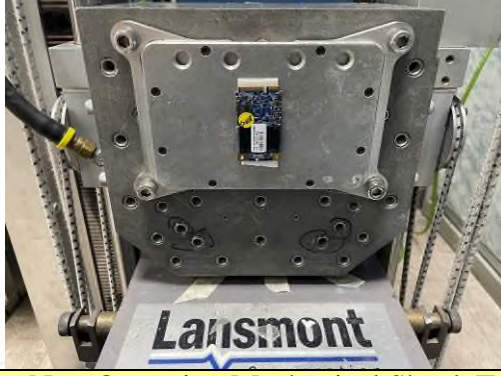
Quantity: Total 1 piece

**Test Result:**

Check Item Style/ Item No.	Appearance check (Visual check)	Functional check
SX24D-300/ No.1	No visible damage	Normal

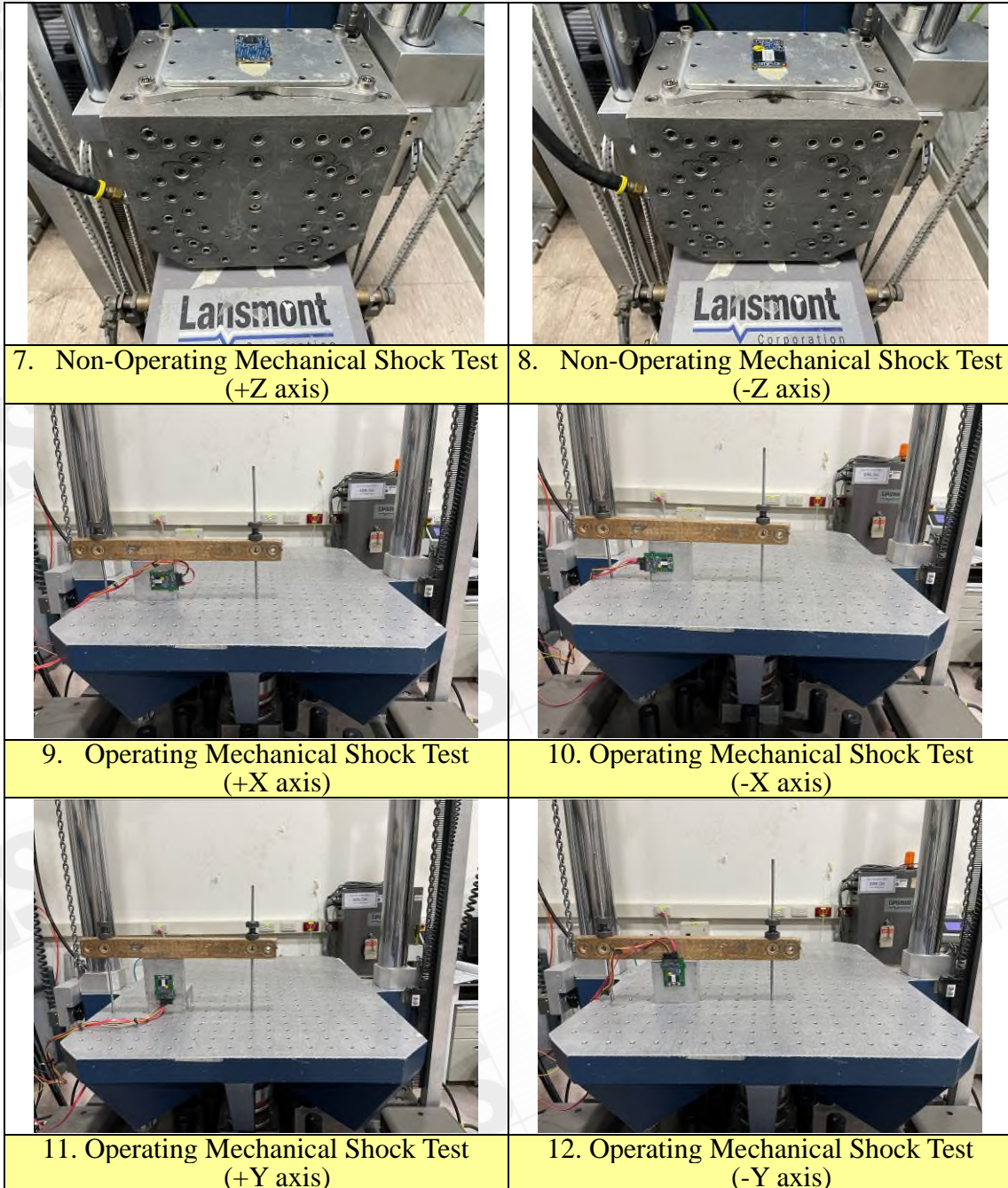
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Test Photos:

	
<p>1. Appearance of specimen</p>	<p>2. Appearance of specimen</p>
	
<p>3. Non-Operating Mechanical Shock Test (+X axis)</p>	<p>4. Non-Operating Mechanical Shock Test (-X axis)</p>
	
<p>5. Non-Operating Mechanical Shock Test (+Y axis)</p>	<p>6. Non-Operating Mechanical Shock Test (-Y axis)</p>

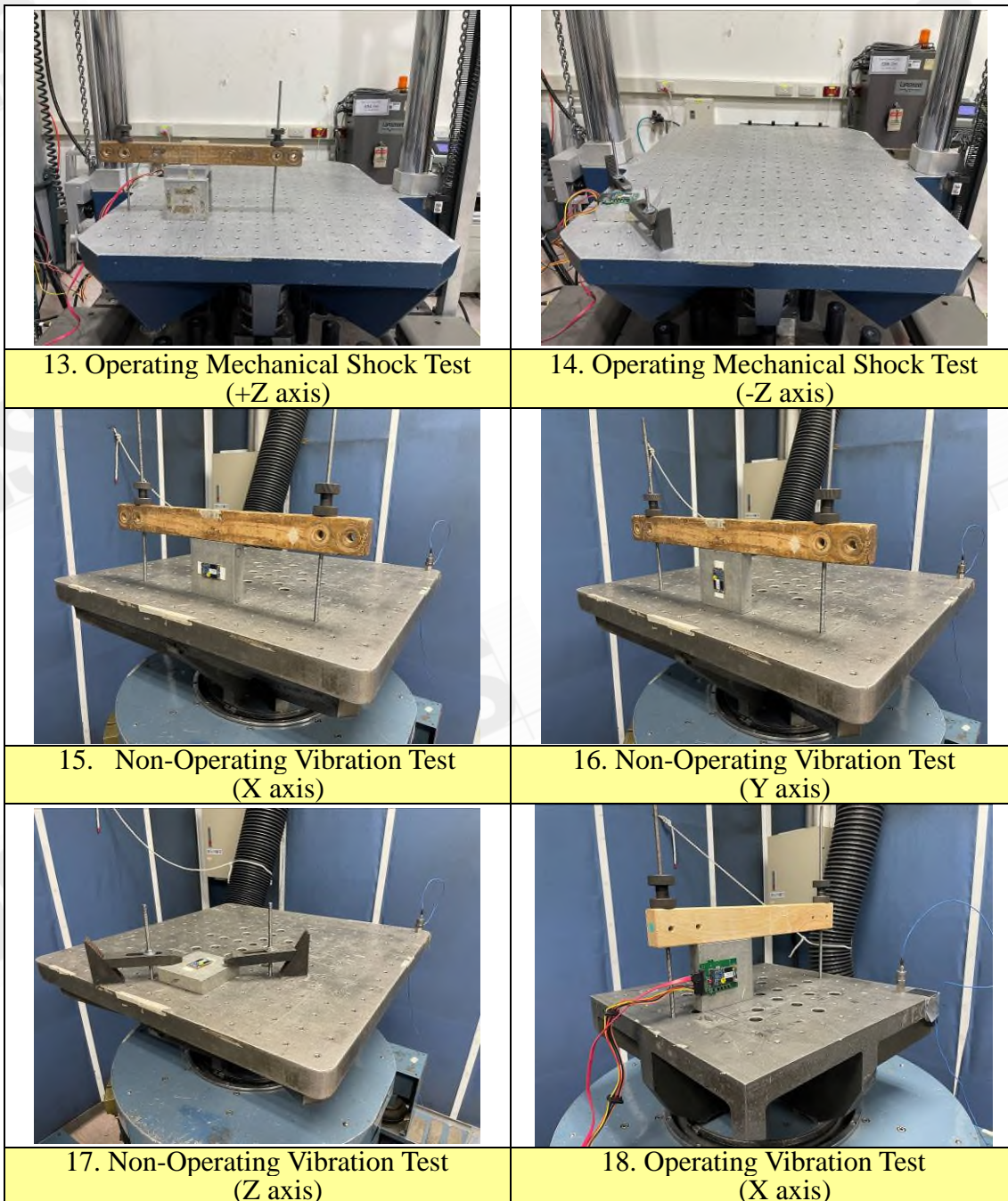
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Test Photos--Continued:



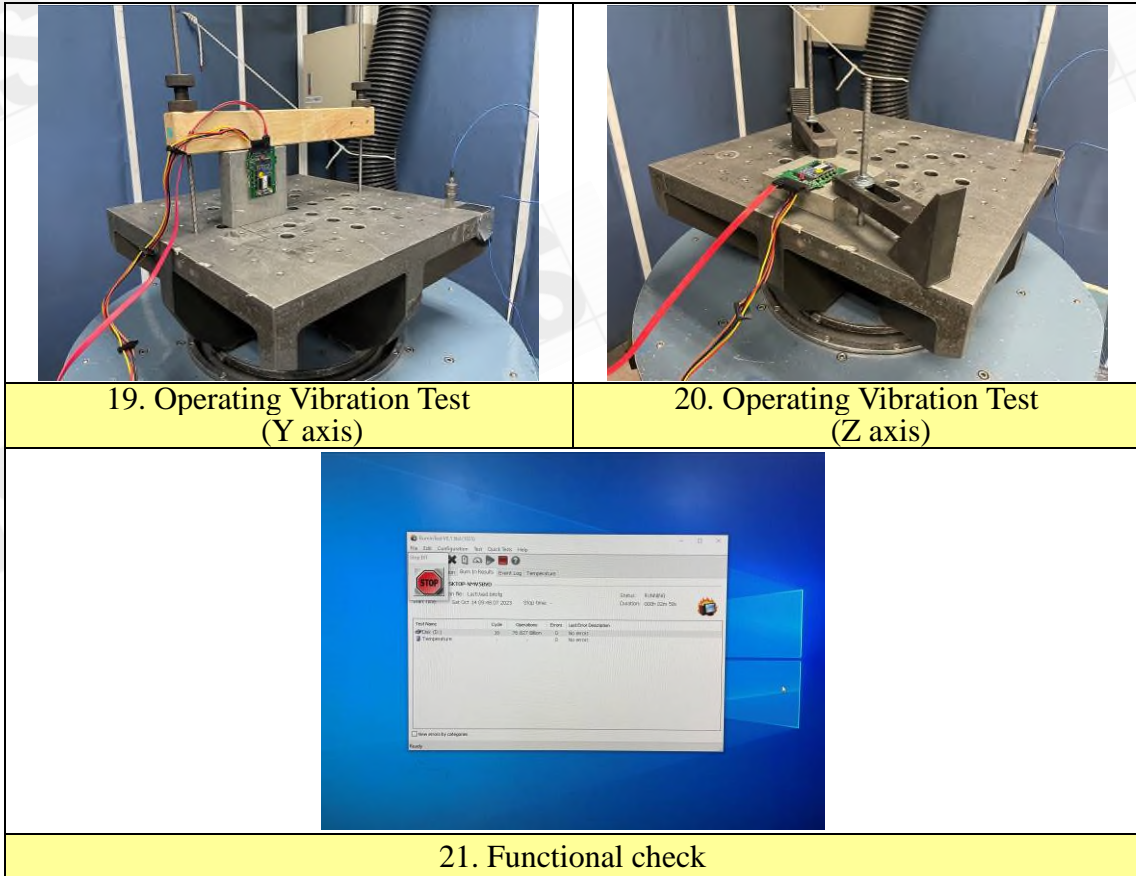
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Test Photos--Continued:



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Test Photos--Continued:



— — — The End of Test Report — — —

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