



TEST REPORT

Report No.: HC50153A/2006

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Date: June 29, 2006

APACER TECHNOLOGY INC.
9 F, NO. 100, SEC. 1, HSIN TAI WU RD.,
HSICHIH, TAIPEI HSIEN,
TAIWAN, R.O.C.

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

Product Description: USB Disk Module
Style/Item No.: UDM/ No.1 ~ No.3
Quantity: Total 3 pieces

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. Operating High Temperature test
2. Operating Low Temperature test
3. Storage High Temperature test
4. Storage Low Temperature test
5. Vibration test
6. Mechanical Shock test

Test Results: - PLEASE SEE ATTACHED SHEETS -

*HC50153/2006, dated June 12, 2006, is hereby canceled and replaced by HC50153A/2006.

Terence Hsieh
Asst. Manager

1. Operating High Temperature test:

Test Equipment:

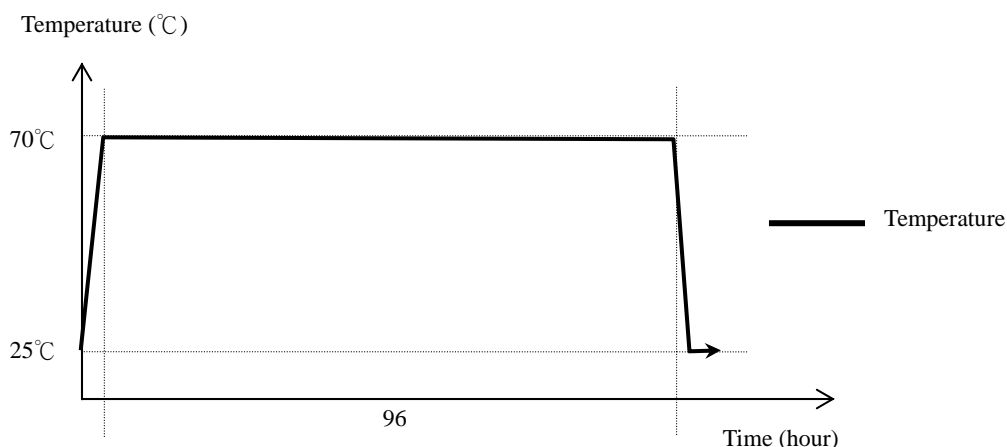
| Name | Brand | Model | Serial No. |
|---|-------|-----------------|------------|
| Programmable Temperature & Humidity Chamber | KSON | THS-A6H+-150-LH | 2335 |

Lab Environmental Conditions:

Ambient temperature: $25 \pm 3^\circ\text{C}$

Relative humidity: $55 \pm 20\% \text{RH}$

Test Method/ Specification:



- Sample condition: Operating (Connect the specimen with PC via USB port and execute test program “WINTHRAX” during this test).
- Examine the appearance of specimen by visual check and perform functional check after this test.
- Functional check: Connect the specimen with PC via USB port and execute test program “WINTHRAX” to check access function of specimen after this test.

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Specimen:

Style/ Item No. : UDM/ No.1 ~ No.3

Quantity : 3 pieces

Test Result:

| Style/Item No. | Check Item | Appearance check (visual check) | Functional check |
|----------------|------------|------------------------------------|------------------|
| UDM/ No.1 | | No visible damage | Normal |
| UDM/ No.2 | | No visible damage | Normal |
| UDM/ No.3 | | No visible damage | Normal |

2. Operating Low Temperature test:

Test Equipment:

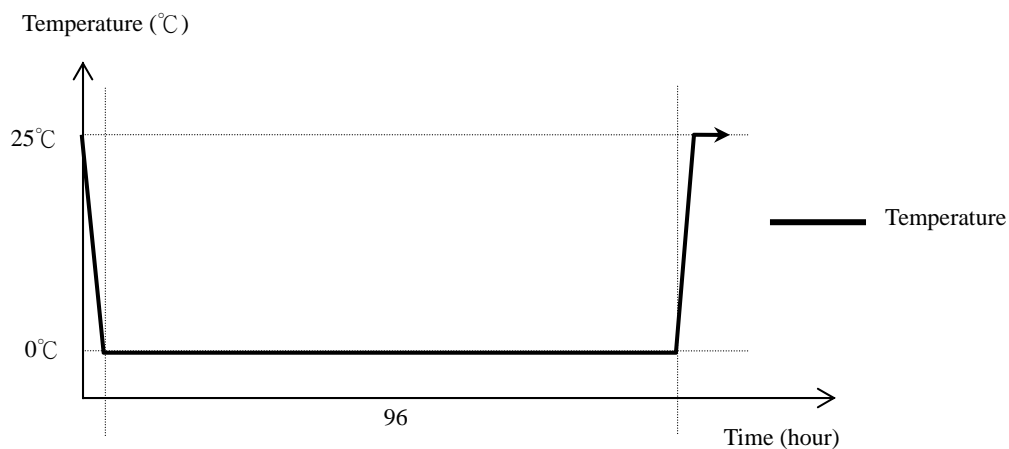
| Name | Brand | Model | Serial No. |
|---|-------|-----------------|------------|
| Programmable Temperature & Humidity Chamber | KSON | THS-A6H+-150-LH | 2335 |

Lab Environmental Conditions:

Ambient temperature: $25 \pm 3^\circ\text{C}$

Relative humidity: $55 \pm 20\% \text{RH}$

Test Method/ Specification:



- Sample condition: Operating (Connect the specimen with PC via USB port and execute test program “WINTHRAX” during this test).
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Specimen:

Style/ Item No. : UDM/ No.1 ~ No.3

Quantity : 3 pieces

Test Result:

| Style/Item No. | Check Item | Appearance check (visual check) | Functional check |
|----------------|------------|------------------------------------|------------------|
| UDM/ No.1 | | No visible damage | Normal |
| UDM/ No.2 | | No visible damage | Normal |
| UDM/ No.3 | | No visible damage | Normal |

3. Storage High Temperature test:

Test Equipment:

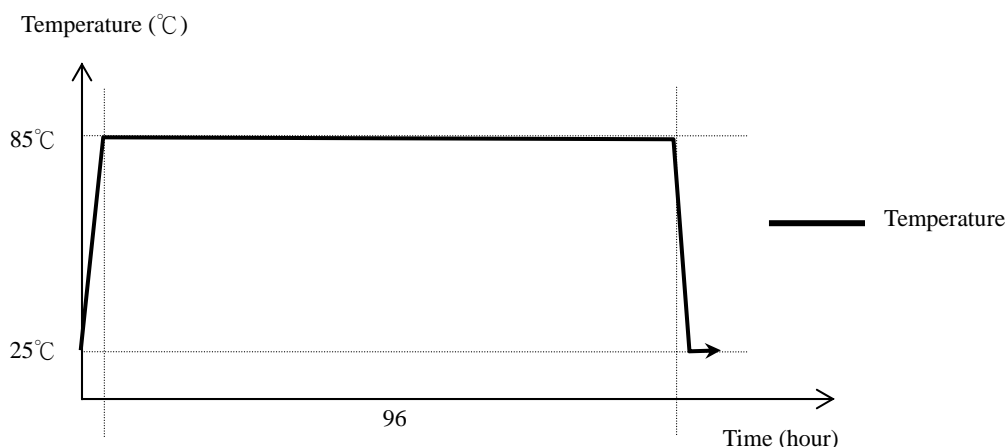
| Name | Brand | Model | Serial No. |
|---|-------|-----------------|------------|
| Programmable Temperature & Humidity Chamber | KSON | THS-A6H+-150-LH | 2335 |

Lab Environmental Conditions:

Ambient temperature: $25 \pm 3^\circ\text{C}$

Relative humidity: $55 \pm 20\% \text{RH}$

Test Method/ Specification:



- 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 PC via USB port and execute test program "WINTHRAX" to check access function of specimen after this test.

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Specimen:

Style/ Item No. : UDM/ No.1 ~ No.3

Quantity : 3 pieces

Test Result:

| Check Item Style/Item No. | Appearance check (visual check) | Functional check |
|------------------------------|------------------------------------|------------------|
| UDM/ No.1 | No visible damage | Normal |
| UDM/ No.2 | No visible damage | Normal |
| UDM/ No.3 | No visible damage | Normal |

4. Storage Low Temperature test:

Test Equipment:

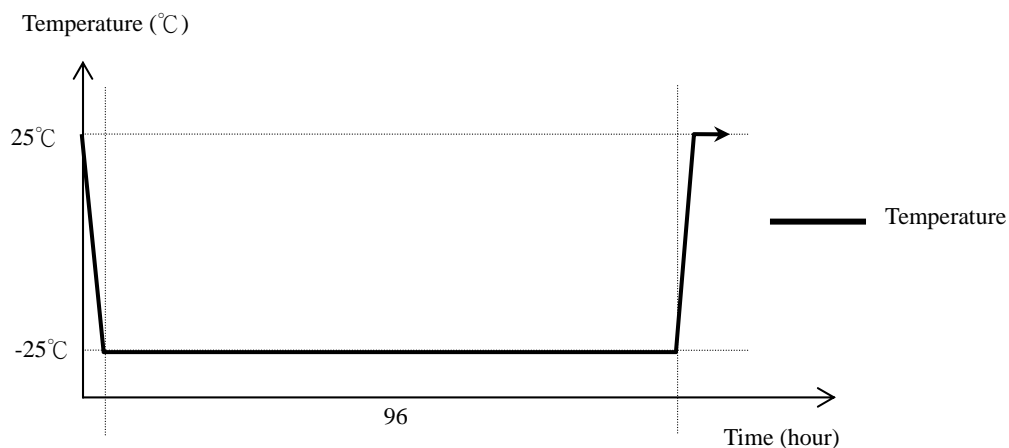
| Name | Brand | Model | Serial No. |
|---|-------|-----------------|------------|
| Programmable Temperature & Humidity Chamber | KSON | THS-A6H+-150-LH | 2335 |

Lab Environmental Conditions:

Ambient temperature: $25 \pm 3^\circ\text{C}$

Relative humidity: $55 \pm 20\% \text{RH}$

Test Method/ Specification:



- 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 PC via USB port and execute test program “WINTHRAX” to check access function of specimen after this test.

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Specimen:

Style/ Item No. : UDM/ No.1 ~ No.3

Quantity : 3 pieces

Test Result:

| Style/Item No. | Check Item | Appearance check (visual check) | Functional check |
|----------------|------------|------------------------------------|------------------|
| UDM/ No.1 | | No visible damage | Normal |
| UDM/ No.2 | | No visible damage | Normal |
| UDM/ No.3 | | No visible damage | Normal |

5. Vibration test:

Test Equipment:

| Name | Brand | Model | Serial No. |
|-----------------------|-------------|-----------------------------|-------------|
| Vibration Tester | King Design | KD-9363EM-600F2K-50N120 | RU104080389 |
| Controller | Dactron | COMET Shaker Control System | 8258992 |
| Control Accelerometer | Kistler | 8704B100 | C131764 |

Lab Environmental Conditions:

Ambient temperature: 25±3°C

Relative humidity: 55±20%RH

Test Method/ Specification:

Test method: Reference to IEC 68-2-6:1995, Test Fc

Sample Condition: Non-Operating

Wave form: Sinusoidal

Frequency: 10~500 Hz

Amplitude(D_{p-p}): 0.7 mm (10~60.15 Hz)

Acceleration: 50 m/s² (60.15~500 Hz)

Sweep rate: 1 octave/minute

Direction: X, Y, Z axes (see photo 7 ~ 12)

Duration: 3 sweep cycles/ axis

- Examine the appearance of specimen by visual check and perform functional check after this test.
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Specimen:

Style/ Item No. : UDM/ No.1 ~ No.3

Quantity : 3 pieces

Test Result:

| Style/Item No. | Check Item | Appearance check (visual check) | Functional check |
|----------------|------------|------------------------------------|------------------|
| UDM/ No.1 | | No visible damage | Normal |
| UDM/ No.2 | | No visible damage | Normal |
| UDM/ No.3 | | No visible damage | Normal |

6. Mechanical Shock test:

Test Equipment:

| Name | Brand | Model | Serial No. |
|------------------------------------|----------|-------------|------------|
| Shock Test System | LANSMONT | 65-81 TTSII | M-13418 |
| Data Acquisition & Analysis System | LANSMONT | 103570-2-B | 0503-73 |
| ICP Accelerometer | PCB | 353B14 | 79713 |

Lab Environmental Conditions:

Ambient temperature: 25±3°C

Relative humidity: 55±20%RH

Test Method/ Specification:

Test method: Reference to IEC 68-2-27:1987, Test Ea

Sample Condition: Non-Operating

Pulse shape: Half-sine

Acceleration: 50 G

Pulse duration: 11 ms

Shock direction: 6 faces (±X, ±Y, ±Z axes, see photo 13 ~ 24)

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: Connect the specimen with PC via USB port and execute test program "WINTHRAX" to check access function of specimen after this test.

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Specimen:






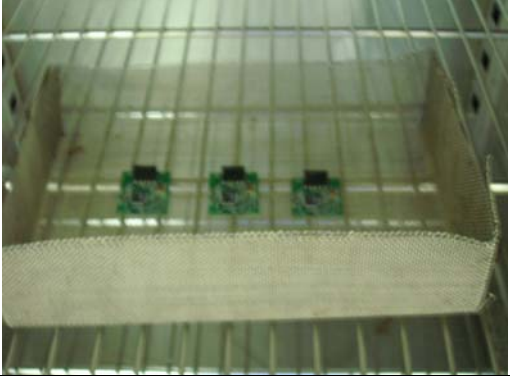
Style/ Item No. : UDM/ No.1 ~ No.3

Quantity : 3 pieces

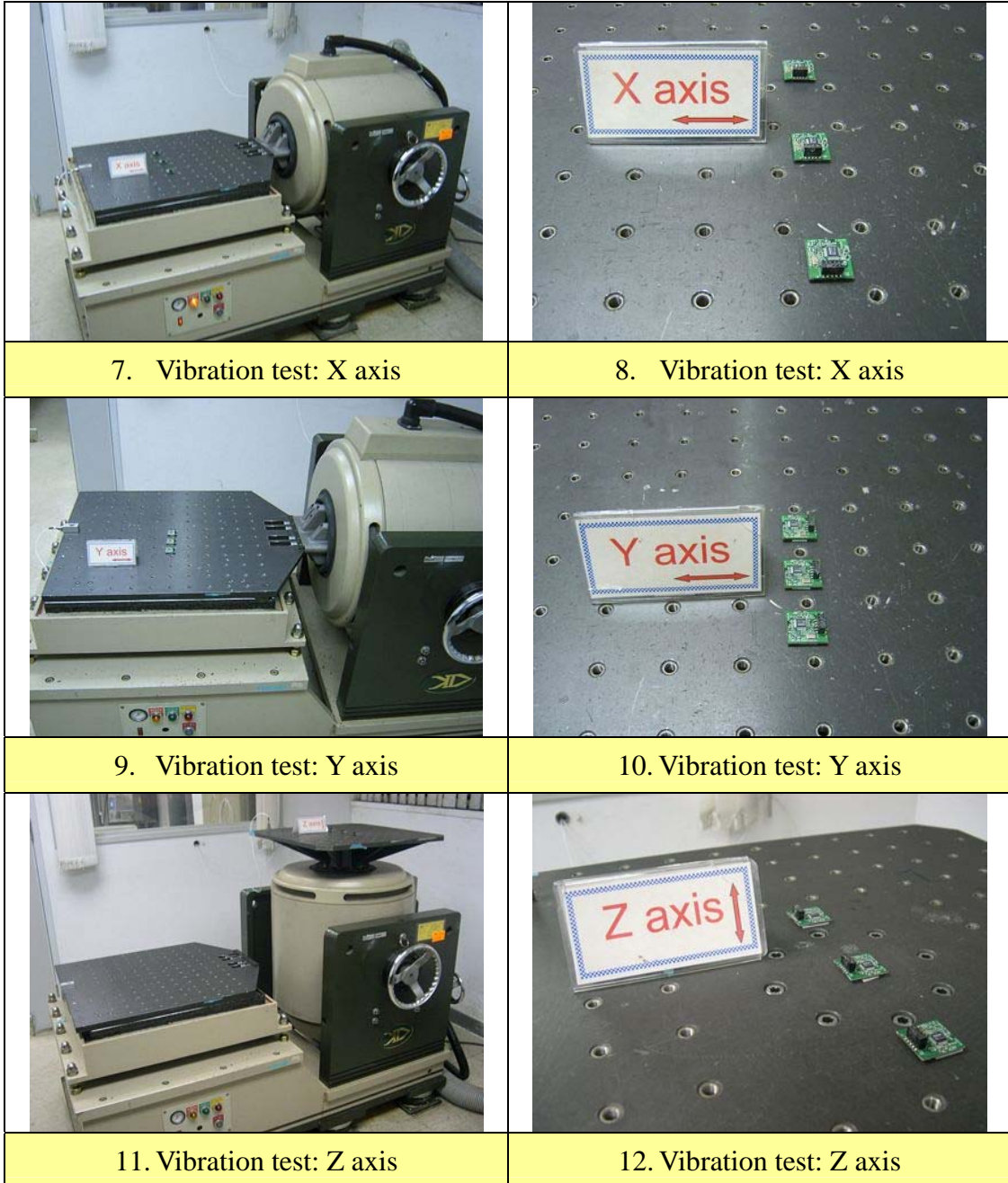
Test Result:

| Check Item Style/Item No. | Appearance check (visual check) | Functional check |
|--|--|-------------------------|
| UDM/ No.1 | No visible damage | Normal |
| UDM/ No.2 | No visible damage | Normal |
| UDM/ No.3 | No visible damage | Normal |

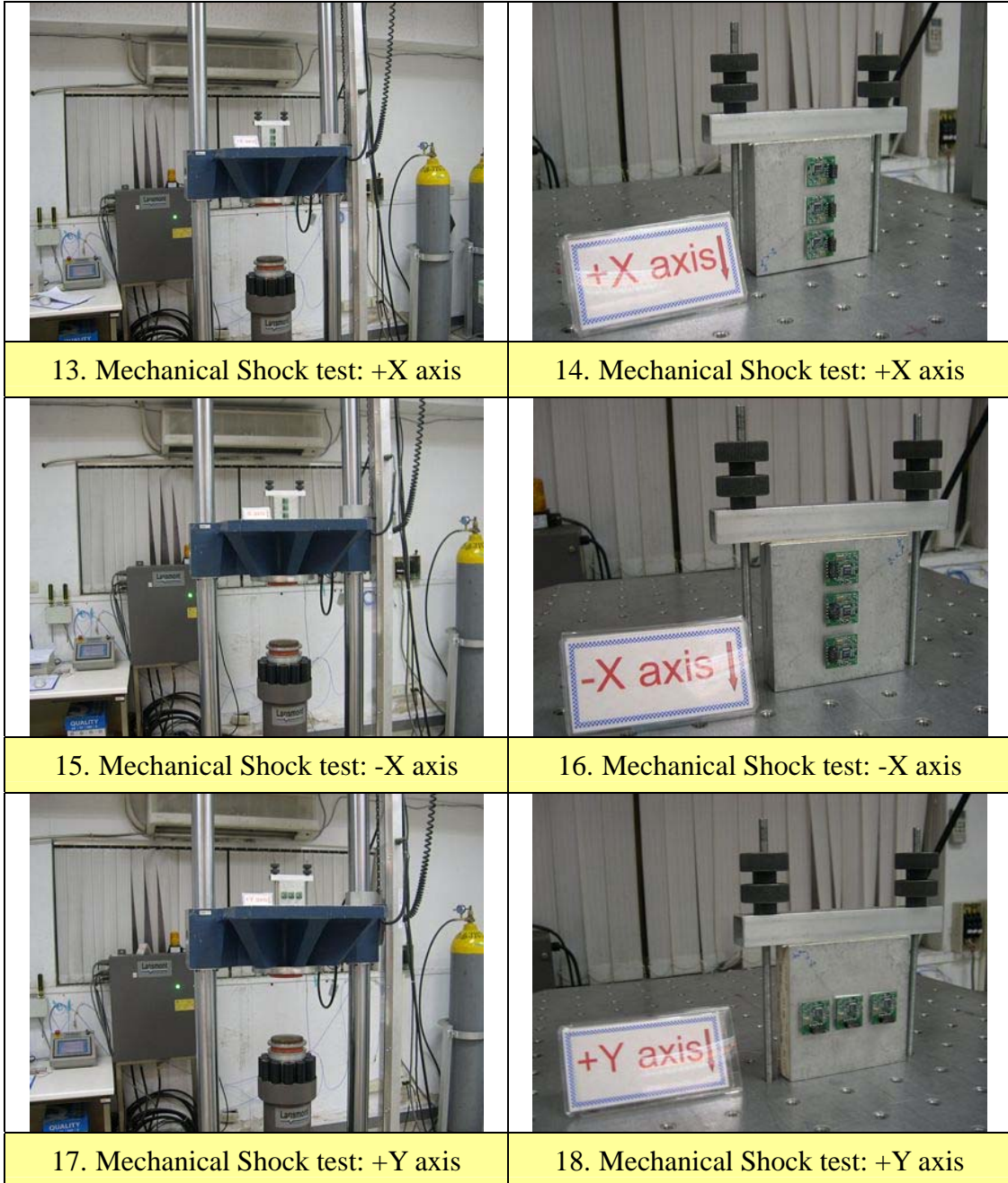
Test Photos:

| | |
|---|--|
|  |  |
| <p>1. Appearance of specimen-- UDM</p> | <p>2. Appearance of specimen-- UDM</p> |
|  |  |
| <p>3. Operating High Temperature test/ Operating Low Temperature test</p> | <p>4. Operating High Temperature test/ Operating Low Temperature test</p> |
|  |  |
| <p>5. Storage High Temperature test/ Storage Low Temperature test</p> | <p>6. Storage High Temperature test/ Storage Low Temperature test</p> |

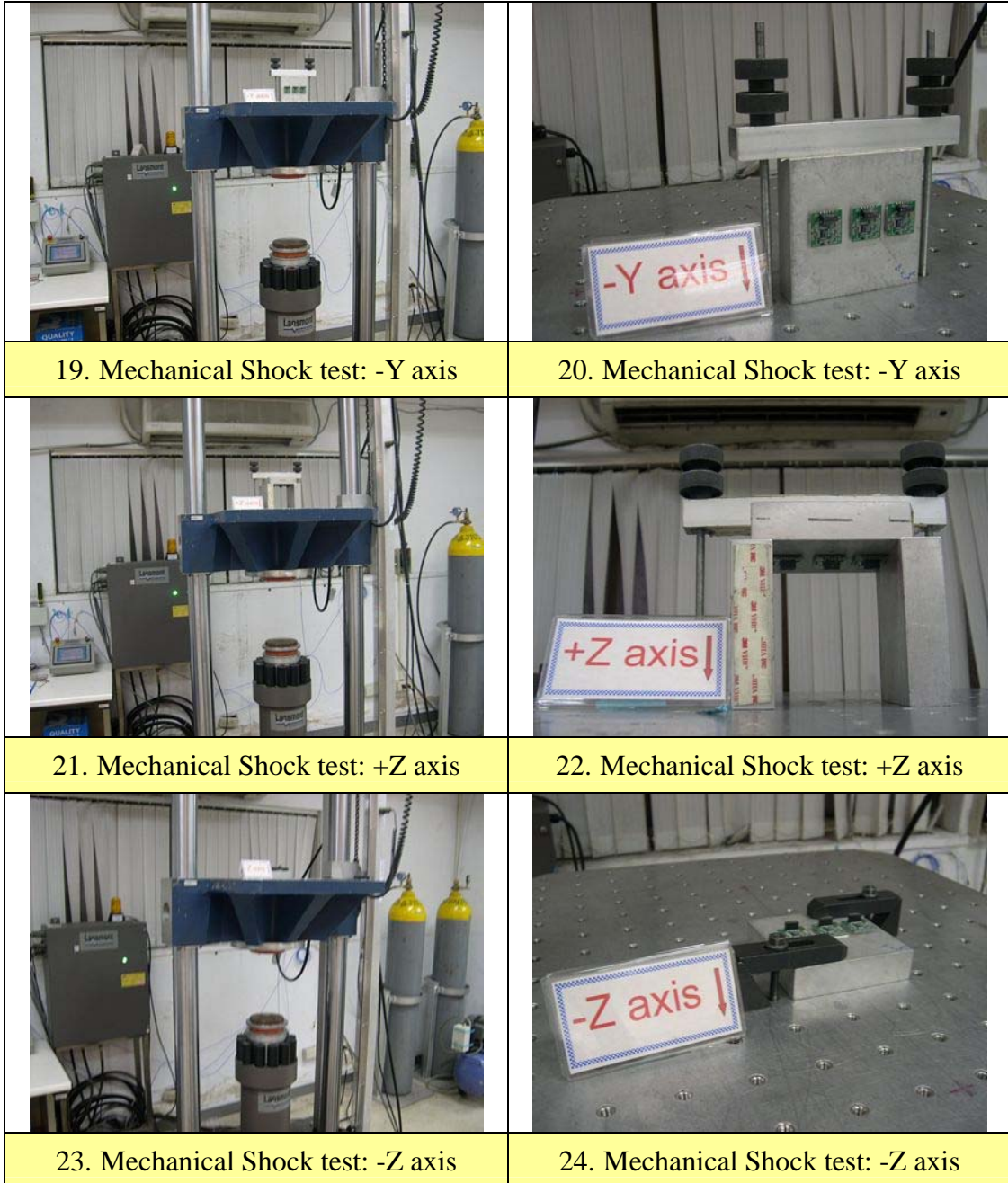
Test Photos--Continued:




Test Photos--Continued:



Test Photos--Continued:



Test Photos--Continued:

| | |
|---|-------|
|  | |
| 25. Functional check | |
| Blank | Blank |
| | |
| Blank | Blank |
| | |

— — — **The End of Test Report** — — —

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