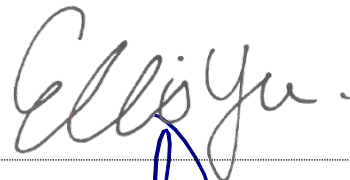
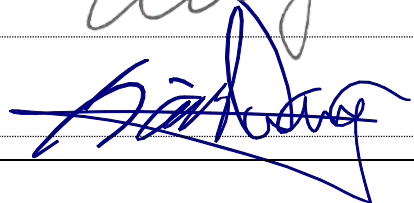


| <b>TEST REPORT</b><br><b>Environmental Testing</b><br><b>MIL-STD-810G: 2014, Method 514.7, Procedure I – General Vibration</b><br><b>MIL-STD-810G: 2014, Method 516.7, Procedure I – Functional Shock</b> |                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Report Number</b> .....                                                                                                                                                                                | <b>: 2505007</b>                                                                                                                                                                                                                                                                                               |
| <b>Date of issue</b> .....                                                                                                                                                                                | <b>: 2025/5/19</b>                                                                                                                                                                                                                                                                                             |
| <b>Total number of pages</b> .....                                                                                                                                                                        | <b>: 12</b>                                                                                                                                                                                                                                                                                                    |
| <b>Tested by</b><br>(name, function, signature) .....                                                                                                                                                     | Ellis Yu /<br>Engineer                                                                                                                                                                                                                                                                                         |
| <b>Approved by</b><br>(name, function, signature).....                                                                                                                                                    | David Wang /<br>Reviewer                                                                                                                                                                                                                                                                                       |
| <br>                                  |                                                                                                                                                                                                                                                                                                                |
| <b>Testing Laboratory</b>                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                |
| <b>Name</b> .....                                                                                                                                                                                         | Universal Certification Technology Co. Ltd.                                                                                                                                                                                                                                                                    |
| <b>Address</b> .....                                                                                                                                                                                      | 13F-5, No. 93, Sec. 1, Xintai 5th Rd.,<br>Xizhi Dist., New Taipei City 221,<br>Taiwan.                                                                                                                                                                                                                         |
| <b>Test Location</b> .....                                                                                                                                                                                | Same above                                                                                                                                                                                                                                                                                                     |
| <b>Applicant</b>                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                |
| <b>Name</b> .....                                                                                                                                                                                         | VECOW CO., LTD.                                                                                                                                                                                                                                                                                                |
| <b>Address</b> .....                                                                                                                                                                                      | 3F., No. 10, Jiankang Road, Zhonghe District, New Taipei City<br>23586                                                                                                                                                                                                                                         |
| <b>Test item description</b>                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                |
| <b>Product name</b> .....                                                                                                                                                                                 | Arm-based Rugged AI Computing System                                                                                                                                                                                                                                                                           |
| <b>Trade mark(s)</b> .....                                                                                                                                                                                | Vecow                                                                                                                                                                                                                                                                                                          |
| <b>Model /Type reference</b> .....                                                                                                                                                                        | RAC-1000, RAC-1000 Series, RAC-1XXXXXXXXXXXXXXXXX ( "X"<br>can be 0-9, A-Z, - or blank for marketing purpose)                                                                                                                                                                                                  |
| <b>Rating</b> .....                                                                                                                                                                                       | DC Power from Power adaptor                                                                                                                                                                                                                                                                                    |
| <b>Test specification</b>                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                |
| <b>Test Required:</b> .....                                                                                                                                                                               | <input checked="" type="checkbox"/> <b>MIL-STD-810G w/Change 1: 2014, Procedure I – Table 514.7C-I<br/>Category 4 / Common carrier and client's request</b><br><input checked="" type="checkbox"/> <b>MIL-STD-810G w/Change 1: 2014, Method 516.7, Procedure I –<br/>Functional Shock and client's request</b> |
| <b>Test Result</b> .....                                                                                                                                                                                  | <b>No visible Damage and Functional check Normal</b>                                                                                                                                                                                                                                                           |

**Testing :**

Dates of receipt of test item ..... : 2025-04-28

Date(s) of performance of tests ..... : 2025-04-30~2025-05-06

**General product information and other remarks :**

1. Test sample :

- ☒ Complete enclosure.  
☐ Individually section of enclosure (see below test method)

2. During test the EUT was operating.

3. The test sample was a pre-production sample without serial number

4. Dimension of test object : 260.0mm x 330.0mm x 80.0mm (10.23" x 13" x 3.14")

5. Weight of test object : 7kg (15.43 lb)

6. Interior Parts:

CPU:NVIDIA Jetson AGX Orin 64G (SOM)

**Model Differences :**

All models are identical with each other except for marketing purpose.

**Summary of compliance with standard:**

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.)

- ☒ MIL-STD-810G w/Change 1: 2014, Procedure I –  
Table 514.7C-I Category 4 / Common carrier and client's request
- ☒ MIL-STD-810G w/Change 1: 2014, Method 516.7, Procedure I – Functional Shock  
and client's request

**Test Results :**

☒ - Please see attached Sheets

## 1. Vibration - operation

| Test Equipment :                                                                                             |                         |                          |                         |                          |                         |
|--------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|
| Name                                                                                                         |                         | Brand                    |                         | Model                    |                         |
| Serial No.                                                                                                   |                         |                          |                         |                          |                         |
| Vibration Tester                                                                                             |                         | Vibration Source         |                         | ZVS-600VH-51             |                         |
| E113006                                                                                                      |                         |                          |                         |                          |                         |
| Controller                                                                                                   |                         | Vibration Source         |                         | VST-9008                 |                         |
| 395352176                                                                                                    |                         |                          |                         |                          |                         |
| Test Laboratory Environment Condition :                                                                      |                         |                          |                         |                          |                         |
| Temperature (°C)                                                                                             |                         | Relative humidity (%)    |                         | Air pressure (kPa)       |                         |
| 15 ~ 35                                                                                                      |                         | 25 ~ 75                  |                         | 86 ~ 106                 |                         |
| Test Location :                                                                                              |                         |                          |                         |                          |                         |
| 13F-5, No. 93, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City 221, Taiwan.                             |                         |                          |                         |                          |                         |
| Test Method / Specification :                                                                                |                         |                          |                         |                          |                         |
| MIL-STD-810G w/Change 1: 2014, Procedure I – Table 514.7C-I Category 4 / Common carrier and client's request |                         |                          |                         |                          |                         |
| Sample Condition: operation                                                                                  |                         |                          |                         |                          |                         |
| Wave form: Random                                                                                            |                         |                          |                         |                          |                         |
| Frequency: 5-500Hz- Continued ( Test Spectrums as shown in the following sheet in detail)                    |                         |                          |                         |                          |                         |
| Vertical - Z axis                                                                                            |                         | Transverse - X axis      |                         | Longitudinal - Y axis    |                         |
| Frequency (Hz)                                                                                               | ASD(g <sup>2</sup> /Hz) | Frequency (Hz)           | ASD(g <sup>2</sup> /Hz) | Frequency (Hz)           | ASD(g <sup>2</sup> /Hz) |
| 5                                                                                                            | 0.015                   | 5                        | 0.00013                 | 5                        | 0.0065                  |
| 40                                                                                                           | 0.015                   | 10                       | 0.00013                 | 20                       | 0.0065                  |
| 500                                                                                                          | 0.00015                 | 20                       | 0.00065                 | 120                      | 0.0002                  |
|                                                                                                              |                         | 30                       | 0.00065                 | 121                      | 0.003                   |
|                                                                                                              |                         | 78                       | 2e-005                  | 200                      | 0.003                   |
|                                                                                                              |                         | 79                       | 0.00019                 | 240                      | 0.0015                  |
|                                                                                                              |                         | 120                      | 0.00019                 | 340                      | 3e-005                  |
|                                                                                                              |                         | 500                      | 1e-005                  | 500                      | 0.00015                 |
| →Equivalent to 1.08 Grms                                                                                     |                         | →Equivalent to 0.21 Grms |                         | →Equivalent to 0.76 Grms |                         |
| Direction : X, Y, Z axis (See photo 1 ~ 3)                                                                   |                         |                          |                         |                          |                         |
| Duration : 1 hour/ axis                                                                                      |                         |                          |                         |                          |                         |

**Test Procedure:**

- Check the samples' appearance before the test.
- Install the samples on the testing table and set up testing condition.
- After testing, take off samples from table and put them in the storage area.
- Observe the samples and record for any visible change after testing.

**Summary:**

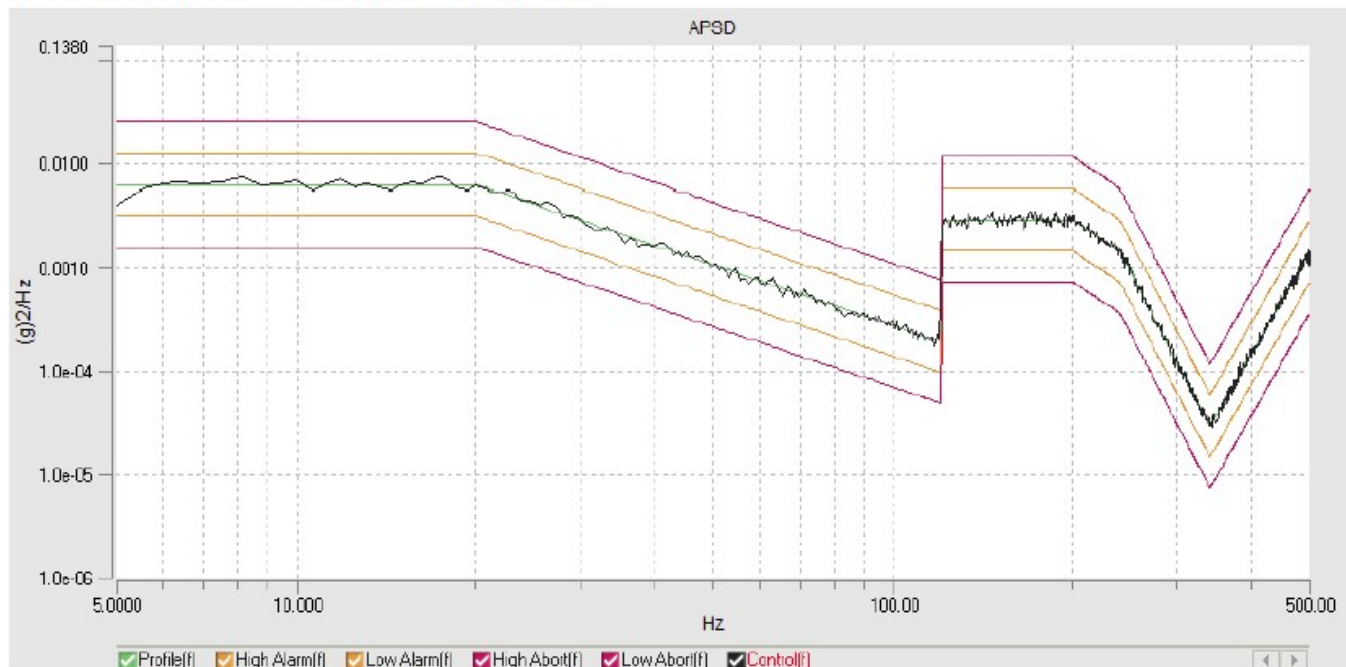
- No visible damage was found on sample appearance after the test.
- Sample photo after the test:

## Test profile:

### X axis

Test Name: 5-500H-1.UCN Object name: Object Type:

Test Type: Random Test Project Name: 0H-1.UCN.ucn



Current Level: 100.00 % Demand RMS: 0.796 g Control RMS: 0.798 g

Frame Time: 1.6000 (s) Lines: 800 dF: 0.6 Hz

DOF: 300 Current Level Time: 01:00:00 Remaining Time: 00:00:00

Data was saved as a file at time: 2025-4-30 AM 11:22:23

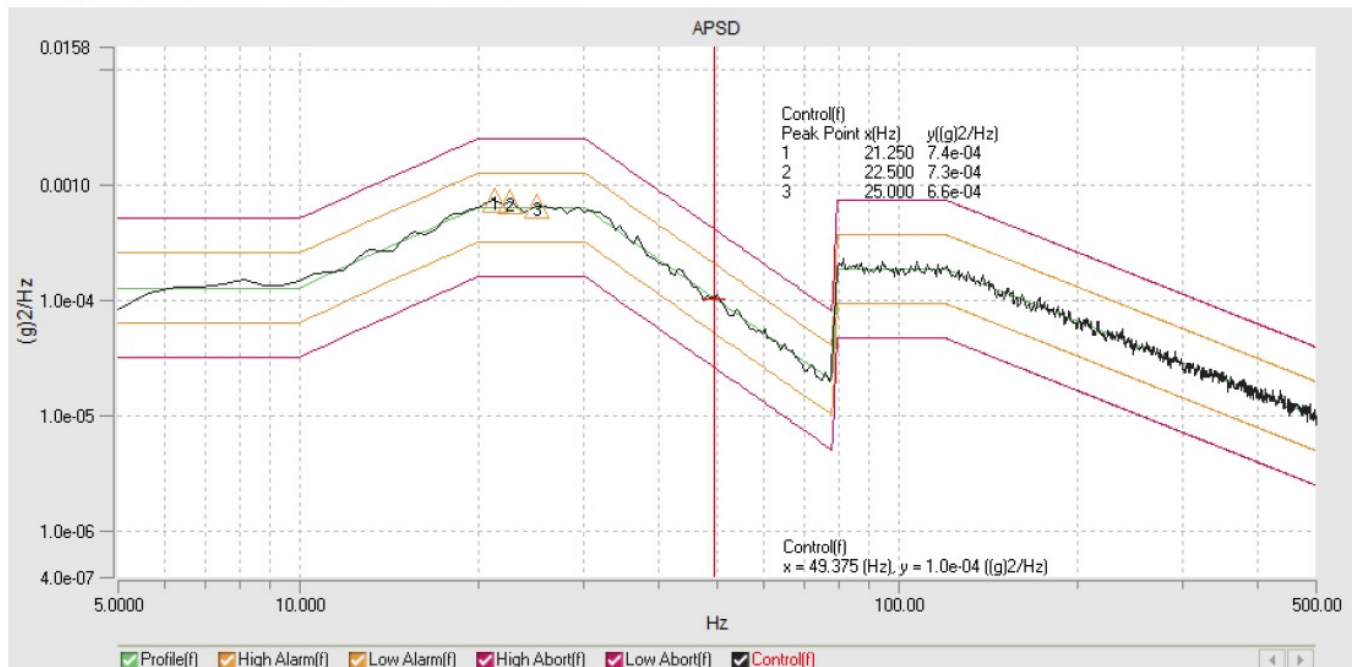
Begin Time: 2025-4-30 AM 10:21:08

End Time: 2025-4-30 AM 11:22:23

## Y axis

Test Name: 5-500H~1.UCN Object name: Object Type:

Test Type: Random Test Project Name: 0H~1.UCN.ucn



Current Level: 100.00 % Demand RMS: 0.205 g Control RMS: 0.206 g

Frame Time: 1.6000 (s) Lines: 800 dF: 0.6 Hz

DOF: 300 Current Level Time: 01:00:00 Remaining Time: 00:00:00

Data was saved as a file at time: 2025-4-29 PM 08:54:26

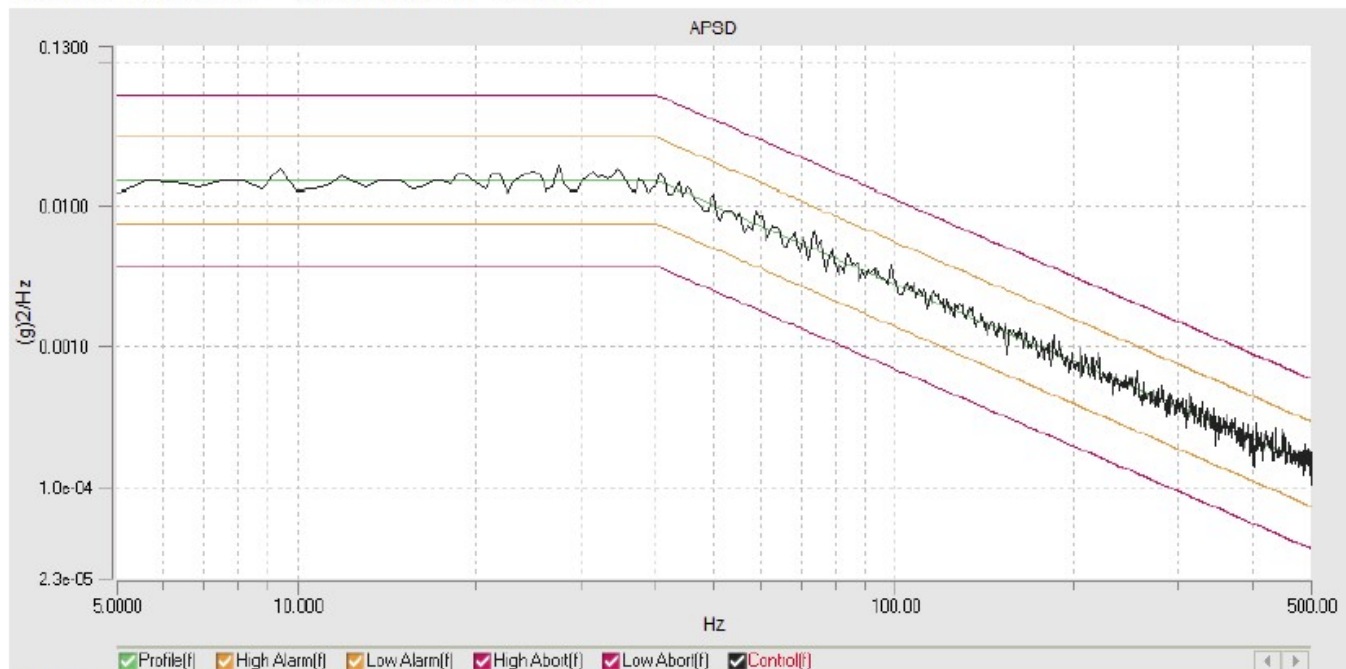
Begin Time: 2025-4-29 PM 07:52:38

End Time: 2025-4-29 PM 08:54:26

## Z axis

Test Name: 5-500H-1.UCN Object name: Object Type:

Test Type: Random Test Project Name: 0H-1.UCN.ucn



Current Level: 100.00 % Demand RMS: 1.078 g Control RMS: 1.078 g

Frame Time: 1.6000 (s) Lines: 800 dF: 0.6 Hz

DOF: 120 Current Level Time: 01:00:00 Remaining Time: 00:00:00

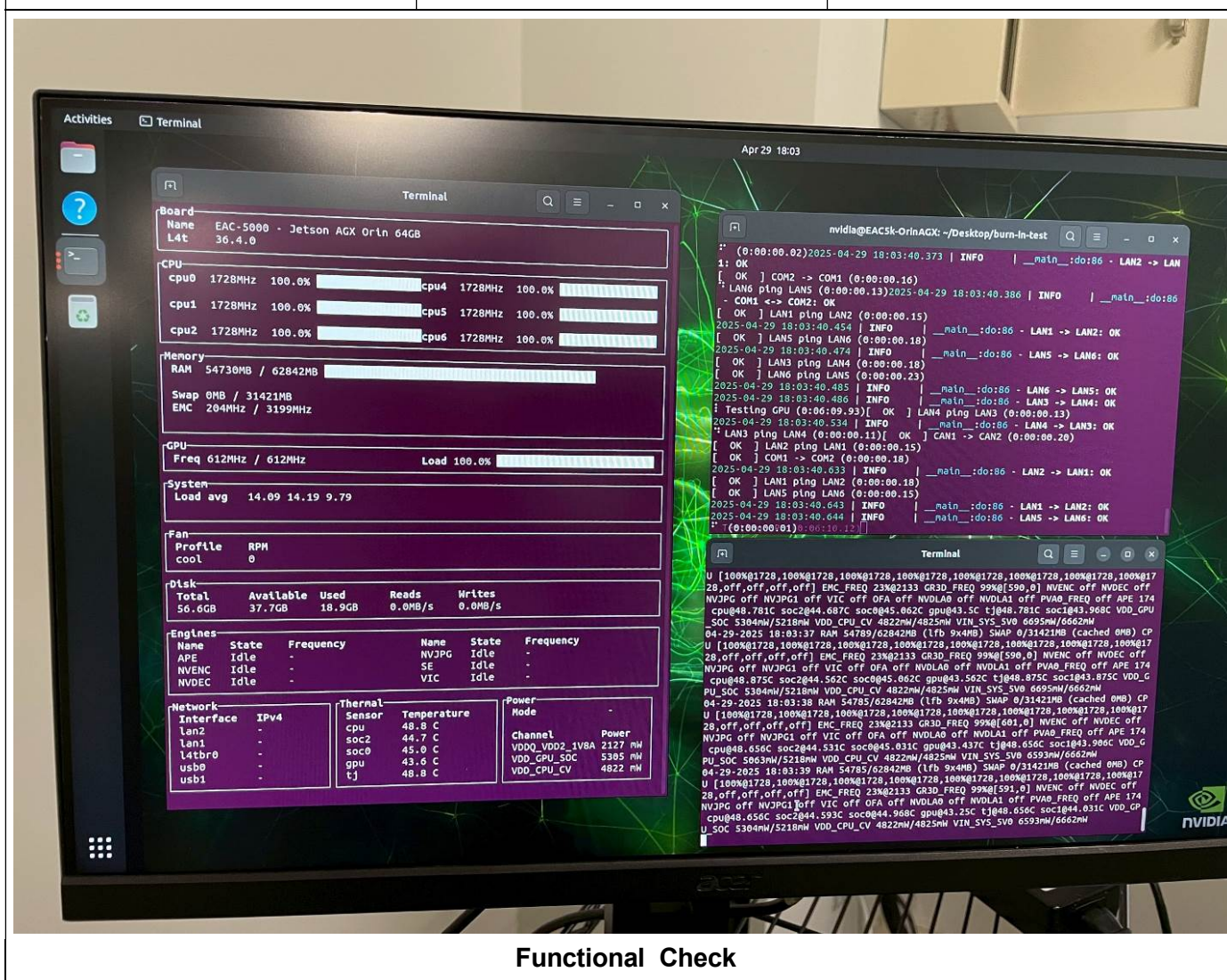
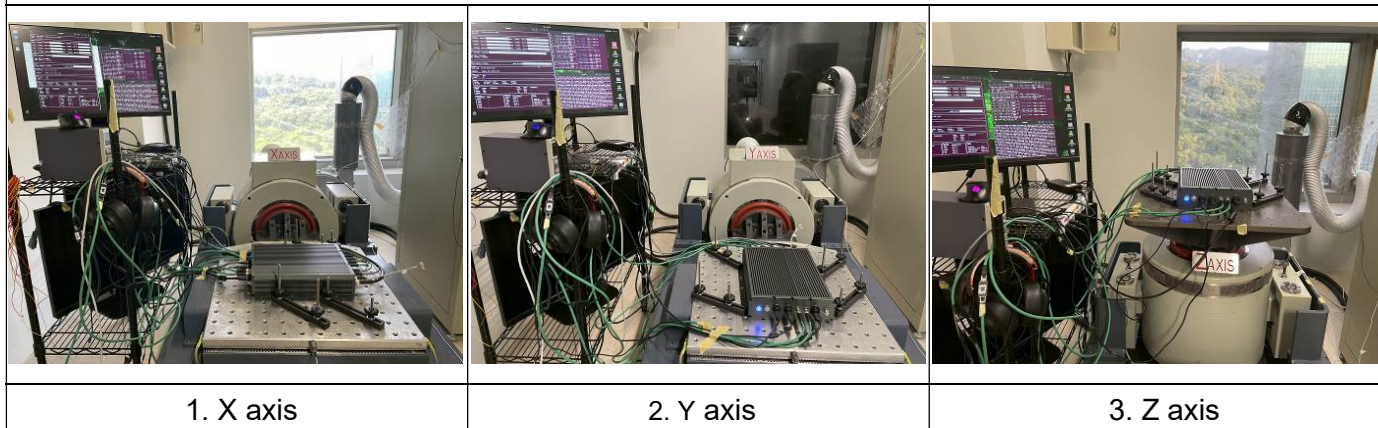
Data was saved as a file at time: 2025-4-29 PM 07:11:33

Begin Time: 2025-4-29 PM 06:09:27

End Time: 2025-4-29 PM 07:11:33



Test photos:





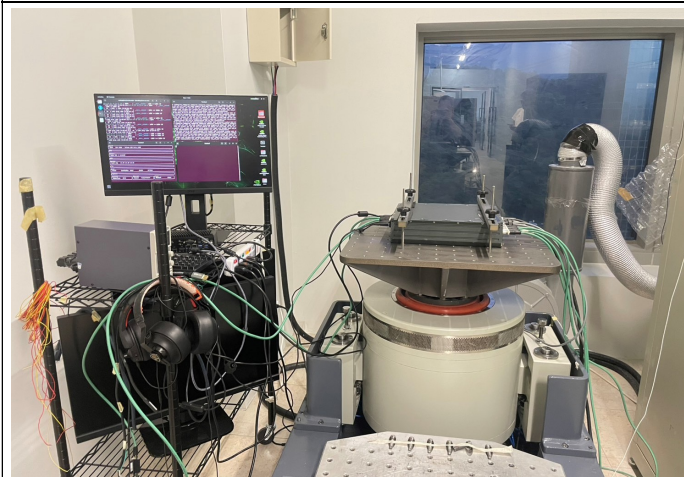
## 2. Operating Mechanical Shock Test

| Test Equipment :                                                                                                                                                                                                                                                                                                                                                                                     |                       |              |                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------|--------------------|
| Name                                                                                                                                                                                                                                                                                                                                                                                                 | Brand                 | Model        | Serial No.         |
| Vibration Tester                                                                                                                                                                                                                                                                                                                                                                                     | Vibration Source      | ZVS-600VH-51 | E113006            |
| Controller                                                                                                                                                                                                                                                                                                                                                                                           | Vibration Source      | VST-9008     | 395352176          |
| Test Laboratory Environment Condition :                                                                                                                                                                                                                                                                                                                                                              |                       |              |                    |
| Temperature ( °C)                                                                                                                                                                                                                                                                                                                                                                                    | Relative humidity (%) |              | Air pressure (kPa) |
| 15 ~ 35                                                                                                                                                                                                                                                                                                                                                                                              | 25 ~ 75               |              | 86 ~ 106           |
| Test Location :                                                                                                                                                                                                                                                                                                                                                                                      |                       |              |                    |
| 13F-5, No. 93, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City 221, Taiwan.                                                                                                                                                                                                                                                                                                                     |                       |              |                    |
| Test Method / Specification :                                                                                                                                                                                                                                                                                                                                                                        |                       |              |                    |
| <b>Shock test –MIL-STD-810G w/Change 1: 2014, Method 516.7, Procedure I – Functional Shock and client's request</b><br><b>Sample Condition:</b> operation<br><b>Waveform :</b> Final Peak Sawtooth Wave<br><b>Acceleration :</b> 20G<br><b>Pulse duration :</b> 11 ms<br><b>Shock direction :</b> 6 faces ( ±X, ±Y, ±Z axes, See photo 4~6)<br><b>No of Shock :</b> 3 shock / axis (Total 18 shocks) |                       |              |                    |
| Test Procedure:                                                                                                                                                                                                                                                                                                                                                                                      |                       |              |                    |
| <ul style="list-style-type: none"> <li>- Check the samples' appearance before the test.</li> <li>- Install the samples on the testing table and perform "BurnIn test"</li> <li>- After testing, take off samples from table and put them in the storage area.</li> <li>- Observe the samples and record for any visible change after testing.</li> </ul>                                             |                       |              |                    |
| Summary:                                                                                                                                                                                                                                                                                                                                                                                             |                       |              |                    |
| <ul style="list-style-type: none"> <li>- No visible damage was found on sample appearance after the test.</li> <li>- Sample photo after the test:</li> </ul>                                                                                                                                                                                                                                         |                       |              |                    |

### Test profile:



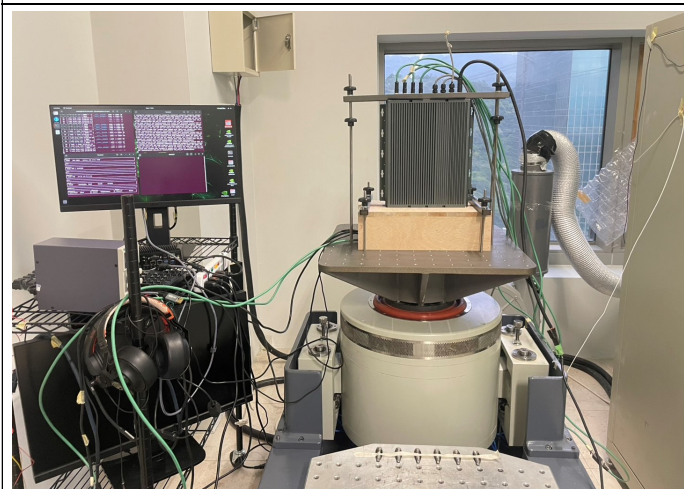
### Test photos:



4.  $\pm X$  axis



5.  $\pm Y$  axis



6.  $\pm Z$  axis







EUT Photo



EUT Photo

—— The End of Test Report ——