ASUS MIL-STD 810H Test Report - ExpertBook B1 (12 gen)

Test Category	Test Method	MIL-STD-810H Test Parameters	Test Result
Altitude Storage/ Air Transport	Method 500.6-Procedure I	Test Pressure: Equivalent to cabin altitude of 40,000ft Temperature: -20℃ Duration:12 hour Unit is non-operational during test.	Pass
Altitude Operation/Air Carriage	Method 500.6-Procedure II	Test Pressure: Equivalent to cabin altitude of 15,000ft Temperature: 5℃ and 40℃ Duration: 12 hour (5℃) and 12 hour (40℃) Unit is operational during test.	Pass
High Temperature Operational (Hot Dry)	Method 501.7-Procedure II (A1)	Duration: 3 day exposure (3 X 24 hr. cycles) Temperature: 32~49℃ cycling temperature exposure Table 501.7-III-Procedure. High temperature cycles, climate category A1 Hot Dry Unit is operational during test.	Pass
High Temperature Storage and Transit (Hot Dry)	Method 501.7-Procedure I (A1)	Duration: 7 day exposure (7 X 24 hr. cycles) Temperature: 33~71℃ cycling temperature exposure Table 501.7-III-Procedure. High temperature cycles, climate category A1 Hot Dry Unit is non-operational during test.	Pass
High Temperature Operational (Basic Hot)	Method 501.7-Procedure II (A2)	Duration: 3 day exposure (3 X 24 hr. cycles) Temperature: 30~43℃ cycling temperature exposure Table 501.7-II-Procedure. High temperature cycles, climatic category A2 - Basic Hot Humidity: 14~44% Unit is operational during test.	Pass
High Temperature Storage and Transit (Basic Hot)	Method 501.7-Procedure I (A2)	Duration: 7 day exposure (7 X 24 hr. cycles) Temperature: 30~63℃ cycling temperature exposure Table 501.7-II-Procedure. High temperature cycles, climatic category A2 - Basic Hot Humidity: 5~44% Unit is non-operational during test.	Pass
Low Temperature Storage and Transit (Basic climatic)	Method 502.7- Procedure I (C1)	Duration: 7 day exposure (7 X 24 hr. cycles) Temperature: -25~ -33℃ Low temperature cycles, Table IX. Basic climatic_C1 Unit is non-operational during test.	Pass
Low Temperature Operational (Basic climatic)	Method 502.7- Procedure II (C1)	Duration: 3 day exposure (3 X 24 hr. cycles) Temperature: -21~ - 32℃ Low temperature cycles,Table IX. Basic climatic_C1 Unit is operational during test.	Pass
Low Temperature Storage and Transit (Cold climatic)	Method 502.7- Procedure I (C2)	Duration: 7 day exposure (7 X 24 hr. cycles) Temperature: -37~ -46℃ Low temperature cycles, Table XI. Cold climatic_C2 Wind speed less than 5m/s(11mph) Unit is non-operational during test.	Pass
Low Temperature Operational (Cold climatic)	Method 502.7- Procedure II (C2)	Duration: 3 day exposure (3 X 24 hr. cycles) Temperature: -37~ -46℃ Low temperature cycles, Table XI. Cold climatic_C2 Wind speed less than 5m/s(11mph) Unit is operational during test.	Pass
Humidity Aggravated Cycle	Method 507.6- Procedure II	Cyclic per Figure 507.6-7 (Aggravated Cycle) Duration:10 Days Temperature: (30℃ and 60℃) Humidity: 95% RH, constant Unit is non-operational during test.	Pass
Sand and Dust	Method 510.7- Procedure II	Particle density:1.2g/m^3 Air velocity:28m/s Operating temperature of 60°C	Pass
Vibration	Method 514.8- Procedure I (Table514.8C-I)	Frequency 10-500Hz, Vertical rms = 1.04 g Transverse rms = 0.02g, Longitudinal rms = 0.74g Test Time: 60 minutes per axis (US highway truck vibration exposure)	Pass
	Method 514.8- Procedure I (Table514.8C-IV)	Frequency 5-500Hz, Vertical rms = 4.43 g Transverse rms = 1.30g, Longitudinal rms = 2.86g Test Time: 32 minutes per axis	Pass

	Method 514.8- Procedure I (Table514.8C-VII)	Frequency 5-500Hz, Vertical rms = 2.24 g Transverse rms = 1.48g, Longitudinal rms = 1.90g Test Time: 40 minutes per axis	Pass
Shock	Method 516.8- Procedure I	Functional Shock Operational 3 shocks/axis/direction for a total of 18 shocks; 40 Gs peak, 11 ms	Pass
	Method 516.8- Procedure II	Transportation shock- On road (5000Km) Amplitude : 5.1~ 7.6 G-Pk , Number of Shocks: 3 ~ 42 times Pulse Duration: 11ms Terminal Peak Sawtooth Non-OP/ Package	Pass
	Method 516.8- Procedure III	Fragility Non-operational 3 shocks/axis/direction for a total of 18 shocks 30~50 Gs peak, Trapezoidal pulse(772cm/s, 10G/each stage)	Pass
	Method 516.8- Procedure V	Crash Hazard Shock Test 2 shocks/axis/direction for a total of 12 shocks 75 Gs peak, 6 ms/Terminal Peak Sawtooth/unpackage nop	Pass
	Method 516.8- Procedure VI	Bench Handling (Drop Height : 100 mm) Unit is operational during test.	Pass
Mechanical Vibrations of Shipboard Equipment	Method 528.1- Procedure1 (Type 1)	Environmental Vibration 4~33 Hz/ 2Hours	Pass

1. The testing regimen includes the requirements of both military-grade standards and ASUS quality tests, and varies depending on device. MIL-STD-810 testing is conducted on selected ASUS products only. These tests do not demonstrate fitness for military use, or adherence to US Department of Defense (DoD) contract requirements. Similarly, the test results should not be considered an indication or guarantee of future performance under the specified test conditions. Damage occurring under these test conditions – or any attempt to replicate them – would be considered accidental, and would not be covered by the standard ASUS warranty. Additional coverage is available with ASUS Premium Care.