

# Operating Shock Test Report

**Issue by**  
**Design Technology Department**

Report No: 1601SK0664BR

<b>Product Model</b>	<b>10.4" Rugged Tablet PC : Taurus FM10</b>
<b>Product Description</b>	<b>Rugged Tablet PC</b>
<b>Test Reason</b>	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> Rugged Tablet PC  <input type="checkbox"/> Renew product <input type="checkbox"/> PCB : <input type="checkbox"/> BIOS:  <input type="checkbox"/> Revision change <input type="checkbox"/> PCB : <input type="checkbox"/> BIOS: <input type="checkbox"/> Component:

2016/01/10  
Issue date

David Chen  
Approved

Freeman Lee  
Test Engineer

## 1. Document Introduction

This document describes how we conduct the environment conditions and test procedure. It includes the test equipment we use, the test condition, and the test procedure we take. We also define our test criteria and the way to conclude the test result.  
 (According to client's test specification, please see following sheets in detail.)

### Table of Testing Summary Results

NO	Test Item	Condition Description	Sect. / Page	Reference to
1	<b>Shock Test</b>	Operating Pulse shape: Sawtooth Impact acceleration: 40g , Pulse duration: 11 ms , Axis of vibration: Transverse-X, Longitudinal-Y, Vertical-Z Number of shocks: one shock for each of the six faces , Total 18 Shocks	4 / 5	<b>MIL-STD-810G</b>  <b>Method 516.6</b>  <b>Procedure V</b>  <b>Table 516.6-VII</b>

## 2. Product Configuration

1. M/B : FMB80-100A
2. CPU : Intel Atom E3845@1.91G 10W
3. Panel : CMO G104X1-L04 1024X768 500Nits
4. RAM : Transcend TS512MSK64W6H DDR3L-1600 4G
5. SSD : Transcend TS64GMTS400 M.2 2242 MLC 64GB
6. Touch : AMT 16108-1-01 80%/1.75mm
7. GPS : u-blox NEO-6Q-0
8. WiFi & Bluetooth : Intel 7265NGW(2x2 AC+BT4.0)
9. 3G : Sierra MC8090
10. Camera : Fangtec AH4220C2-S2-2Z7 2M
11. Battery : JHT B5054 2S2P 3800mAh
12. BIOS /EC : FMB80V023 x64 / FMB8P023FM08
13. Adapter : EDAC EA1050C-120 AC(100-240V~1.8A,50-60Hz) DC 12V 4.16A
14. HotTab : 1.0.2

### 3. Photo of Product Configuration

Photo of EUT



## 4. Shock Test (Operating)

### **A. Test Equipment:**

- Test Site: SGS LAB
- Shock Testing System: LANSMONT / 65-81 TTSII
- Data Acquisition & Analysis System: LANSMONT / 1033570-2-B
- ICP Accelerometer: PCB / 353B14

### **B. LAB Environmental Conditions:**

- Ambient Temperature: 25 +/- 3°C
- Relative Humidity: 55 +/- 20% RH

### **C. Test Method / Specification:**

- Reference to MIL-STD-810G Method 516.6 Testing Procedures
- Procedure V / Table 516.6 VII
- Sample Condition: Operating
- Pulse shape: Sawtooth
- Impact acceleration: 40g
- Pulse duration: 11 ms
- Axis of vibration: Transverse-X, Longitudinal-Y, Vertical-Z
- Number of shocks: one shock for each of the six faces
- No. of Shock: 3 Shocks / face (Total 18 shocks)
- Quantity: Total 1 Set
- Testing Period: Dec. 03, 2015 to Dec. 03, 2015

### **D. Check Condition and Requirements:**

The equipment ,in its operation shock mode, Sawtooth waveform,40g 11ms duration and one shock for each of the six faces & the cycle is 3 times (Total 18 shocks) on testing. Must be free of mechanical structure, operational, functional and the display of key parts have to be normal. Document the result during the test. The functional and electrical check is required; document the result after the check.

**E. Test Result:**

Examine the appearance of specimen(s) by visual check and perform functional check after this test. Connect the specimen with rated power then examine whether the display function of specimen could be work normally or not.

- Functional Check & Mechanical Structure: Normal
- Appearance check (Visual check): No visible damage



**F. Test Judgment:**

– Test Result as below:

Check Item Style Item No.	Appearance check (Visual check)		Functional & Performance check
	Initial	Final	
10.4" Rugged Tablet PC : Taurus FM10	No visible damage	No visible damage	Normal