

Function test

P/N:	8Y.F1DD4.LR25B
F/W:	SFDDA01C
Flash Type:	MT29F64G08CBAAWP:A*4
Description:	SDM4-M 22P 180D-W 32GB(HF)
Controller	Apacer SCJA65 1231 BGFA0 A E749J0012
Test Result:	Pass
Prepared By:	Martin Chiang
Approval By:	Danny Chen
Date:	2012/11/09
File Name:	8Y.F1DD4.LR25B (SDM4-M 22P 180D-W HF 32GB)

System Configuration				
M/B/ Chipset	GA-EP45-UD3LR / Intel P45 / ICH10R			
SDM4-M 22P 180D-W	32GB			
Test Program result				
Function test (Windows platform)	Win XP		Win 7	
	PASS	FAIL	PASS	FAIL
Data access	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Data Delete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Data Compare	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Restart	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Suspend	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Format Size	FAT32:29.7GB	NTFS:29.8GB	FAT32:29.7GB	NTFS:29.8GB
Install Windows CE System	Pass			
Install Windows XP-E System	Pass			
Install Windows embedded standard 7 System	Pass			
Install Windows XP SP2 System	Pass			
Install Windows Vista System	Pass			
Install Windows 7 System	Pass			
Install Linux (3.3.4-5..fc17)System	Pass			
Rebooter Test 1000 Cycle	Pass			
Long-run Iometer(2006.07.27-RC3)-15hr	Pass			
Long-run Comp32 15hrs	Pass			
Long-run BurnIn Test V4.0 Pro-48hr	Pass			

System Configuration		
M/B/ Chipset	ASUS M3A78-EM / AMD 780G / SB700 / 0508	
SDM4-M 22P 180D-W	32GB	
Test Program result		
<i>Function test (Windows platform)</i>	Linux (3.3.4-5..fc17)	
	PASS	FAIL
Data access	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Data Delete	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Data Compare	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Restart	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Suspend	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Install Linux (3.3.4-5..fc17)System	Pass	
Rebooter Test 1000 Cycle for Linux	Pass	
Long-run BurnIn -48hr for Linux	Pass	

- Crystal Disk Mark 3.0.1



Additional Qualification:

Environmental

- 1. RoHS Standard _____
- 2. Other Environmental Standard _____
- 3. WEEE (By Product) _____
- 4. Battery Standard _____
- 5. Packing Standard _____
- 6. Others _____

Certification

- 1. CE No. _____
- 2. FCC No. _____
- 3. BSMI No. _____
- 4. VCCC No. _____
- 5. C-tick No. _____
- 6. Other _____

Reliability test

Testing equipment:

1. Chamber: KING SON KSON KS-9001, S/N: 001
2. Vibration tester: KING DESIGN KD-9363EM-600F2K-50N120, S/N: KDS11054783
3. Controller: DACTRON COMET USB, S/N: 9478158
4. Controller accelerometer: Wilcoxon Research WR-777, S/N:4208
5. Shock testing system: KING DESIGN DP-1200-60, S/N: R2110086489
6. Controller: KING DESIGN DP-1200-03C, S/N: KD674
7. Accelerometer: B & K 4398, S/N: 2209044
8. Shock testing system: KING DESIGN DP-1200-18, S/N:KDS02197998
9. Controller: KING DESIGN DP-1200-03C, S/N: KD674
10. Accelerometer: DYTRAN3200B2T, S/N: 2657

Testing environment:

1. Temperature: 21.5°C (25±10 °C)
2. Relative humidity: 63% RH (50±25 RH)

Testing results:

1. Temperature test

	Temperature (°C)	Duration	Result
Non-operating	-40	96hrs	Pass
	100	96hrs	Pass
Operating	0	96hrs	Pass
	70	96hrs	Pass

2. Vibration test

1) Sine vibration test (Non-operation)

Frequency: 10Hz to 2000Hz

Displacement: 1.52mm (10Hz to 70 Hz)

Accelerate: 15g (70Hz to 2000Hz)

Sweep rate: 20 min/cycle

Test axis: X, Y, Z axis

Test time: 1hour (each axis)

Total test time: 3 hours

2) Random vibration test (operation)

Reference to MIL-STD 810G 514.6 category 24

Frequency: 20Hz to 2000Hz

Accelerate: 7.69g rms

P.S.D: 0.04g²/Hz (20Hz to 1000Hz)

:-6 dB/Oct (1000Hz to 2000Hz)

Test axis: X, Y, Z axis

Test time: 1hour (each axis)

Total test time: 3 hours

3. Shock test

1) Wave form: half sine wave (non-operation)

Acceleration: 1500g

Duration time: 0.5 ms

No. of shock: each axis 3 times

Shock direction: $\pm X$, $\pm Y$, $\pm Z$ axis

3) Half sine wave (operation)

Acceleration: 50g

Duration time: 11 ms

No. of shock: each axis 3 times

Shock direction: $\pm X$, $\pm Y$, $\pm Z$ axis

Test results:

Describe	Pass	fail	Non-judgement
Function judgment (1)	v	--	--
Appearance check (2)	v	--	--
(1):burn in function was normal after the test			
(2): No visible damages were found after the test			