

Product Qualification

--- Compatibility Test ---

Product Name: SFD 25A-M 256GB (ET)

Product P/N: APS25A77 (B)256G-6A (B)TM (W)

Firmware Version: SFDM106A (B)

Controller: SCJC72

Qualification: Qual all

Test Result: PASS

APPROVAL					
QT	Date	Signature	Approved by	Date	Signature
Alex Lin	2016/04/19	Alex Lin	Danny Chen	2016/04/19	Danny Chen

Table Of Content

SUMMARY RESULT 3

A. Function Test With M/B : ASUS Z170A..... 4

1. Basic Function Test4

2. Format Test.....4

3. Burn In Test4

4. Reboot Test.....4

5. Install System Test.....4

6. Test Result4

B. Function Test With M/B : Avalue EMX QM77-A1R 5

1. Basic Function Test5

2. Reboot Test.....5

3. Install System Test.....5

4. Test Result5

C. Performance Test With M/B : ASUS Z170A 6

D. Performance Test With M/B : Asus Maximus VI Hero 7

E. Platform Compatibility Test..... 8

F. Additional Qualification: 9

1. Environmental9

2. Certification.....9

SUMMARY RESULT

		PC1	PC2	PC3	PC4						
Testing Product		SFD 25A-M 256GB									
System		Windows Emb. 8.1 Industry Pro	Fedora kernel 3.3.4 -5 fc17 / Windows Emb. 8.1 Industry Pro								
M/B	Name	Z170A	QM77-A1R								
	Vendor	ASUS	Avalue EMX								
	Chipset	Intel Z170	Intel QM77								
	Interface	SATA III	SATA III								
	BIOS	1302	V1.1.0								
Test Result											
Basic Function Test		V	V								
Burn In Test	Comp32	V	--								
	PassMark Burn In Test Pro V8.0	V	--								
	PassMark Burn In Test Pro V3.0.1007	--	--								
Warm Boot Test		V	--								
Cold Boot Test		--	V								
		--	--								
		--	--								
Install System Test											
	Windows Emb. 7 Standard	Windows Emb. 8 Standard	Windows Emb. 8.1 Industry	Windows 10	Fedora kernel 3.3.4 -5 fc17	Ubuntu kernel 3.13.0 -32	Red Hat kernel 2.6.32 -431.e16				
Result	V	V	V	V	V	V	V				
Remark:						Test Result — PASS					

A. Function Test With M/B : ASUS Z170A

Testing Product	SFD 25A-M 256GB	Testing Engineer	Alex Lin
Testing Environment	M/B: ASUS Z170A	Chipset: Intel Z170 Interface: SATA III	BIOS: 1302

1. Basic Function Test

	Copy	Delete	Restart	Compare	Suspend (S3)	Hibernate (S4)	LED
Windows Emb. 8.1 Industry Pro	V	V	V	V	V	V	V

2. Format Test

	FAT32	NTFS
Windows Emb. 8.1 Industry Pro	--	238GB

3. Burn In Test

	Comp32 15 hours	Burn In Test V8.0 Pro 168 hours
Windows Emb. 8.1 Industry Pro	V	V

4. Reboot Test

	Warm Boot 6000 Cycles
Windows Emb. 8.1 Industry Pro	V

5. Install System Test

Install System	Result
Install Windows Embedded Standard 7 System	V
Install Windows Embedded 8 Standard System	V
Install Windows Embedded 8.1 Industry Pro System	V
Windows 10 Multiple Edition	V
Windows 10 Enterprise	V

6. Test Result

Pass

B. Function Test With M/B : Avalue EMX QM77-A1R

Testing Product	SFD 25A-M 256GB	Testing Engineer	Alex Lin
Testing Environment	M/B: Avalue EMX QM77-A1R	Chipset: Intel QM77 Interface: SATA III	BIOS: V1.1.0

1. Basic Function Test

	Copy	Delete	Restart	Compare	Suspend (S3)	Hibernate (S4)	LED
Fedora kernel 3.3.4 -5 fc17	V	V	V	V	V	V	V

2. Reboot Test

	Cold Boot 6000 Cycles
Windows Emb. 8.1 Industry Pro	V

3. Install System Test

Install System	Result
Install Windows Embedded Standard 7 System	V
Install Windows Embedded 8 Standard System	V
Install Windows Embedded 8.1 Industry Pro System	V
Install Windows 7 System	V
Install Windows 8.1 System	V
Install Fedora kernel 3.3.4 -5 System	V
Install Ubuntu kernel 3.13.0 -32 System	V
Install Red Hat Kernel 2.6.32 -431.e16 System	V

4. Test Result

Pass

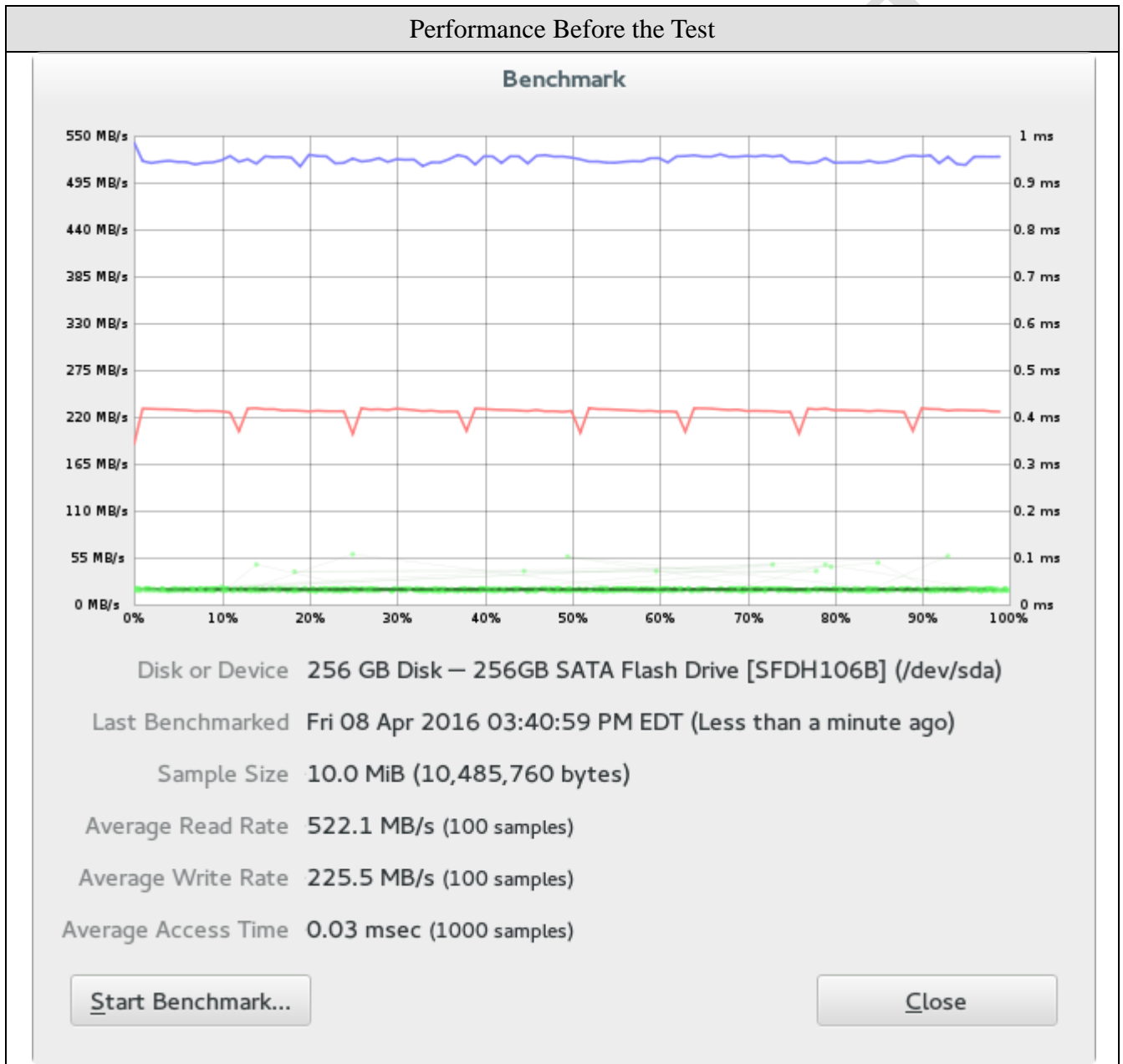
C. Performance Test With M/B : ASUS Z170A

Testing Product	SFD 25A-M 256GB	Testing Engineer	Alex Lin
Testing Environment	M/B: ASUS Z170A	Chipset: Intel Z170 Interface: SATA III	BIOS: F4b
Testing Software	CrystalMark 3.0.2		

Performance Before the Test	Performance After the Test																														
<table border="1"> <thead> <tr> <th></th> <th>Read [MB/s]</th> <th>Write [MB/s]</th> </tr> </thead> <tbody> <tr> <td>Seq</td> <td>534.1</td> <td>350.2</td> </tr> <tr> <td>512K</td> <td>365.7</td> <td>353.5</td> </tr> <tr> <td>4K</td> <td>40.99</td> <td>126.1</td> </tr> <tr> <td>4K QD32</td> <td>341.5</td> <td>325.9</td> </tr> </tbody> </table>		Read [MB/s]	Write [MB/s]	Seq	534.1	350.2	512K	365.7	353.5	4K	40.99	126.1	4K QD32	341.5	325.9	<table border="1"> <thead> <tr> <th></th> <th>Read [MB/s]</th> <th>Write [MB/s]</th> </tr> </thead> <tbody> <tr> <td>Seq</td> <td>529.0</td> <td>350.0</td> </tr> <tr> <td>512K</td> <td>369.1</td> <td>353.6</td> </tr> <tr> <td>4K</td> <td>41.26</td> <td>127.0</td> </tr> <tr> <td>4K QD32</td> <td>340.1</td> <td>323.9</td> </tr> </tbody> </table>		Read [MB/s]	Write [MB/s]	Seq	529.0	350.0	512K	369.1	353.6	4K	41.26	127.0	4K QD32	340.1	323.9
	Read [MB/s]	Write [MB/s]																													
Seq	534.1	350.2																													
512K	365.7	353.5																													
4K	40.99	126.1																													
4K QD32	341.5	325.9																													
	Read [MB/s]	Write [MB/s]																													
Seq	529.0	350.0																													
512K	369.1	353.6																													
4K	41.26	127.0																													
4K QD32	340.1	323.9																													

D. Performance Test With M/B : Asus Maximus VI Hero

Testing Product	SFD 25A-M 256GB	Testing Engineer	Alex Lin
Testing Environment	M/B: ASUS Maximus VI Hero	Chipset: Intel Z87 Interface: SATA III	BIOS: 0224
Testing Software	Ubuntu 14.10 Benchmark		



E. Platform Compatibility Test

Platform	Chipset	M/B	Interface	System	Result
PC1	Intel G35	Asus P5E-VM HDMI	SATA II	Win7	V
PC2	Intel P55	Asus P7P55D	SATA II	Win7	V
PC3	Intel H67	Gigabyte PH67A-D3-B3	SATA III	Win8.1	V
PC4	Intel Z68	Asus P8Z68-M Pro	SATA III	Win8.1	V
PC5	Intel Z77	Gigabyte IVB	SATA III	Win8.1	V
PC6	Intel Z87	Asus Maximus VI Hero	SATA III	Win8.1	V
PC7	Intel Z77	GA-Z77X-D3H	SATA III	Win8.1	V
PC8	Intel QM77	Avalue EMX QM77-A1R	SATA III	Win8.1	V
PC9	AMD 780G	Ausu M3A78-EM	SATA II	Win7	V
PC10	AMD 785G	Asus M4A785D-M Pro	SATA II	Win7	V
PC11	AMD 790FX	Asus M4A79T Deluxe	SATA III	Win8.1	V
PC12	AMD 790GX	Asus M4A78T-E	SATA III	Win8.1	V
PC13	AMD A88X	Asus A88XM-A	SATA III	Win8.1	V

F. Additional Qualification:

1. Environmental

- 1. RoHS Standard 2011/65/EU / PCRD005
- 2. Other Environmental Standard REACH / China RoHS
- 3. WEEE (By Product) 2012/19/EU
- 4. Battery Standard N/A
- 5. Packing Standard 94/62/EC
- 6. Others N/A

2. Certification

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

