

Product Qualification

--- Compatibility Test ---

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

Product P/N: APS25A77 (B)256G-8A (B)TM1G (W)

Firmware Version: SFDH008A (B)

Controller: SCJC72

Qualification: Qual all

Test Result: PASS

APPROVAL					
QT	Date	Signature	Approved by	Date	Signature
Alex Lin	2017/05/26	Alex Lin	Danny Chen	2017/05/26	Danny Chen

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SUMMARY RESULT

		PC1	PC2	PC3	PC4						
Testing Product		SFD 25A-M ET 256GB									
System		Windows Emb. 8.1 Industry Pro	Fedora kernel 3.3.4 -5 fc17 / Windows Emb. 8.1 Industry Pro								
M/B	Name	Z170-A	QM77-A1R								
	Vendor	ASUS	Avalue EMX								
	Chipset	Intel Z170	Intel QM77								
	Interface	SATA III	SATA III								
	BIOS	2202	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 Z170-A

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

1. Basic Function Test

	Copy	Delete	Restart	Compare	Suspend (S3)	Hibernate (S4)	LED
Windows Emb. 7 Standard	V	V	V	V	V	V	V

2. Format Test

	FAT32	NTFS
Windows Emb. 7 Standard	--	238GB

3. Burn In Test

	Comp32 15 hours
Windows Emb. 7 Standard	V

4. Reboot Test

	Warm Boot 6000 Cycles	Cold Boot 6000 Cycles
Windows Emb. 7 Standard	V	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 ET 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. Install System Test

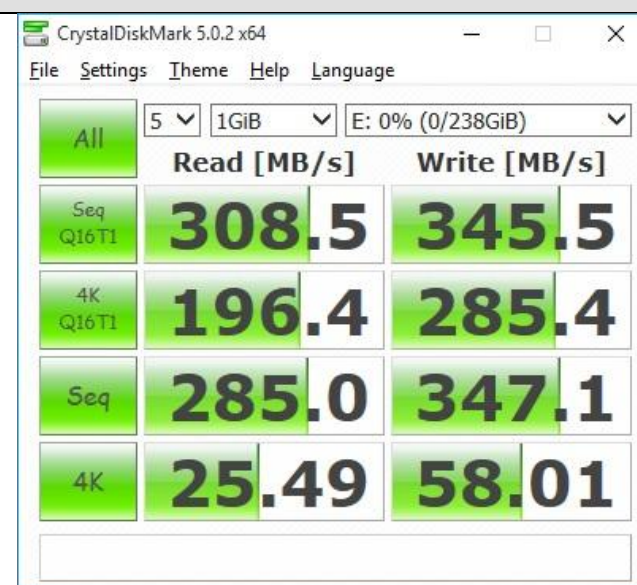
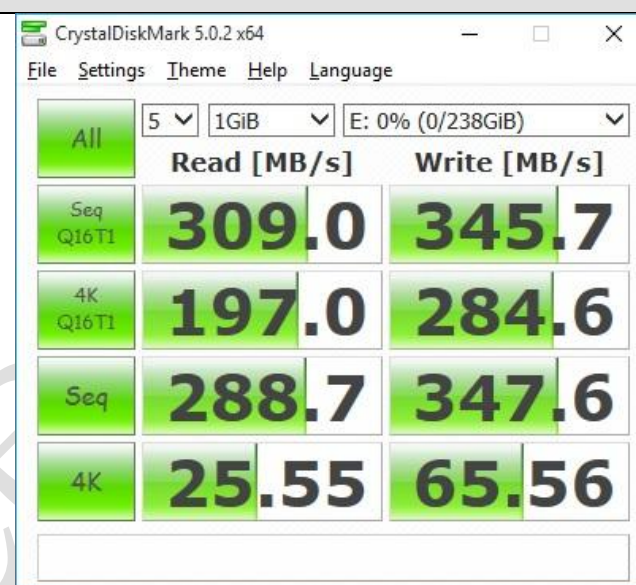
Install System	Result
Install Windows Embedded Standard 7 System	V
Install Windows Embedded 8 Standard System	V
Install Windows Embedded 8.1 Industry Pro System	V
Install Windows 7 System	V
Install Windows 8.1 System	V
Install Fedora kernel 3.3.4 -5 System	V
Install Ubuntu kernel 3.13.0 -32 System	V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

3. Test Result

Pass

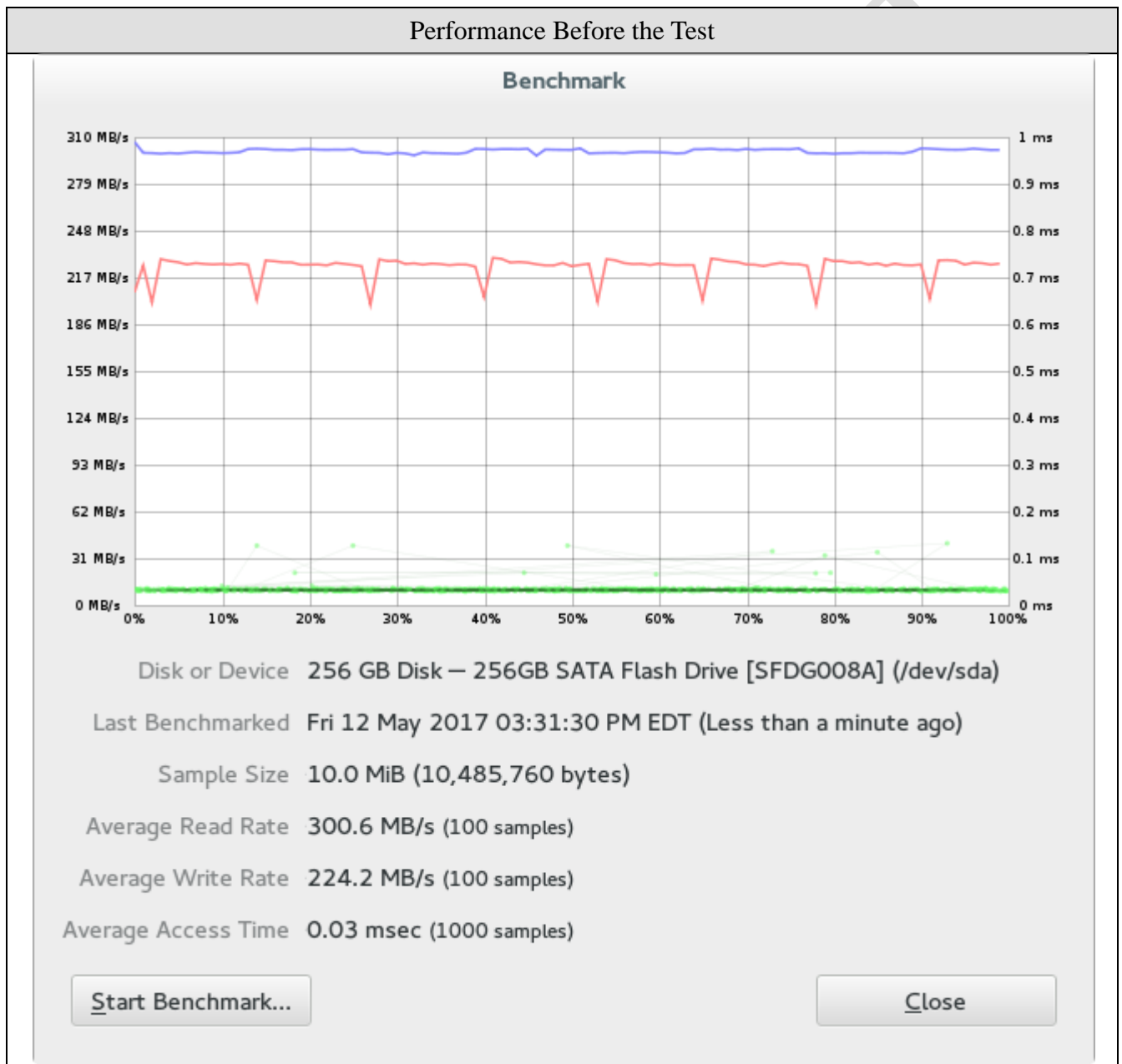
C. Performance Test With M/B : Gigabyte GA-Z77X-D3H

Testing Product	SFD 25A-M ET 256GB	Testing Engineer	Alex Lin
Testing Environment	M/B: Gigabyte GA-Z77X-D3H	Chipset: Intel Z77 Interface: SATA III	BIOS: F16
Testing Software	CrystalMark 5.0.2		

Test Function : BurnIn Test 168hrs																																	
Before		After																															
 <p>CrystalDiskMark 5.0.2 x64</p> <p>File Settings Theme Help Language</p> <p>All 5 1GiB E: 0% (0/238GiB)</p> <table border="1"> <tr> <td></td> <td>Read [MB/s]</td> <td>Write [MB/s]</td> </tr> <tr> <td>Seq Q16T1</td> <td>308.5</td> <td>345.5</td> </tr> <tr> <td>4K Q16T1</td> <td>196.4</td> <td>285.4</td> </tr> <tr> <td>Seq</td> <td>285.0</td> <td>347.1</td> </tr> <tr> <td>4K</td> <td>25.49</td> <td>58.01</td> </tr> </table>			Read [MB/s]	Write [MB/s]	Seq Q16T1	308.5	345.5	4K Q16T1	196.4	285.4	Seq	285.0	347.1	4K	25.49	58.01	 <p>CrystalDiskMark 5.0.2 x64</p> <p>File Settings Theme Help Language</p> <p>All 5 1GiB E: 0% (0/238GiB)</p> <table border="1"> <tr> <td></td> <td>Read [MB/s]</td> <td>Write [MB/s]</td> </tr> <tr> <td>Seq Q16T1</td> <td>309.0</td> <td>345.7</td> </tr> <tr> <td>4K Q16T1</td> <td>197.0</td> <td>284.6</td> </tr> <tr> <td>Seq</td> <td>288.7</td> <td>347.6</td> </tr> <tr> <td>4K</td> <td>25.55</td> <td>65.56</td> </tr> </table>			Read [MB/s]	Write [MB/s]	Seq Q16T1	309.0	345.7	4K Q16T1	197.0	284.6	Seq	288.7	347.6	4K	25.55	65.56
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4K	25.55	65.56																															

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

Testing Product	SFD 25A-M ET 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 Z68	Asus P8Z68-M Pro	SATA III	Win8.1	V
PC2	Intel Z77	Gigabyte IVB	SATA III	Win8.1	V
PC3	Intel Z87	Asus Maximus VI Hero	SATA III	Win8.1	V
PC4	Intel Z77	GA-Z77X-D3H	SATA III	Win8.1	V
PC5	Intel QM77	Avalue EMX QM77-A1R	SATA III	Win8.1	V
PC6	AMD 790FX	Asus M4A79T Deluxe	SATA III	Win8.1	V
PC7	AMD 790GX	Asus M4A78T-E	SATA III	Win8.1	V
PC8	AMD A88X	Asus A88XM-A	SATA III	Win8.1	V

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F. Additional Qualification:

1. Environmental

- 1. RoHS Standard 2011/65/EU , 2015/863/EU
- 2. Other Environmental Standard EC/1907/2006
- 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 _____

