

Date: June 30, 2017 Version: 1.2

#### **Vess R2000 Series Systems Covered:**

Vess R2600xiPRO - 3U/16-bay 10G SFP+ iSCSI/iSCSI to SAS/SATA RAID System Vess R2600tiPRO - 3U/16-bay 10G BASE-T iSCSI/iSCSI to SAS/SATA RAID System Vess R2600xi - 3U/16-bay 10G SFP+ iSCSI/iSCSI to SAS/SATA RAID System Vess R2600ti - 3U/16-bay 10G BASE-T iSCSI/iSCSI to SAS/SATA RAID System - 3U/16-bay Fibre/iSCSI to SAS/SATA RAID System Vess R2600fi - 3U/16-bay Fibre/iSCSI to SAS/SATA RAID System Vess R2604fi Vess R2608fi - 3U/16-bay 16G Fibre/iSCSI to SAS/SATA RAID System - 3U/16-bay iSCSI to SAS/SATA RAID System Vess R2600i Vess R2610i - 3U/16-bay iSCSI to SAS/SATA RAID System - 3U/16-bay iSCSI to SAS/SATA RAID System Vess R2612i - 3U/16-bay Fibre/iSCSI to SAS/SATA RAID System Vess R2610fi Vess R2610xi - 3U/16-bay 10G SFP+ iSCSI/iSCSI to SAS/SATA RAID System - 4U/24-bay iSCSI to SAS/SATA RAID System Vess R2810i Vess R2812i - 4U/24-bay iSCSI to SAS/SATA RAID System Vess R2810fi - 4U/24-bay Fibre/iSCSI to SAS/SATA RAID System

#### **Vess R2000 Series Systems Covered:**

Vess J2600s - 3U/16-bay SAS to SAS/SATA JBOD System
 Vess J2610s - 3U/16-bay SAS to SAS/SATA JBOD System
 Vess J2810s - 4U/24-bay SAS to SAS/SATA JBOD System

#### **Systems Versions Covered:**

BootLoader - Version 1.00.0000.18
 Firmware - Version 1.05.0000.80
 Software - Version 1.05.0000.80

#### **DEVICE COMPATIBILITY NOTE:**

Basic compatibility between the 3rd party device and Promise device has been verified in typical configurations, unless otherwise stated.

The EOL of 3rd party device may not be in the current list, user can refer older version of Promise compatibility list to get those test result.

#### **DISCLAIMERS:**

Only the versions available at time of testing have been verified, as listed.

Corner cases may exist depending on user configuration etc.

Individual 3rd party units may exhibit problems that did not show up in through the Promise test process.

Published performance is not assured with configuration deviations.

Some listed devices may go EOL. AVL listing does not imply market availability.



## **Document History**

Date	Release Label	Release Version	Notes
		First release	VessR2000
		Thouse	series fibre
		Qualified some devices:	and iSCSI
		SAS Hard Drive: 5 models	Release
		SATA Hard Drive: 9 models	neicuse
		• iSCSI HBA: 2 models	
		NIC: 9 models	
		Ethernet Switch: 6 models	
		• Fibre HBA: 7 models	
August 29,	FCS	Fibre Switch: 4 models	
2012	1 63	• Fibre SFP+: 7 models	
		SAS RAID Card: 4 models	
		SAS HBA: 2 models	
		OS: 11 sets	
		Web browser: 8 new versions	
		<ul> <li>USB Flash Drive: 9 models</li> </ul>	
		UPS: 2 models	
		Multi Path: 1 version	
		JBOD: 1 model	
		Based on FCS Compatibility List with new	
		added disk drive devices: (blue and orange-	
January 23,	SR1	color highlights)	
2013		SAS Hard Drive: 20 models	
		SATA Hard Drive:9models	
		Solid State Drive: 1 model	
		Based on SR1 Compatibility List with new	
		added disk drive devices: (blue and orange-	
		color highlights)	
March 28,		SAS Hard Drive: 1 model	
2013	SR1.1	SATA Hard Drive: 1 model	
2015		Add Citrix ready support	
		<ul> <li>Add Windows Hyper-V support</li> </ul>	
		<ul> <li>Add VMware certified</li> </ul>	
		• 0.S.: 1 set	
		Based on SR1.1 Compatibility List with new	
		added disk drive devices: (blue and orange-	
June 6, 2013	SR1.2	color highlights)	
Julie 0, 2013	381.2	<ul><li>SAS Hard Drive: 5 models</li></ul>	
		<ul> <li>SATA Hard Drive: 3models</li> </ul>	
		<ul> <li>Add Windows Cluster Services support</li> </ul>	
		Based on SR1.2 Compatibility List with new	Version 1.0
	CD4 2	added disk drive devices: (blue and orange-	
July 15, 2013	SR1.3	color highlights)	
		SATA Hard Drive: 4 models	
		Based on SR1.3 Compatibility List version	Version 2.0
September		1.0 with new added disk drive devices: (blue	
04, 2013	SR1.3	and orange-color highlights)	
, 2020		SAS Hard Drive: 3 models	
		<ul><li>SAS Hard Drive: 3 models</li></ul>	



	Ī		
		SATA Hard Drive:4models	
		Based on SR1.3 Compatibility List version	10G Base-T
		2.0 with new added disk drive devices: (blue	iSCSI release
		and orange-color highlights)	
		<ul> <li>SAS Hard Drive: 4 models</li> </ul>	
January 07,		SATA Hard Drive: 2models	
2014	SR2.02	• iSCSI HBA: 2 models	
		NIC: 3 models	
		• Ethernet Switch: 4 models	
		• O.S.: 2 sets	
		<ul> <li>Add NAS Citrix ready support</li> </ul>	
		Based on SR2.02 Compatibility List with new	NAS function
			release
Falam.a.m. 17		added disk drive devices: (blue and orange-	release
February 17,	SR2.1	color highlights)	
2014		SAS Hard Drive: 1 models	
		SATA Hard Drive:1model	
		• O.S.: 1 set	
		Based on SR2.1 Compatibility List with new	10G SFP+ iSCSI
		added disk drive devices: (blue and orange-	release
		color highlights)	
		<ul><li>SAS Hard Drive: 5 models</li></ul>	
		<ul> <li>Solid State Drive: 1model</li> </ul>	
July 2, 2014	SR2.2	• iSCSI HBA: 2 models	
		NIC: 2 models	
		Ethernet Switch: 1 models	
		Ethernet SFP: 3 models	
		• O.S.: 4 sets	
		Add VMware certified	
		Based on Vess R2000 SR2.2 Compatibility	Combine the
		List with new added disk drive devices: (blue	Vess R2000
July 18, 2014	SR2.2	and orange-color highlights)	and Vess
July 10, 2014	3112.2	<ul> <li>SATA Hard Drive: 9 models</li> </ul>	J2000 AVL
		<ul> <li>Solid State Drive: 9 models</li> </ul>	J2000 AVL
			Version 2.0
		Based on Vess R2000 SR2.2 Compatibility	version 2.0
		List Version 1.0 with new added disk drive	
September		devices: (blue and orange-color highlights)	
23, 2014	SR2.2	SATA Hard Drive: 17 models	
		SAS Hard Drive: 8 models	
		<ul> <li>Solid State Drive: 9 models</li> </ul>	
		Add VMware certified	
		Based on Vess R2000 SR2.2 Compatibility	Vess
		List Version 2.0 with new added disk drive	R2610i/Vess
December	SR2.3	devices: (blue and orange-color highlights)	R2612i/Vess
22, 2014	3N2.3	SATA Hard Drive: 2 models	J2610s release
		SAS Hard Drive: 1 models	
		Misc Thounderbolt Devices: 3 models	
		Based on Vess R2000 SR2.3 Compatibility	Vess
March 26,		List Version 1.0 with new added disk drive	R2810i/Vess
2015	SR2.4	devices: (blue and orange-color highlights)	R2812i/Vess
		<ul> <li>SATA Hard Drive: 9 models</li> </ul>	J2810s release
	<u> </u>	- SATATION DIEG. STITOUEIS	720103 TCTC03C



			1
May 20, 2015	SR2.4.1	Based on Vess R2000 SR2.4 Compatibility List Version 1.0 with new added disk drive devices: (blue and orange-color highlights)  SAS Hard Drive: 9 models  Solid State Drive: 4 models  SPF+ Cooper Cable: 1 models	Vess R2600xiPRO/ Vess R2600tiPRO release
September 15, 2015	SR2.5.1	Based on Vess R2000 SR2.4.1 Compatibility List Version 1.0 with new added disk drive devices: (blue and orange-color highlights)  SAS Hard Drive: 13 models  SATA Hard Drive: 4 models  O.S.: 2 sets	
October 16, 2015	SR2.5.1	Based on Vess R2000 SR2.5.1 Compatibility List Version 1.0 with new added disk drive devices: (blue and orange-color highlights)  SAS Hard Drive: 3 models  Ethernet SFP.: 2 sets	Version 2.0
February 17, 2016	SR2.5.2	Based on Vess R2000 SR2.5.1 Compatibility List Version 2.0 with new added disk drive devices: (blue and orange-color highlights)  SAS Hard Drive: 4 models  SATA Hard Drive: 7 models  Solid State Drive: 3 models  NIC: 2 models	
April 26, 2016	SR2.5.3	Based on Vess R2000 SR2.5.2 Compatibility List Version 1.0 with new added disk drive devices: (blue and orange-color highlights)  SAS Hard Drive: 15 models  SATA Hard Drive: 1 model  Solid State Drive: 3 models	
August 17, 2016	SR2.5.4	Based on Vess R2000 SR2.5.3 Compatibility List Version 1.0 with new added disk drive devices: (blue and orange-color highlights)  SAS Hard Drive: 6 models  SATA Hard Drive: 1 model  Solid State Drive: 3 models  Fibre HBA: 2 models  Fibre Switch: 1 model  Fibre SFP+: 4 models	Vess R2608fi release
December 05, 2016	SR2.5.5	Based on Vess R2000 SR2.5.5 Compatibility List Version 1.1 with new added disk drive devices: (blue and orange-color highlights)  SAS Hard Drive: 3 models  Solid State Drive: 2 models  Fibre HBA: 1 models  Fibre SFP+: 1 model  Ethernet SFP+: 1 models	
June 30, 2016	SR2.5.6	Based on Vess R2000 SR2.5.6 Compatibility List Version 1.2 with new added disk drive devices: (blue and orange-color highlights)	



<ul> <li>SATA Hard Drive: 3 models</li> <li>SAS Hard Drive: 3 models</li> <li>Solid State Drive: 1 models</li> </ul>	
John State Drive: Tilloneis	



# 1. SATA Hard Drives

Vendor	Family	Model	Capacity	Firmware	Buffer	Drive Transfer Rate	Form Factor	RPM
	Illitus et eur. Ille O	HUH728080ALE600	8ТВ	514 <sup>(1)</sup>	128MB	6Gb/s	3.5"	7200
	Ultrastar He8	HUH728060ALE600	6ТВ	514 <sup>(1)</sup>	128MB	6Gb/s	3.5"	7200
	Ultrastar He6	HUS726060ALA640	6ТВ	AHGNT1EN	64MB	6Gb/s	3.5"	7200
	MagaScale DC 4000.B	HMS5C4040BLE640	4TB	MPAOA5D0	64MB	6Gb/s	3.5"	5700
	MegaScale 4000	HMS5C4040ALE640	4TB	MPAOA3W0	64MB	6Gb/s	3.5"	5700
		HUS726060ALE610	6ТВ	517 <sup>(1)</sup> 7J0 <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
	Ultrastar 7K6000	HUS726050ALE610	5TB	517 <sup>(1)</sup> 7J0 <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
		HUS726040ALE610	4TB	517 <sup>(1)</sup> 7J0 <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
HGST		HUS726020ALE610	2TB	517 <sup>(1)</sup> 7J0 <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
	Ultrastar 7K4000	HUS724040ALA640	4TB	MFAOA8B0 MFAOAA70		6Gb/s	3.5"	7200
		HUS724030ALA640	3ТВ	MFAOA8B0 MFAOAA70	64MB	6Gb/s	3.5"	7200
		HUS724020ALA640	2TB	MFAOA8B0 MFAOAA70	64MB	6Gb/s	3.5"	7200
		HUS724040ALE640	4TB	MJAOA3B0	64MB	6Gb/s	3.5"	7200
		HUS724030ALE640	3TB	MJAOA3B0	64MB	6Gb/s	3.5"	7200
		HUS724020ALE640	2TB	MJAOA3B0	64MB	6Gb/s	3.5"	7200
	Ultrastar 7K3000	HUA723030ALA640	3ТВ	MKAOA580 MKAOAA10	64MB	6Gb/s	3.5"	7200
		HUA723020ALA640	2TB	MK7OA5C0	64MB	6Gb/s	3.5"	7200
	Ultrastar A7K2000	HUA722010CLA330	1TB	JP4OA3EA	32MB	3Gb/s	3.5"	7200
		ST6000NM0115	6TB	DA24	256MB	6Gb/s	3.5"	7200
	Enterprise Capacity	ST6000NM0024	6ТВ	SN02 <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
	3.5 HDD	ST4000NM0024	4TB	SN02 <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
		ST2000NM0024	2TB	SN02 <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
	Terascale	ST4000NC001	4TB	CN02	64MB	6Gb/s	3.5"	5900
SEAGATE		ST5000NM0024	5TB	SN01	128MB	6Gb/s	3.5"	7200
		ST4000NM0033	4TB	0001 SN04 <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
	Constellation ES.3	ST3000NM0033	3ТВ	0001 SN04 <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
		ST2000NM0033	2ТВ	0001 SN04 <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
		ST1000NM0033	1TB	0001	128MB	6Gb/s	3.5"	7200



				SN04 <sup>(2)</sup>				
	Constellation ES.2	ST33000650NS	ЗТВ	0001	64MB	6Gb/s	3.5"	7200
	Constellation ES	ST2000NM0011	2TB	SN02	64MB	6Gb/s	3.5"	7200
		ST3000NC002	3ТВ	CN01	64MB	6Gb/s	3.5"	7200
		ST2000NC001	2TB	CN01	64MB	6Gb/s	3.5"	7200
	Constellation CS	ST1000NC001	1TB	CN01	64MB	6Gb/s	3.5"	7200
		ST3000NC000	3TB	CE02	64MB	6Gb/s	3.5"	7200
		ST2000NC000	2TB	CE02	64MB	6Gb/s	3.5"	7200
		ST1000NC000	1TB	CE02	64MB	6Gb/s	3.5"	7200
		ST6000VX0001	6TB	VN01 <sup>(1)</sup>	128MB	6Gb/s	3.5"	7200
		ST5000VX0001	5TB	VN01 <sup>(1)</sup>	128MB		3.5"	7200
	Surveillance HDD	ST4000VX000	4TB	CV12	64MB	6Gb/s	3.5"	5900
	Sarvemance 11DD	314000 77000	710	CV13	64MB	6Gb/s	3.5"	5900
		ST3000VX002	ЗТВ	CV12	64MB	6Gb/s	3.5"	5900
		313000 77002	316	CV13	64MB	6Gb/s	3.5"	5900
	MKx002TSKB	MK2002TSKB	2TB	MT2A	64MB	6Gb/s	3.5"	7200
	Capacity HDD-MG04	MG04ACA600E	6ТВ	FS2B <sup>(2)</sup> FS3B <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
		MG04ACA500E	5TB	FP3B <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
		MG04ACA400E	4TB	FP3B <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
		MG04ACA300E	ЗТВ	FP3B <sup>(2)</sup>	128MB	·	3.5"	7200
		MG04ACA200E	2TB	FP3B <sup>(2)</sup>	128MB		3.5"	7200
Toshiba	Enterprise Cloud	MC04ACA500E	5TB	FP1A FP2A	FP1A 128MB		3.5"	7200
		MC04ACA400E	4TB	FP1A FP2A	128MB	6Gb/s	3.5"	7200
	HDD	MC04ACA300E	3ТВ	FP1A FP2A	128MB	6Gb/s	3.5"	7200
		MC04ACA200E	2ТВ	FP1A FP2A	128MB	6Gb/s	3.5"	7200
	WD Cold	WD6002FRYZ	6ТВ	01.01M02	128MB	6Gb/s	3.5"	7200
	WD Gold	WD8002FRYZ	8TB	01.01H01	128MB	6Gb/s	3.5"	7200
	WD RE4	WD2003FYYS	2TB	01.01D02	64MB	6Gb/s	3.5"	7200
	WD KE4	WD1003FBYX	1TB	01.01V02	64MB	3Gb/s	3.5"	7200
		WD2000FYYZ	2TB	01.01K01	64MB	6Gb/s	3.5"	7200
WDC	WD RE	VV DZUUUF I IZ	Z1D	01.01K02	UHIVID	ogn/s	3.3	7200
	VVD RE	WD4000FYYZ	4TB	01.01K01	64MB	6Gb/s	3.5"	7200
		WD3000FYYZ	3ТВ	01.01K01	64MB	6Gb/s	3.5"	7200
		WD4001FFSX	4TB	81.00A81	64MB	6Gb/s	3.5"	7200
	WD Red Pro	WD3001FFSX	3ТВ	81.00A81	64MB	6Gb/s	3.5"	7200
		WD2001FFSX	2TB	81.00A81	64MB	6Gb/s	3.5"	7200

<sup>&</sup>lt;sup>(1)</sup>This model supports Vess R2000 series and Vess R2610 series.



- In a RAID array setup, we recommend using the enterprise level hard drive as it has much better command timeout control and features stable reliability to vibration compared to desktop one for critical applications.
- § Some listed devices may go EOL. AVL listing does not imply market availability.
- **\$ BLUE** Models are new additions actual in test to this release.
- **§** ORANGE Capacities are assumed to work but were not tested.
- 4 Additional AA-Mux adapter is required when use with SATA 3Gb drive, while SATA 6Gb drive requires BlackJack adapter.
- ▶ Verified all listed SATA drives with 3Gb AA-Mux adapter and 6G Blackjack adapter.
- № When you use SATA6Gb/s drive with 3Gb AA-Mux adapter in the disk array system, the drive runs at 3Gb/s speed.

#### 2. SAS Hard Drives

Vendor	Family	Model	Capacity	Firmware	Buffer	Drive Transfer Rate	Form Factor	RPM
	Illturanto u III-10	HUH721010AL5200	10TB	A21D <sup>(2)</sup>	256MB	12GB/s	3.5"	7200
	Ultrastar He10	HUH721008AL5200	8TB	A21D <sup>(2)</sup>	256MB	12GB/s	3.5"	7200
	Ultrastar He8	HUH728080AL5200	8TB	A515 A907 <sup>(2)</sup>	128MB	12Gb/s	3.5"	7200
		HUH728060AL5200	6ТВ	A515 A907 <sup>(2)</sup>	128MB	12Gb/s	3.5"	7200
		HUH728080ALE600	8TB	A4GNT907	128MB	12Gb/s	3.5"	7200
	Ultrastar He6	HUS726060ALS640	6TB	A280	64MB	6Gb/s	3.5"	7200
	Ultrastar 7K6000	HUS726060AL5210	6ТВ	A519 <sup>(2)</sup> A7J0 <sup>(2)</sup> A907 <sup>(2)</sup>	128MB	12Gb/s	3.5"	7200
		HUS726050AL5210	5TB	A519 <sup>(2)</sup> A7J0 <sup>(2)</sup>	128MB	12Gb/s	3.5"	7200
		HUS726040AL5210	4TB	A519 <sup>(2)</sup> A7J0 <sup>(2)</sup>	128MB	12Gb/s	3.5"	7200
HGST		HUS726020AL5210	2TB	A519 <sup>(2)</sup> A7J0 <sup>(2)</sup>	128MB	12Gb/s	3.5"	7200
		HUS724040ALS640	4TB	A1C4 A280 A3A0	64MB	6Gb/s	3.5"	7200
	Ultrastar 7K4000	HUS724030ALS640	3ТВ	A1C4 A280	64MB	6Gb/s	3.5"	7200
		HUS724020ALS640	2TB	A1C4 A280	64MB	6Gb/s	3.5"	7200
	Ultrastar 7K3000	HUS723030ALS640	ЗТВ	A222 A440	64MB	6Gb/s	3.5"	7200
	Oitrastar /NS000	HUS723020ALS640	2TB	A222 A440	64MB	6Gb/s	3.5"	7200
	Ultrastar 15K600	HUS156060VLS600	600GB	A5D0	64MB	6Gb/s	3.5"	15000
	Oitiastai 13N000	HUS156045VLS600	450GB	A392	64MB	6Gb/s	3.5"	15000
	Ultrastar C10K900		900GB	A2D0	64MB	6Gb/s	2.5"	10000
	Sitiastal Cloky00	HUC109060CSS600	600GB	A2D0	64MB	6Gb/s	2.5"	10000

 $<sup>^{(2)}</sup>$ This model supports Vess R2000 series, Vess R2610 series and Vess R2810 series.

<sup>&</sup>lt;sup>(3)</sup>This model supports Vess R2610 series.



		HUC109045CSS600	450GB	A2D0	64MB	6Gb/s	2.5"	10000
		HUC109030CSS600	300GB	A2D0	64MB	6Gb/s	2.5"	10000
	Ultrastar			A35A				
	C10K1200	HUC101212CSS600	1.2TB	A469 (1)	64MB	6Gb/s	2.5"	10000
	Ultrastar C7K1000	HUC721010ASS600	1TB	A610	64MB	6Gb/s	2.5"	7200
		HUC156060CSS200	600GB	A210	128MB	12Gb/s	2.5"	15000
	Ultrastar C15K600	HUC156045CSS200	450GB	A210	128MB	12Gb/s	2.5"	15000
		HUC156030CSS200	300GB	A210	128MB	12Gb/s	2.5"	15000
	Fotomorico	ST1200MM0088	1.2TB	N003 <sup>(2)</sup>	128MB	12Gb/s	2.5"	10000
	Enterprise Performance 10K	ST600MM0088	600GB	N003 <sup>(2)</sup>	128MB	12Gb/s	2.5"	10000
	r criormance for	ST1800MM0018	1.8TB	E002	128MB	12Gb/s	2.5"	10000
		ST6000NM0034	6ТВ	E001 <sup>(2)</sup> E005 <sup>(2)</sup>	128MB	12Gb/s	3.5"	7200
		ST4000NM0034	4TB	E001 <sup>(2)</sup> E005 <sup>(2)</sup>	128MB	12Gb/s	3.5"	7200
		ST2000NM0034	2TB	E001 <sup>(2)</sup>	128MB	12Gb/s	3.5"	7200
				0002				
	Comptelletien FC 2	ST33000650SS	3ТВ	A003	64MB	6Gb/s	3.5"	7200
	Constellation ES.2			0004	1			
		ST32000645SS	2TB	0004	64MB	6Gb/s	3.5"	7200
	Constellation ES	ST2000NM0001	2TB	0001	64MB	6Gb/s	3.5"	7200
SEAGATE	Constellation ES.3	ST4000NM0023	4TB	0001 0004 <sup>(2)</sup> 0006 <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
		ST3000NM0023	3ТВ	0001 0004 <sup>(2)</sup> 0006 <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
		ST2000NM0023	2TB	0001 0004 <sup>(2)</sup> 0006 <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
		ST1000NM0023	1TB	0001 0004 <sup>(2)</sup>	128MB	6Gb/s	3.5"	7200
		GT2 C000FT22	500.05	0006 <sup>(2)</sup> 000B	C 43 45	601./	2.5"	45000
	Cheetah 15K.7	ST3600057SS	600GB	0005	64MB	6Gb/s	3.5"	15000
		ST3300657SS	300GB	0006	64MB	6Gb/s	3.5"	15000
	Savvio 10K.7	ST1200MM0007	1.2TB	0001	64MB	6Gb/s	2.5"	10000
		ST600MM0006	600GB	0004 <sup>(2)</sup>	64MB	6Gb/s	2.5"	10000
	Savvio 10K.6	ST450MM0006	450GB	0004 <sup>(2)</sup>	64MB	6Gb/s	2.5"	10000
		ST300MM0006	300GB	0004 <sup>(2)</sup>	64MB	6Gb/s	2.5"	10000
	HARRIER	MG03SCA300	3ТВ	1001	64MB	6Gb/s	3.5"	7200
TOSHIBA	TOMCAT-R	MG04SCA60EE	6ТВ	0101 <sup>(2)</sup> 0103 <sup>(2)</sup> 104	128MB	12Gb/s	3.5	7200
	TOMCAT-R	MG04SCA50EE	5TB	901 0101 <sup>(2)</sup>	128MB	12Gb/s	3.5	7200



1				0103 <sup>(2)</sup>				
		MG04SCA40EE	4TB	0101 <sup>(2)</sup>	128MB	12Gb/s	3.5	7200
		100 130/11022	1115	0103 <sup>(2)</sup>	1201115	1200/5	3.5	7200
		MG04SCA20EE	2TB	0101 <sup>(2)</sup> 0103 <sup>(2)</sup>	128MB	12Gb/s	3.5	7200
		MG04SCA500E	5TB	0102 0103 <sup>(2)</sup>	64MB	6Gb/s	3.5"	7200
		MG04SCA400E	4TB	0102 0103 <sup>(2)</sup>	-64MB	6Gb/s	3.5"	7200
	TOMCAT			0102				
		MG04SCA300E	3ТВ	0103 <sup>(2)</sup>	64MB	6Gb/s	3.5"	7200
		NACOASCA 2005	3TD	0102	CANAD	CCh/a	3.5"	7200
		MG04SCA200E	2TB	0103 <sup>(2)</sup>	64MB	6Gb/s	3.5	7200
	MKx001TRKB	MK1001TRKB	1TB	1001	16MB	6Gb/s	3.5"	7200
		AL13SEB900	900GB	0101	64MB	6Gb/s	2.5"	10500
	AL13SE	AL13SEB600	600GB	0101	64MB	6Gb/s	2.5"	10500
	ALISSE	AL13SEB450	450GB	0101	64MB	6Gb/s	2.5"	10500
		AL13SEB300	300GB	0101	64MB	6Gb/s	2.5"	10500
		AL14SEB120N	1.2TB	0102 <sup>(2)</sup>	128MB	12Gb/s	2.5"	10000
		AL14SEB090N	900GB	0102 <sup>(2)</sup>	128MB	12Gb/s	2.5"	10000
	AL14SE	AL14SEB060N	600GB	0102 <sup>(2)</sup>	128MB	12Gb/s	2.5"	10000
		AL14SEB045N	450GB	0102 <sup>(2)</sup>	128MB	12Gb/s	2.5"	10000
		AL14SEB030N	300GB	0102 <sup>(2)</sup>	128MB	12Gb/s	2.5"	10000
		WD4001FWC	4TD	VR02	22140	6Gb/s	3.5"	7200
		WD4001FYYG	4TB	VR07	32MB	ogn/s	3.5	7200
WDC	WD RE	WD3001FYYG	3ТВ	VR02	32MB	6Gb/s	3.5"	7200
WDC		WD2001FYYG	2TB	VR02	32MB	6Gb/s	3.5"	7200
		WD1001FYYG	1TB	VR02	32MB	6Gb/s	3.5"	7200
(1)	WD XE	WD9001BKHG	900GB	SR04	32MB	6Gb/s	2.5"	10000

<sup>&</sup>lt;sup>(1)</sup>This model supports Vess R2000 series and Vess R2610 series.

#### 3. SSD Drives

Vendor	Family	Model	Capacity	Firmware	Туре	Drive Transfer Rate	Form Factor
	SSD 520 series	520 – 240GB	240GB	400i	MLC	SATA 6Gb/s	2.5"
Intel	DC S3500 series	SSDSC2BB800G7	800GB	N2010101	MLC	SATA 6Gb/s	2.5"
		SSDSC2BB800G4	800GB <sup>(1)</sup>	D2010370	MLC	SATA 6Gb/s	2.5"

<sup>(2)</sup> This model supports Vess R2000 series, Vess R2610 series and Vess R2810 series.

<sup>•</sup> In a RAID array setup, we recommend using the enterprise level hard drive as it has much better command time out control and features stable reliability to vibration compared to desktop one for critical applications.

<sup>§</sup> Some listed devices may go EOL. AVL listing does not imply market availability.

**<sup>♣</sup> BLUE** Models are new additions actual in test to this release.

**<sup>§</sup>** ORANGE Capacities are assumed to work but were not tested.



1						C . T .	
		SSDSC2BB600G4	600GB <sup>(1)</sup>	D2010370	MLC	SATA 6Gb/s	2.5"
		SSDSC2BB480G4	480GB	D2010355	MLC	SATA 6Gb/s	2.5"
		SSDSC2BB240G6	240GB <sup>(2)</sup>	G2010140	MLC	SATA 6Gb/s	2.5"
	DC S3510 series	SSDSC2BB120G6	120GB <sup>(2)</sup>	G2010140	MLC	SATA 6Gb/s	2.5"
		SSDSC2BB080G6	80GB <sup>(2)</sup>	G2010140	MLC	SATA 6Gb/s	2.5"
	DCS3700 series	SSDSC2BA800G3	800GB	5DV10270	MLC	SATA 6Gb/s	2.5"
		SSDSC2BA400G3	400GB	5DV10270	MLC	SATA 6Gb/s	2.5"
		SSDSC2BA200G3	200GB	5DV10270	MLC	SATA 6Gb/s	2.5"
		SSDSC2BA100G3	100GB	5DV10270	MLC	SATA 6Gb/s	2.5"
		850 EVO	2TB	EMT02B6Q	MLC	SATA 6Gb/s	2.5"
		850 EVO	1TB	EMT02B6Q	MLC	SATA 6Gb/s	2.5"
		850 EVO	500GB <sup>(2)</sup>	EMT01B6Q	MLC	SATA 6Gb/s	2.5"
		850 EVO	250GB <sup>(2)</sup>	EMT01B6Q	MLC	SATA 6Gb/s	2.5"
		850 EVO	120GB <sup>(2)</sup>	EMT01B6Q	MLC	SATA 6Gb/s	2.5"
Samsung	Consumer SSD	840 EVO	1TB	EXTOBBOQ	MLC	SATA 6Gb/s	2.5"
		840 EVO	750GB	EXTOBBOQ	MLC	SATA 6Gb/s	2.5"
		840 EVO	500GB	EXTOBBOQ	MLC	SATA 6Gb/s	2.5"
		840 EVO	250GB	EXTOBBOQ	MLC	SATA 6Gb/s	2.5"
		840 EVO	120GB	EXT0BB0Q	MLC	SATA 6Gb/s	2.5"
		SDLKODDM-400G-5CA1	400GB <sup>(2)</sup>	F670	MLC	SAS 6Gb/s	2.5"
SanDisk	Optimus Ascend	SDLKOEDM-200G-5CA1	200GB <sup>(2)</sup>	F670	MLC	SAS 6Gb/s	2.5"

<sup>(1)</sup> This model supports Vess R2000 series and Vess R2610 series.

 $<sup>^{(2)}</sup>$ This model supports Vess R2000 series, Vess R2610 series and Vess R2810 series.

<sup>•</sup> In a RAID array setup, we recommend using the enterprise level hard drive as it has much better command timeout control and features stable reliability to vibration compared to desktop one for critical applications.

<sup>§</sup> Some listed devices may go EOL. AVL listing does not imply market availability.

**LESS Models are new additions actual in test to this release.** 

**<sup>♣</sup> ORANGE** Capacities are assumed to work but were not tested.



- 4 Additional AA-Mux adapter is required when use with SATA 3Gb drive, while SATA 6Gb drive requires BlackJack adapter.
- ▶ Verified all listed SATA drives with 3Gb AA-Mux adapter and 6G Blackjack adapter.
- № When you use SATA6Gb/s drive with 3Gb AA-Mux adapter in the disk array system, the drive runs at 3Gb/s speed.

## 4. iSCSI Host Bus Adapters

Vendor	Model	BIOS / FW	Win / Linux Drv. Ver.	Interface	Port	TCP/IP Offload	ISCSI Offload	iSCSI Initiator Type	Data Rate
QLogic	QLE4060C	BIOS: 2.09 FW: 3.00.01.53	2.1.4.26/ 5.02.15.05. 05.06-C0	PCle	1	yes	yes	HW	1Gb/s
	QLE4062C	BIOS: 2.09 FW: 3.00.01.53	2.1.4.26/ 5.02.15.05. 05.06-C0	PCle	2	yes	yes	HW	1Gb/s
	QLE8242-SR	3.06	5.2.2.412	PCle	2	yes	yes	HW	10Gb/s
Broadcom	NetXtreme II 57810S	7.4.8	7.6.51.0	PCle	2	yes	yes	HW	10Gb/s
	OCe11102-IT	4.4.249.3	4.6.203.1	PCle	2	yes	yes	HW	10Gb/s
Emulex	OCe14102- NX	10.0.803.23	10.0.718.26 /10.0.800.0	PCle	2	yes	yes	HW	10Gb/s

#### 5. NIC Initiators List

Vendor	HBA Model	Controller Model	Win / Linux / Mac Drv. Ver.	Interface	Port	Data Rate
	BCM95708A0804F	Broadcom BCM5708C	12.54.06 / 6.0.53	PCle 4x	1	1Gb/s
Broadcon	BCM95721A211	Broadcom BCM5721	15.2.0.5 / 3.108	PCIe 1x	1	1Gb/s
	Broadcom BCM5709CC0KPBG	BCM5709C	14.2.0.A00/6.0.53	PCIE 4x	2	1Gb/s
	PRO/1000PT Dual Port Server Adapter (D33682)	Intel 82571GB	9.15.17.0 / 3.4.7	PCIe 2x	2	1Gb/s
	(EXPI9404PTBLK)	Intel 82571GB	9.15.17.0 / 2.0.0.1	PCIe 4x	4	1Gb/s
	Gigabit ET Dual Port Server Adapter(E1G42ET)	Intel 82576	11.17.27.0 / 3.4.8	PCIe 1x	2	1Gb/s
Intel	Ethernet Server Adapter I340 – T4(E85683-001)	Intel 82580	11.14.49.0/ 3.4.8	PCIe 4x	4	1Gb/s
inter	Intel® Gigabit ET2 Quad Port Server Adapter	E1G44ETBLK	11.17.27.0/ 3.4.8	PCIe 4x	4	1Gb/s
	Intel®Ethernet Server Adapter I350 T4	Intel I350	11.17.27.0/ 3.4.8	PCle4x	4	1Gb/s
	Intel® Ethernet Converged Network Adapter X540-T2	Intel X540	3.7.5.0	PCle8x	2	10Gb/s
	Intel® Ethernet Converged Network Adapter X520-T2	Intel 82599ES	3.7.5.0	PCle8x	2	10Gb/s



	Intel® Ethernet Converged Network Adapter X520-SR2	Intel® 82599ES 10 Gigabit Ethernet Controller	3.5.22.0/ 3.12.6	PCIe8x	2	10Gb/s
Emulex	OCe11102-NT	BladeEngine® 3	10.0.4030.57	PCle8x	2	10Gb/s
НР	530 SFP+	Broadcom BCM57810S	7.10.6.0/7.10.12	PCle8x	2	10Gb/s
ATTO	RJ45	Ethernet Controller	3.9.58/4.1.5/3.05	PCle 2.0 8x	2	10Gb/s
	FastFrame™ NS12 LC SFP+ SR Optica Interface	Intel Ethernet Controller #82599	3.9.58/4.1.5/3.05	PCIe 2.0 8x	2	10Gb/s

#### 6. Ethernet Switches

Vendor	Model	Ports	Speed (Mbs)	User Configuration
Cisco	WS-C3560-24T-L	24	10/100/1000	Yes
	DGS-1024D	24	10/100/1000	Yes
D-Link	DGS-1248T	48	10/100/1000	Yes
D-LITIK	DGS-1224T	24	10/100/1000	Yes
	DGS-3620-28TC(EI)	28	10/100/1000	Yes
LID	ProCurve Switch 1800-24G	24	10/100/1000	Yes
HP	5820-24XG-SFP+	24	100/1000/10000	Yes
Dell	PowerConnect 8024	24	100/1000/10000	Yes
Extreme	Summit X650-24t	24	100/1000/10000	Yes
NETGEAR	PROSAFE X712T	12	100/1000/10000	Yes
Cisco	Catalyst 3560X-24T-L	24	100/1000/10000	Yes

#### 7. Ethernet SFPs

Vendor	Model	Туре
Finisar	FTLX8571D3BCV	10Gb Multi-mode
FIIIISdi	FTLX8574D3BCV	10Gb Multi-mode
Avago	AFBR-709DMZ	10Gb Multi-mode
Intel	FTLX8571D3BCV-IT	10Gb Multi-mode
JDSU	PLRXPL-SC-S43-22-N <sup>(1)</sup>	10Gb Multi-mode
FCi	TRX10GVP2010C2 <sup>(1)</sup>	10Gb Multi-mode

<sup>(1)</sup>This model only supports 10Gb link speed.

## 8. SFPs Cooper Cable

Vendor	Model	Туре
ENET	ENSFC2-1M	10GBase-CU SFP+ Passive Twinax cable

# 9. Fibre Channel Host Bus Adapters

Vendor	Model	BIOS	FW	Windows Driver	Linux Driver
--------	-------	------	----	----------------	--------------



ATTO	FC-82EN	3.24	2010_7_30	1.36.2.0	1.34
Duagada	815Fibre	2.3.0.0	FCHBA3.1.0.0	3.1.0.0	3.1.0.0
Brocade	825Fibre	3.1.0.0	FCHBA3.1.0.0	3.1.0.0	3.1.0.0
	LPe11000	NA	Zd2.82A4	7.2.40.5	0:8.3.5.17
Emulex	LPe12002	NA	VS1.11A5	7.2.4.05	0:8.2.0.86
	LPe16002B	11.0.243.7	11.0.243.11	11.0.247.0-10	0:8.3.7.34.3P
	QLE2560	3.00	5.06.04	9.1.9.47	8.03.07.13.06.0-k
Qlogic	QLE2562	3.00	5.06.04	9.1.9.47	8.03.07.13.06.0-k
Qiogic	QLE2672	3.32	8.03.01	9.1.17.21	8.07.00.27.07.0- K2 <sup>(1)</sup>

<sup>&</sup>lt;sup>(1)</sup>This model only qualified in windows server O.S.

## **10.Fibre Channel Switches**

Vendor	Model	Ports	Firmware
Brocade	BR-320-0008	8x8Gb	v6.2.0c
Бгосаце	Brocade 6505	16x16Gb	5.1.0
	SANBox 5800	8x8Gb	7.4.0.10.0
Qlogic	SANBox 3810	8x8Gb	7.4.0.16.0
	SANBox 5200	8x2Gb	4.2.0.18-0

#### 11. Fibre Channel SFPs

Vendor	Model	Туре
Brocade	Brocade 57-0000088-01	16Gb Multi-mode
Brocade	8G SWL (P/N:57-1000012-01)	8Gb Multi-mode
	FTLF8529P3BNV-E5	16Gb Multi-mode
	FTLF8529P3BCV	16Gb Multi-mode
Finisar	FTLF8528P2BCV	8Gb Multi-mode
FILLISAL	FTLF8528P2BNV	8Gb Multi-mode
	FTLF8528P3BNV	8Gb Multi-mode
	FTLF8524P2BNL	4Gb Multi-mode
Ανασο	AFBR-57D7APZ	8Gb Multi-mode
Avago	AFBR-57R5APZ	4Gb Multi-mode
QLogic	FTLF8529P3BCV-QL	16Gb Multi-mode

# 12.SAS Host Adapters (For host connected with Vess J2000)

Vendor	Model	BIOS/FW	PCI Interface	External Channels	RAID Function
	Mega RAID SAS 9285	F/W: v1.51	PCIe	8 ports	RAID
LSI	Mega RAID SAS 9280	F/W: v1.51	PCle	8 ports	RAID
	SAS 9205	F/W: 15.00.00.00	PCIe	8 ports	Non-RAID



	SAS 9200	F/W: 15.00.00.00	PCle	8 ports	Non-RAID
Areca	ARC-1882X <sup>(1)</sup>	V1.05 / v1.51	PCIe	8 ports	RAID
АТТО	ExpressSAS R680	F/W: 3.00	PCIe	8 ports	RAID

<sup>(1)</sup> This model only supports single-controller based JBOD expansion, and scales up to seven single-controller based JBOD enclosures.

- In a RAID array setup, we recommend using the enterprise level hard drive as it has much better command timeout control and features stable reliability to vibration compared to desktop one for critical applications.
- § Some listed devices may go EOL. AVL listing does not imply market availability.
- 4 Additional AA-Mux adapter is required when use with SATA 3Gb drive, while SATA 6Gb drive requires BlackJack adapter.
- ▶ Verified all listed SATA drives with 3Gb AA-Mux adapter and 6G Blackjack adapter.
- № When you use SATA 6Gb/s drive with 3Gb AA-Mux adapter in the disk array system, the drive runs at 3Gb/s speed.

#### 13. Misc Thounderbolt Devices (For SAN Link 2)

Vendor	Model	Driver/FW	Interface	External Channels
Promise	SAN Link 2 8G FC	1.4.8/20.1	Thounderbolt 2	2 ports
	SAN Link 2 10G Base-T <sup>(1)</sup>	1.48/24.2	Thounderbolt 2	2 ports
	SAN Link 2 10G SFP+ <sup>(1)</sup>	1.48/25.1	Thounderbolt 2	2 ports

<sup>&</sup>lt;sup>(1)</sup>This model only supports NAS function in MAC platform.

#### **14.Operating Systems**

Vendor	Core Platform	Туре
	Windows Server 2003 Enterprise Edition R2 w/ SP2	x86/x64
	Windows Server 2008 Datacenter Edition w/ SP2	x86/x64
Microsoft	Windows Server 2008 R2 SP1 Datacenter Edition	x64
IVIICIOSOIT	Windows 2012 Datacenter	x64
	Windows 2012 R2 Standard	x64
	Windows 2012 R2 Datacenter	x64
	Enterprise Linux 5.7	x86/x64
RedHat	Enterprise Linux 5.9	x86/x64
Кейпаі	Enterprise Linux 6.3	x86/x64
	Enterprise Linux 6.5	x86/x64
SUSE	LINUX Enterprise Server 10 + SP4	x86/x64
303E	LINUX Enterprise Server 11 + SP2	x86/x64
	5.8	x86/x64
CentOS	6.2	x86/x64
CentOS	6.5	x86/x64
	7.0	X64
Ubuntu	Server Edition 11.10	x86/x64
	Server Edition 12.04	x86/x64
	Server Edition 13.10	x86/x64



Annia	OS X Mavericks (10.9)	x64
Apple	OS X Mountain Lion (10.8)	x64

- \$ SUSE LINUX Enterprise Server 10 + SP4-32bit can't support dual controller boot from SAN
- \$ SUSE LINUX Enterprise Server 11 + SP2-32bit can't support dual controller boot from SAN
- Apple OS X Mavericks (10.9) only supports file-level AFP Protocol operation and Time Machine backup
- 4 Apple OS X Mountain Lion (10.8) only supports file-level AFP Protocol operation and Time Machine backup

#### 15.Web Browsers

Browsers Name		
Mozilla Firefox 14.0.1		
Google Chrome 20.0.1132.57 m		
Internet Explorer 7 (Version:7.0.5730.13)		
Internet Explorer 8 (Version:8.0.6001.18702 )		
Internet Explorer 9 (Version: )		
Safari 5.1.7 for Windows		
Safari 5.1.7 for MAC		
Mozilla Firefox for Linux 3.6.13		

<sup>14</sup> Note: Promise always strives to test latest web browsers as soon as they become available.

#### **16.USB Flash Drive**

Vendor	Model	Capacity
A-DATA	N005 USB3.0	64GB
	Classic C103 USB3.0	16GB
Apacer	Handy Steno AH323	16GB
	Handy Steno AH552 USB 3.0	64GB
SONY	Micro Vault Click USM8GLX	8GB
	Micro Vault Click USM16GL	16GB
	Micro Vault USM-Q USB3.0	64GB
Transcend	JetFlashUSB 3.0 700 64GB	64GB
PATRIOT	XPORTER XT	32GB

#### **17.UPS**

Vendor	Model	HW Rev.	APC OS	APP. Module SW
APC	Smart-UPS 1500	667.18.D	V5.0.3	V5.0.3
	Smart-UPS 3000	666.6.D	V5.0.3	V5.0.3

#### 18. Multi-Path Support

Verified this feature with following MPIO driver version:

7.20	Windows	Windows	DUEL C.O.	SLES 44.0
OS Type	Server 2003 R2	Server 2008 R2	RHEL 6.0	SLES 11.0
RAID System	SP2	sp1		



VessR-Class	v2.08	v6.1.7601.17514	V6.0	V6.0

#### 19.JBODs Support

(1) PROMISE VessJ2600

#### 20.VMware® Support

Certified this feature with

- (1) VessR2600 Series iSCSI Feature
  - VMware ESXi 6.0 U2

The link of VMware Compatibility Guide:

http://partnerweb.vmware.com/comp\_guide2/detail.php?deviceCategory=san&productid=37082&vcl=true

- (2) Vess R2600 Series Fibre Channel
  - VMware ESXi 6.0[8G FC Switched]

The link of VMware Compatibility Guide:

http://partnerweb.vmware.com/comp\_guide2/detail.php?deviceCategory=san&productid=37081&vcl=true

- (3) Vess R2600 Series NAS
  - VMware® ESXi 6.0

The link of VMware Compatibility Guide:

http://partnerweb.vmware.com/comp\_guide2/detail.php?deviceCategory=san&pro\_ductid=36296&vcl=true

- (4) VessR2600 Series iSCSI Feature
- (5) VMware®ESXi 6.0

http://partnerweb.vmware.com/comp\_guide2/detail.php?deviceCategory=san&pro\_ductid=37082&vcl=true

- (6) VessR2600 Series Fibre Channel
  - VMware®ESXi 6.0[8G FC Switched]

http://partnerweb.vmware.com/comp\_guide2/detail.php?deviceCategory=san&productid=37081&vcl=true

## 21.Citrix® Support

Certified this feature with

- (1) VessR2600 Series iSCSI and Fibre Channel
  - XenServer6.1

The link of Citrix:

https://www.citrix.com/ready/en/promise-technology-inc/vess-r2000-series

- (2) VessR2600 Series NAS Channel
  - XenServer6.2

The link of Citrix:

http://www.citrix.com/ready/en/promise-technology-inc/vess-r2000-series

#### 22.Microsoft® Windows Hyper-V

Verified this feature under VessR2600 series with

(1) Microsoft® Hyper-V Server 2008 R2 sp1

PROMISE Technology, Inc. ©2017 PROMISE Technology, Inc. All rights reserved.



# 23.Microsoft® Windows Failover Cluster Services

Verified this feature with following combination:

OS Type RAID System	Microsoft® Windows Server 2012 Datacenter
VessR2000 Series - iSCSI	Qlogic QLE4062C Qlogic QLE4050
	BROCADE 825
VessR2000 Series -FC	BROCADE 815