

IBM SAN Volume Controller, FlashSystem V9000, and Storwize family deliver improved performance options and additional cache option for IBM Storwize V7000

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At a glance

IBM^(R) Storwize^(R) V7000 offers increased cache of up to 256 GB per system, 128 GB per canister.

IBM SAN Volume Controller (SVC) and Storwize Family delivers an additional option with a 900 GB 15K rpm 2.5-inch SAS drive.

IBM FlashSystem^(R) V9000 offers an option to order a pair of AC3 nodes without AE2 enclosures to scale performance.

IBM FlashSystem V9000 offers a single AC3 node for use as a hot spare node.

Overview

The IBM Storwize Family of products offers increased capacity by adding a 900 GB 15K rpm 2.5-inch SAS drive option. IBM Storwize delivers increased memory cache of up to 128 GB per canister on Storwize V7000.

Key prerequisites

The 900GB 15K RPM HDD requires Spectrum Virtualize Software V7.4, or later for operation.

The 256 GB Cache Upgrade feature requires Spectrum Virtualize Software V7.8.1.1, or later for operation. Full functionality of the cache upgrade feature requires IBM Spectrum VirtualizeTM Software V8.1, or later.

The FlashSystemTM V9000 Additional Controller pair requires an existing V9000 system running FlashSystem software V7.8 or later.

The FlashSystem spare controller requires an existing FlashSystem V9000 system running FlashSystem software V8.1.

For a comprehensive list of supported environments, devices, and configurations, go to the [IBM System Storage^{\(R\)} Interoperation Center](#) website.

Planned availability date

- September 8, 2017: All features, except as noted below.
- September 22, 2017: Spare Controller (feature number AF3W).

The TAA Designated Country feature (feature number ADZ1) is not available in the US.

Description

The IBM Storwize family of products delivers the following enhancements:

- 900 GB 15K rpm 2.5-inch SAS drive
- IBM Storwize V7000 Model 624 feature to increase memory per system up to 256 GB
- IBM FlashSystem V9000 offers a pair of AC3 nodes without AE2 enclosures to scale performance
- IBM FlashSystem V9000 offers a single AC3 node for use as a hot spare node.

Accessibility by people with disabilities

A US Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be found on the [IBM Accessibility](#) website.

Reference information

Storwize family product information is available on the [IBM Storwize family](#) website.

Product number

Storwize V7000

Description	Machine type	Model	Feature number
900GB 15K 2.5 Inch HDD	2076	624, 24F	AHE3
900GB 15K 3.5 Inch HDD	2076	92F	AH71
256 GB Cache Upgrade	2076	624, AF6	ACHG
Power Cord - PDU C20	2076	624, AF6, 12F, 24F, AFF	AHP6

Storwize V5000

Description	Machine type	Model	Feature number
900GB 15K 2.5 Inch HDD	2077	124, 224, 324, 24F	AC59
900GB 15K 3.5 Inch HDD	2077	112, 212, 312, 12F	AC18
900GB 15K 3.5 Inch HDD	2077	92F	ACP1
Power Cord - PDU C20	2077	112, 124, 212, 224, 312, 324, AF3, 12F, 24F, AFF	AHP6

Description	Machine type	Model	Feature number
900GB 15K 2.5 Inch HDD	2078	124, 224, 324, 24F	AC59

Description	Machine type	Model	Feature number
900GB 15K 3.5 Inch HDD	2078	112, 212, 312, 12F	AC18
900GB 15K 3.5 Inch HDD	2078	92F	ACP1
Power Cord - PDU C20	2078	112, 124, 212, 224, 312, 324, AF3, 12F, 24F, AFF	AHP6
OEM Bulk Option AHLJ	2078	124, 224, 24F	AHLJ
OEM Bulk Option AHL2	2078	112, 212, 12F	AHL2
OEM Bulk Option AHMJ	2078	324, 24F	AHMJ
OEM Bulk Option AHM2	2078	312, 12F	AHM2

SVC

Description	Machine type	Model	Feature number
900GB 15K 2.5 Inch HDD	2145	24F	AH42
900GB 15K 3.5 Inch HDD	2145	92F	AH71
Power Cord - PDU C20	2145	SV1, 12F, 24F	AHP6

Description	Machine type	Model	Feature number
900GB 15K 2.5 Inch HDD	2147	24F	AH42
900GB 15K 3.5 Inch HDD	2147	92F	AH71
Power Cord - PDU C20	2147	SV1, 12F, 24F	AHP6

FlashSystem V9000

Description	Machine type	Model	Feature number
Additional Controller Pair	9846	AC3	AF3V
Spare Controller	9846	AC3	AF3W
Generic Bezel	9846	AC3, 12F, 24F, 92F, AE2	ACZA
Generic Packaging	9846	AC3, 12F, 24F, 92F, AE2	ACZF

Description	Machine type	Model	Feature number
Additional Controller Pair	9848	AC3	AF3V
Spare Controller	9848	AC3	AF3W
Generic Bezel	9848	AC3, 12F, 24F, 92F, AE2	ACZA
Generic Packaging	9848	AC3, 12F, 24F, 92F, AE2	ACZF

Business Partner information

If you are a Direct Reseller - System Reseller acquiring products from IBM, you may link directly to Business Partner information for this announcement. A PartnerWorld ID and password are required (use IBMid).

Publications

No publications are shipped with these options. Refer to the publications that shipped with your base system for information.

Product documentation is available in [IBM Knowledge Center](#).

To access the IBM Publications Center Portal, go to the [IBM Publications Center](#) website.

The Publications Center is a worldwide central repository for IBM product publications and marketing material with a catalog of 70,000 items. Extensive search facilities are provided. A large number of publications are available online in various file formats, which can currently be downloaded.

Services

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IBM Systems Lab Services exists to help you successfully implement emerging technologies so as to accelerate your return on investment and improve your satisfaction with your IBM systems and solutions. Services examples include initial implementation, integration, migration, and skills transfer on IBM systems solution capabilities and recommended practices. IBM Systems Lab Services is one of the service organizations of IBM's world-renowned IBM Systems Group development labs.

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For details on available services, contact your IBM representative or go to the [IBM Global Technology Services^{\(R\)}](#) website.

For details on available IBM Business Continuity and Recovery Services, contact your IBM representative or go to the [Resiliency Services](#) website.

Details on education offerings related to specific products can be found on the [IBM authorized training](#) website.

Technical information

Specified operating environment

Hardware requirements

The 900 GB 15K rpm HDD requires Spectrum Virtualize Software V7.4, or later, for operation.

The 256 GB Cache Upgrade feature requires Spectrum Virtualize Software V7.8.1.1, or later, for operation.

The FlashSystem V9000 Additional Controller pair requires an existing V9000 system running FlashSystem software V7.8 or later.

The FlashSystem spare controller requires an existing FlashSystem V9000 system running FlashSystem software V8.1.

Software requirements

The 256 GB Cache Upgrade feature provides performance benefits only when Real-time Compression™ is used with Spectrum Virtualize Software V7.8.1.1. Spectrum Virtualize Software V8.1, or later, is required for Storwize V7000 Model 624 to also benefit from uncompressed workloads.

Planning information

Customer responsibilities

Physical configuration and installation planning are customer responsibilities.

You are responsible for downloading or obtaining from IBM, and installing designated Machine Code (microcode, basic input/output system code (called BIOS), utility programs, device drivers, and diagnostics delivered with an IBM machine) and other software updates in a timely manner from an IBM internet website or from other electronic media, and following the instructions that IBM provides. You may request IBM to install Machine Code changes; however, you may be charged for that service.

Security, auditability, and control

This product uses the security and auditability features of the preloaded application software.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

IBM Systems Lab Services

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For details on available services, contact your IBM representative or go to the [Lab Services](#) website.

Terms and conditions

MES discount applicable

No

Field installable feature

Yes

Warranty period

Three years:

- Machine type 2076
- Machine type 2078
- Machine type 2147
- Machine type 9848

One year:

- Machine type 2077
- Machine type 2145
- Machine type 9846

To obtain copies of the IBM Statement of Limited Warranty, contact your reseller or IBM. An IBM part or feature installed during the initial installation of an IBM machine is subject to the full warranty period specified by IBM. An IBM part or feature that replaces a previously installed part or feature assumes the remainder of the warranty period for the replaced part or feature. An IBM part or feature added to a machine without replacing a previously installed part or feature is subject to a full warranty. Unless specified otherwise, the warranty period, type of warranty service, and service level of a part or feature are the same as those for the machine in which it is installed.

Customer setup

- Machine type 2076: Yes
- Machine type 2077: Yes
- Machine type 2078: Yes
- Machine type 2147: No
- Machine type 2145: No
- Machine type 9846 : No
- Machine type 9848 : No

Machine code

Machine type 2145 (SVC): Same license terms and conditions as designated machine.

Machine type 2147 (SVC): Same license terms and conditions as designated machine

Prices

Storwize V7000

Description	Machine type	Model	Feature number	Install type	CSU
900GB 15K 2.5 Inch HDD	2076	624, 24F	AHE3	Both	Yes
900GB 15K 3.5 Inch HDD	2076	92F	AH71	Both	Yes

Description	Machine type	Model	Feature number	Install type	CSU
256 GB Cache Upgrade	2076	624, AF6	ACHG	Both	Yes
Power Cord - PDU C20	2076	624, AF6, 12F, 24F, AFF	AHP6	Both	Yes

Storwize V5000

Description	Machine type	Model	Feature number	Install type	CSU
900GB 15K 2.5 Inch HDD	2077	124, 224, 324, 24F	AC59	Both	Yes
900GB 15K 3.5 Inch HDD	2077	112, 212, 312, 12F	AC18	Both	Yes
900GB 15K 3.5 Inch HDD	2077	92F	ACP1	Both	Yes
Power Cord - PDU C20	2077	112, 124, 212, 224, 312, 324, AF3, 12F, 24F, AFF	AHP6	Both	Yes

Description	Machine type	Model	Feature number	Install type	CSU
900GB 15K 2.5 Inch HDD	2078	124, 224, 324, 24F	AC59	Both	Yes
900GB 15K 3.5 Inch HDD	2078	112, 212, 312, 12F	AC18	Both	Yes
900GB 15K 3.5 Inch HDD	2078	92F	ACP1	Both	Yes
Power Cord - PDU C20	2078	112, 124, 212, 224, 312, 324, AF3, 12F, 24F, AFF	AHP6	Both	Yes
OEM Bulk Option AHLJ	2078	124, 224, 24F	AHLJ	Field	Yes
OEM Bulk Option AHL2	2078	112, 212, 12F	AHL2	Field	Yes
OEM Bulk Option AHMJ	2078	324, 24F	AHMJ	Field	Yes
OEM Bulk Option AHM2	2078	312, 12F	AHM2	Field	Yes

SVC

Description	Machine type	Model	Feature number	Install type	CSU
900GB 15K 2.5 Inch HDD	2145	24F	AH42	Both	No
900GB 15K 3.5 Inch HDD	2145	92F	AH71	Both	No

Description	Machine type	Model	Feature number	Install type	CSU
Power Cord - PDU C20	2145	SV1, 12F, 24F	AHP6	Both	No
Description	Machine type	Model	Feature number	Install type	CSU
900GB 15K 2.5 Inch HDD	2147	24F	AH42	Both	No
900GB 15K 3.5 Inch HDD	2147	92F	AH71	Both	No
Power Cord - PDU C20	2147	SV1, 12F, 24F	AHP6	Both	No

FlashSystem V9000

Description	Machine type	Model	Feature number	Install type	CSU
Additional Controller Pair	9846	AC3	AF3V	Both	Yes
Spare Controller	9846	AC3	AF3W	Both	Yes
Generic Bezel	9846	AC3, 12F, 24F, 92F, AE2	ACZA	Plant	No
Generic Packaging	9846	AC3, 12F, 24F, 92F, AE2	ACZF	Plant	No

Description	Machine type	Model	Feature number	Install type	CSU
Additional Controller Pair	9848	AC3	AF3V	Both	Yes
Spare Controller	9848	AC3	AF3W	Both	Yes
Generic Bezel	9848	AC3, 12F, 24F, 92F, AE2	ACZA	Plant	No
Generic Packaging	9848	AC3, 12F, 24F, 92F, AE2	ACZF	Plant	No

CSU = Customer setup

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