



IBM Storwize V7000 delivers improved performance

Table of contents

1 Overview	10 Publications
2 Key prerequisites	11 Technical information
2 Planned availability date	14 Terms and conditions
2 Description	19 Prices
5 Statement of general direction	30 Order now
6 Product number	

At a glance

IBM^(R) Storwize^(R) V7000 Model 624 offers increased performance with the following features:

- Two node canisters, each with a ten-core processor and integrated hardware-assisted compression acceleration
- 64 GB cache (per system) standard, with optional 128 GB cache (per system)
- 16 Gb Fibre Channel (FC), 10 Gb iSCSI / Fibre Channel over Ethernet (FCoE), and 1 Gb iSCSI connectivity options
- 12 Gb SAS expansion enclosures supporting twelve 3.5-inch large form factor (LFF) or twenty-four 2.5-inch small form factor (SFF) drives
- Scaling for up to 504 drives per system with the attachment of 20 Storwize V7000 expansion enclosures, and up to 1,056 drives in a four-way clustered configuration
- The ability to be added into existing clustered systems with previous generation Storwize V7000 systems

All models are delivered in a 2U, 19-inch rack-mount enclosure and include a three-year warranty with customer replaceable unit (CRU) and on-site service. Optional warranty service upgrades are available for enhanced levels of warranty service.

Overview

IBM Storwize V7000 is a virtualized, software-defined storage system designed to consolidate workloads into a single storage system for ease of management, reduced costs, highly scalable capacity, and high performance and availability. Storwize V7000 Model 624 delivers improved performance and efficiency.

Storwize V7000 SFF Control Enclosure Model 624 features:

- Two node canisters, each with a ten-core processor and 32 GB of memory for a system total of 64 GB
- 1 Gb Ethernet ports standard for 1 Gb iSCSI connectivity
- Up to two I/O adapter features for 16 Gb FC and 10 Gb iSCSI/FCoE connectivity
- Support for up to twenty-four 2.5-inch drives
- 2U, 19-inch rack mount enclosure

Model 624 comes standard with integrated, hardware-assisted compression acceleration. Regular and Real-time CompressionTM workloads can further benefit from the optional cache upgrade to increase the total system cache to 128 GB.

Compression workloads can also benefit from the optional compression accelerator card feature for additional hardware-assisted compression acceleration.

A Storwize V7000 Model 624 system scales up to 504 drives with the attachment of 20 Storwize V7000 expansion enclosures.

Storwize V7000 systems can be clustered to help deliver greater performance, bandwidth, and scalability. A Storwize V7000 clustered system can contain up to four Storwize V7000 systems and up to 1,056 drives.

Storwize V7000 Model 624 systems can be added into existing clustered systems that include previous generation Storwize V7000 systems.

All Storwize V7000 functional capabilities are provided through IBM Spectrum Virtualize™ Software. For additional information on Storwize V7000 functional capabilities and software, refer to the materials listed in the [Reference information](#) section.

Key prerequisites

Storwize V7000 requires Spectrum Virtualize Software V7.7.1, or later, for operation. Use of the software is entitled through the acquisition of IBM Spectrum Virtualize software licenses.

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

Planned availability date

September 9, 2016: All models and features, except in the countries listed below

October 14, 2016: All models and features in Taiwan

March 10, 2017: All models and features in Argentina and India

The Encryption Enablement feature (feature number ACE1) and the Encryption USB Drive Pack feature (feature number ACEA) are not available in the following countries:

- Belarus
- Kazakhstan
- People's Republic of China
- Russia

Description

IBM Storwize V7000 is a virtualized, software-defined storage system comprised of hardware components and a requisite licensed software product, IBM Spectrum Virtualize Software. All functional capabilities for the Storwize V7000 system are provided through Spectrum Virtualize software.

Storwize V7000 SFF Control Enclosure Model 624 is a hardware component of a Storwize V7000 system and includes:

- Two node canisters, each with a ten-core processor and integrated hardware-assisted compression acceleration
- 64 GB cache (32 GB per canister) with optional 128 GB cache (64 GB per canister)

- 16 Gb FC, 10 Gb Ethernet, and 1 Gb Ethernet ports for FC, iSCSI, and FCoE connectivity
- Optional compression accelerator card for additional hardware-assisted compression acceleration
- 12 Gb SAS ports for expansion enclosure attachment
- Twenty-four slots for 2.5-inch SAS drives
- 2U, 19-inch rack-mount enclosure with AC power supplies

Existing machine type 2076 expansion enclosure models 12F and 24F can be attached to a Storwize V7000 Model 624.

Storwize V7000 LFF Expansion Enclosure Model 12F includes:

- Two expansion canisters
- 12 Gb SAS ports for control enclosure and expansion enclosure attachment
- Twelve slots for 3.5-inch SAS drives
- 2U, 19-inch rack-mount enclosure with AC power supplies

Storwize V7000 SFF Expansion Enclosure Model 24F includes:

- Two expansion canisters
- 12 Gb SAS ports for control enclosure and expansion enclosure attachment
- Twenty-four slots for 2.5-inch SAS drives
- 2U, 19-inch rack-mount enclosure with AC power supplies

iSCSI, FC, and FCoE connectivity with intermix flexibility

Model 624 includes six 1 Gb Ethernet ports standard for iSCSI connectivity and can be configured with two I/O adapter features to provide up to sixteen 16 Gb FC ports or up to eight 10 Gb Ethernet (iSCSI/ FCoE) ports.

A minimum quantity of one 16 Gb FC adapter feature or one 10 Gb Ethernet adapter feature is required.

Drive options and intermix flexibility meet a complete range of needs

Storwize V7000 is designed to support the complete range of data storage requirements, from highly utilized applications to high-capacity, low usage applications.

The following high-capacity, archival-class, nearline 3.5-inch (LFF) drives are supported in Expansion Enclosure Model 12F:

- 3 TB 7,200 rpm
- 4 TB 7,200 rpm
- 6 TB 7,200 rpm
- 8 TB 7,200 rpm

The following 2.5-inch (SFF) drives are supported:

- Flash drives in 400^(R) GB, 800 GB, 1.6 TB, and 3.2 TB
- Read-intensive Flash drives in 1.92 TB and 3.84 TB
- High-performance, enterprise class disk drives
 - 300 GB and 600 GB 15,000 rpm
 - 900 GB, 1.2 TB, and 1.8 TB 10,000 rpm
- High-capacity, archival-class nearline disk drive in 2 TB 7,200 rpm

All drives are dual-port and hot-swappable. Drives of the same form factor can be intermixed within an enclosure, and LFF and SFF expansion enclosures can be intermixed behind the SFF control enclosure.

Scalable configurations respond to growing capacity needs

A single Storwize Model 624 control enclosure can support up to 20 Storwize V7000 expansion enclosures with a maximum of 504 drives per system. Expansion enclosures are designed to be dynamically added with virtually no downtime, helping to quickly and seamlessly respond to growing capacity demands.

With four-way system clustering, the size of the system can be increased to a maximum of 1,056 drives. Storwize V7000 Model 624 systems can be added into existing Storwize V7000 clustered systems that include previous generation Storwize V7000 systems.

Further scalability can be achieved with virtualization of external storage. When Storwize V7000 virtualizes an external disk system, capacity in the external system inherits the functional richness and ease of use of Storwize V7000.

Designed for high availability

Storwize V7000 is designed to offer high system and data availability with the following features:

- Dual-active, intelligent node canisters with mirrored cache
- Dual-port disk drives with automatic disk drive failure detection and RAID rebuild with global hot spares
- Redundant hardware, including power supplies and fans
- Hot-swappable and customer replaceable components
- HyperSwap^(R)
- Automated path failover support for the data path between the server and the drives

Encryption for enhanced data security

Storwize V7000 Model 624 supports encryption for data at rest. Encryption is performed by the Storwize V7000 control enclosure for data stored within the Storwize V7000 system (Storwize V7000 control enclosure and all attached Storwize V7000 expansion enclosures) and for data stored in externally virtualized storage subsystems.

Encryption is enabled on Storwize V7000 through the acquisition of the Encryption Enablement feature. This feature enables encryption on the entire Storwize V7000 system (Storwize V7000 control enclosure and all attached Storwize V7000 expansion enclosures) and externally virtualized storage subsystems.

The Encryption USB Flash Drives (Four Pack) feature is required when the Encryption Enablement feature is acquired. This feature provides four USB flash drives for storing the encryption master access key.

Rich set of functional capabilities

Storwize V7000 combines a variety of IBM technologies, including thin provisioning, automated tiering, storage virtualization, Real-time Compression, clustering, replication, HyperSwap, multiprotocol support, and a next-generation GUI. It also includes leading third-party technologies, such as Bridgeworks SANSlide network optimization. These technologies are designed to enable Storwize V7000 to offer a rich set of functional capabilities and deliver extraordinary levels of storage efficiency when used together.

All Storwize V7000 functional capabilities are provided through IBM Spectrum Virtualize Software.

Storwize V7000 Control Enclosure

Storwize V7000 SFF Control Enclosure (Model 624) base model configuration includes:

- 2U, 19-inch rack mount enclosure
- Two node canisters each with:
 - One ten-core processor
 - 32 GB cache
 - Compression accelerator chip
- Six 1 Gb Ethernet ports for 1 Gb iSCSI connectivity and system management (three ports per node canister)
- Two 1 Gb Ethernet ports for service technician use (one port per node canister)
- Four 12 Gb SAS ports for Storwize V7000 expansion enclosure attachment (two ports per node canister)
- Twenty-four slots for 2.5-inch SAS drives
- Two AC power supplies and cooling units

The following optional features are available. Refer to the [Product number](#) section for feature numbers.

- 16 Gb FC adapter pair for 16 Gb FC connectivity (two cards each with four 16 Gb FC ports and shortwave SFP transceivers)
- 10 Gb Ethernet adapter pair for 10 Gb iSCSI/FCoE connectivity (two cards each with four 10 Gb Ethernet ports and SFP+ transceivers)
- Cache upgrade
- Compression accelerator
- 16 Gb FC longwave SFP transceivers
- 2.5-inch SAS disk drives:
 - 300 GB and 600 GB 15,000 rpm (12 Gb SAS)
 - 900 GB, 1.2 TB, and 1.8 TB 10,000 rpm (12 Gb SAS)
 - 2 TB 7,200 rpm (12 Gb SAS)
- 2.5-inch flash (solid state) drives:
 - 400 GB, 800 GB, 1.6 TB, and 3.2 TB (12 Gb SAS)
- 2.5-inch read intensive flash (solid state) drives:
 - 1.92 TB and 3.84 TB (12 Gb SAS)
- Fiber optic I/O cables
- Rack power distribution unit (PDU) and wall outlet power cords
- RFID tag
- US Trade Agreements Act (TAA) compliance

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.

Statement of general direction

Product previews

- IBM intends to support a new high-density expansion enclosure for attachment to the Storwize V7000 and V5000 second-generation control models.
- IBM intends to support 7.68TB and 15.36TB flash drives in Storwize V7000 and Storwize V5000 second-generation SFF models in the fourth quarter of 2016.

- IBM intends to offer model conversions for Storwize V7000 Model 524 to the new V7000 Model 624 in the fourth quarter of 2016

IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at IBM's sole discretion. Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision. The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for our products remain at our sole discretion.

Reference information

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

For additional information about Spectrum Virtualize software, refer to Software Announcement [216-346](#), dated August 23, 2016.

Product number

Storwize V7000

Description	Machine type	Model	Feature number
V7000 SFF Control	2076	624	
16Gb FC 4 Port Adapter Pair	2076	624	AHB3
10Gb Ethernet Adapter Pair	2076	624	AHB5
Encryption Enablement	2076	624	ACE1
Encryption USB Drive Pack	2076	624	ACEA
Compression Accelerator	2076	624	AHC1
Cache Upgrade	2076	624	ACHE
16Gb FC LW SFP Transceivers	2076	624	ACHU
Generic Bezel	2076	624	ACZA
Generic Packaging	2076	624	ACZF
RFID AG/AP: 902-928 Mhz	2076	624	A2EV
RFID EMEA: 865.6-867.8 Mhz	2076	624	A2EW
300GB 15K 2.5 Inch HDD	2076	624	AHE1
600GB 15K 2.5 Inch HDD	2076	624	AHE2
900GB 10K 2.5 Inch HDD	2076	624	AHF2
1.2TB 10K 2.5 Inch HDD	2076	624	AHF3
1.8TB 10K 2.5 Inch HDD	2076	624	AHF4
2TB 7.2K 2.5 Inch NL HDD	2076	624	AHG2
400GB 2.5 Inch Flash Drive	2076	624	AHH2

Description	Machine type	Model	Feature number
800GB 2.5 Inch Flash Drive	2076	624	AHH3
1.6TB 2.5 Inch Flash Drive	2076	624	AHH4
3.2TB 2.5 Inch Flash Drive	2076	624	AHH5
1.92TB 2.5" RI Flash Drive	2076	624	AHHA
3.84TB 2.5" RI Flash Drive	2076	624	AHHB
OEM Bulk Option 701	2076	624	ACX6
OEM Bulk Option 702	2076	624	ACX7
OEM Bulk Option 703	2076	624	ACX8
OEM Bulk Option 704	2076	624	ACX9
OEM Bulk Option 706	2076	624	ACV6
OEM Bulk Option 707	2076	624	ACV7
1m Fiber Cable (LC)	2076	624	5301
5m Fiber Cable (LC)	2076	624	5305
25m Fiber Cable (LC)	2076	624	5325
10m OM3 Fiber Cable (LC)	2076	624	ACSS
Power Cord - EMEA	2076	624	9716
Power Cord - Australia/NZ	2076	624	9717
Power Cord - Europe/Africa	2076	624	9718
Power Cord - Denmark	2076	624	9719
Power Cord - South Africa	2076	624	9720
Power Cord - Switzerland	2076	624	9721
Power Cord - Chile/Italy	2076	624	9722
Power Cord - Israel	2076	624	9723
Power Cord - Argentina	2076	624	9725
Power Cord - China	2076	624	9726
Power Cord - PDU Connection	2076	624	9730
Power Cord - Brazil	2076	624	9733
Power Cord - India	2076	624	9734
Power Cord - Japan	2076	624	9735
Power Cord - Korea	2076	624	9736
Power Cord - Chicago	2076	624	9737

Description	Machine type	Model	Feature number
Power Cord - US/ Group 1	2076	624	AHP1
Power Cord - Taiwan	2076	624	AHP2
JEMT Indicator	2076	624	0021
TAA Compliance	2076	624	0983
Cluster Unit 1 Indicator	2076	624	1201
Cluster Unit 2 Indicator	2076	624	1202
Cluster Unit 3 Indicator	2076	624	1203
Cluster Unit 4 Indicator	2076	624	1204
Bulk Order Indicator	2076	624	5555
OEM 1 FC Order Indicator	2076	624	ACW1
OEM 2 FC Order Indicator	2076	624	ACW2
OEM 3 FC Order Indicator	2076	624	ACW3
OEM 4 FC Order Indicator	2076	624	ACW4
OEM 5 FC Order Indicator	2076	624	ACW5
OEM 6 FC Order Indicator	2076	624	ACW6
OEM 7 FC Order Indicator	2076	624	ACW7
OEM 8 FC Order Indicator	2076	624	ACW8
OEM 9 FC Order Indicator	2076	624	ACW9
OEM 10 FC Order Indicator	2076	624	ACWA
OEM 11 FC Order Indicator	2076	624	ACWB
OEM 12 FC Order Indicator	2076	624	ACWC
OEM 13 FC Order Indicator	2076	624	ACWD
OEM 14 FC Order Indicator	2076	624	ACWE
OEM 15 FC Order Indicator	2076	624	ACWF
OEM 1 MTM Order Indicator	2076	624	ACY1
OEM 2 MTM Order Indicator	2076	624	ACY2
OEM 3 MTM Order Indicator	2076	624	ACY3
OEM 4 MTM Order Indicator	2076	624	ACY4
OEM 5 MTM Order Indicator	2076	624	ACY5
OEM 6 MTM Order Indicator	2076	624	ACY6
OEM 7 MTM Order Indicator	2076	624	ACY7
OEM 8 MTM Order Indicator	2076	624	ACY8

Description	Machine type	Model	Feature number
OEM 9 MTM Order Indicator	2076	624	ACY9
OEM 10 MTM Order Indicator	2076	624	ACYA
OEM 11 MTM Order Indicator	2076	624	ACYB
OEM 12 MTM Order Indicator	2076	624	ACYC
OEM 13 MTM Order Indicator	2076	624	ACYD
OEM 14 MTM Order Indicator	2076	624	ACYE
OEM 15 MTM Order Indicator	2076	624	ACYF
Order Type 1 - CTO	2076	624	ADN1
Order Type 2 - MTM Only	2076	624	ADN2
Order Type 3 - FC Only	2076	624	ADN3
Shipping and Handling NC	2076	624	AG00
Shipping and Handling 624	2076	624	AGBL
VersaStack Indicator	2076	624	AHZC
CSC Routing - Guadalajara	2076	624	ECSM
Month Indicator	2076	624	9461
Day Indicator	2076	624	9462
Hour Indicator	2076	624	9463
Minute Indicator	2076	624	9464
Quantity Indicator	2076	624	9465
Countable Member Indicator	2076	624	9466
Route to Power Mfg	2076	624	EFD0
Rack Indicator None	2076	624	4650
Rack Indicator Rack 1	2076	624	4651
Rack Indicator Rack 2	2076	624	4652
Rack Indicator Rack 3	2076	624	4653
Rack Indicator Rack 4	2076	624	4654
Rack Indicator Rack 5	2076	624	4655
Rack Indicator Rack 6	2076	624	4656
Rack Indicator Rack 7	2076	624	4657
Rack Indicator Rack 8	2076	624	4658
Rack Indicator Rack 9	2076	624	4659
Rack Indicator Rack 10	2076	624	4660
Rack Indicator Rack 11	2076	624	4661

Description	Machine type	Model	Feature number
Rack Indicator Rack 12	2076	624	4662
Rack Indicator Rack 13	2076	624	4663
Rack Indicator Rack 14	2076	624	4664
Rack Indicator Rack 15	2076	624	4665
Rack Indicator Rack 16	2076	624	4666
Storage Subsystem ID 1	2076	624	9170
Storage Subsystem ID 2	2076	624	9171
Storage Subsystem ID 3	2076	624	9172
Storage Subsystem ID 4	2076	624	9173
Storage Subsystem ID 5	2076	624	9174
Storage Subsystem ID 6	2076	624	9175
Storage Subsystem ID 7	2076	624	9176
Storage Subsystem ID 8	2076	624	9177
Storage Subsystem ID 9	2076	624	9178
Storage Subsystem ID 10	2076	624	9179
Storage Subsystem ID 11	2076	624	9180
Storage Subsystem ID 12	2076	624	9181
Storage Subsystem ID 13	2076	624	9182
Storage Subsystem ID 14	2076	624	9183
Storage Subsystem ID 15	2076	624	9184
Storage Subsystem ID 16	2076	624	9185
Storage Subsystem ID 17	2076	624	9186
Storage Subsystem ID 18	2076	624	9187
Storage Subsystem ID 19	2076	624	9188
Storage Subsystem ID 20	2076	624	9189

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).

[BP Attachment for Announcement Letter 116-080](#)

Publications

The following publications are available:

- *IBM Storwize V7000 Quick Installation Guide*
- *IBM Storwize V7000 Troubleshooting, Recovery, and Maintenance Guide*

IBM Knowledge Center provides you with a single point of reference where you can access product documentation for IBM systems hardware, operating systems, and server software. Through a consistent framework, you can efficiently find information and personalize your access by going to [IBM Knowledge Center](#) for all your product information needs.

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

Global Technology Services

IBM services include business consulting, outsourcing, hosting services, applications, and other technology management.

These services help you learn about, plan, install, manage, or optimize your IT infrastructure to be an on-demand business. They can help you integrate your high-speed networks, storage systems, application servers, wireless protocols, and an array of platforms, middleware, and communications software for IBM and many non-IBM offerings. IBM is your one-stop shop for IT support needs.

For details on available services, contact your IBM representative or go to the <http://www.ibm.com/services/> 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

Physical specifications

- Height: 8.7 cm
- Width: 48.3 cm
- Depth: 74.4 cm
- Approximate weight:
 - Empty: 31.8 kg
 - Fully configured: 36.7 kg

To assure installability and serviceability in non-IBM industry-standard racks, review the installation planning information for any product-specific installation requirements.

Operating environment

Air temperature:

- Operating: 5°C to 40°C (41°F to 104°F) up to 950 m (3,117 ft) above sea level. Above 950 m, de-rate maximum air temperature 1 degree per 175 m.
- Non-operating: 1°C to 60°C (33.8°F to 140°F)

Relative humidity:

- Operating: 8% - 85%
- Non-operating: 8% - 85%

Electrical power:

- Voltage range: 100-240 V AC
- Frequency: 50-60 Hz
- Power: 541 watts

Heat dissipation (BTU per hour): 1,846

Acoustical noise emission:

- 6.5 bels (idling)
- 6.5 bels (operating)

Software requirements

Storwize V7000 machines require IBM Spectrum Virtualize Software V7.7.1, or later, for operation.

Spectrum Virtualize software is preloaded by IBM on Storwize V7000 machines. Use of the software is entitled through the acquisition of a Storwize V7000 Software license. Use of optional features offered with the Storwize V7000 software is entitled through the acquisition of their respective licenses.

For additional information about Storwize V7000 software, refer to the announcement listed in the [Reference information](#) section.

Compatibility

Storwize V7000 Model 624 systems can be added into existing Storwize V7000 clustered systems that include previous generation Storwize V7000 systems. All systems within a cluster must be using the same version of Storwize V7000 software.

Model 624 control enclosure only supports attachment of Model 12F and 24F expansion enclosures.

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

Limitations

Encryption: The Encryption Enablement feature and the Encryption USB Drive Pack feature (feature numbers ACE1 and ACEA, respectively) are not available in the following countries:

- Belarus
- Kazakhstan
- People's Republic of China
- Russia

Encryption may be subject to limitations and restrictions for supported configurations, environments, and use. See the *V7.7.1 Configuration Limits and Restrictions for IBM Storwize V7000* document at the [IBM Systems Support](#) site for details.

Shipments to India: Storwize V7000 machines shipped prior to the published planned availability date for India are not compliant with India certification and product labeling requirements.

If you did not acquire your machine from IBM as a direct shipment to India, you are responsible for validating the machine has the appropriate certifications and product labels.

Contact your IBM sales representative or Business Partner for assistance with this validation.

Planning information

Customer responsibilities

Physical configuration and installation planning, along with machine installation and configuration, 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.

Cable orders

Cables are required for the following:

- I/O connectivity to servers and fabric components
- Expansion enclosure attachment
- System management

As a convenience, a limited selection of cables can be ordered with the Storwize V7000 machine. Refer to the [Product number](#) section for feature numbers.

Cables, along with installation services, are also available from IBM Network Integration and Deployment Services, an IBM Global Services offering.

I/O connectivity cables

Cables are required to connect the Storwize V7000 I/O ports to server or fabric ports.

16 Gb FC: Storwize V7000 requires a 50.0/125 micrometer fiber optic cable terminated with an LC Duplex connector. The following can be ordered with the Storwize V7000 control enclosure model:

- 1 m fiber cable (LC)
- 5 m fiber cable (LC)
- 25 m fiber cable (LC)
- 10 m OM3 fiber cable (LC)

10 Gb iSCSI/FCoE: Storwize V7000 requires a 10GBASE-SR cable terminated with an LC Duplex connector. A 10 m OM3 fiber cable (LC) can be ordered with the Storwize V7000 control enclosure model.

A 50.0/125 micrometer fiber optic cable can also be used, subject to distance limitations. An OM3 cable is strongly recommended for use with 10 Gb iSCSI/FCoE.

1 Gb iSCSI: Storwize V7000 requires a Category 5 or Category 5E Ethernet cable terminated with an 8P8C modular connector (RJ45 compatible connector). This cable is not available for ordering with the machine and must be supplied by the customer.

Expansion enclosure attachment cables

Cables are required to connect a Storwize V7000 expansion enclosure to the Storwize V7000 control enclosure and to another Storwize V7000 expansion enclosure. This requires a 12 Gb mini-SAS HD 4x cable terminated with SFF-8644 connectors.

The following SAS cables can be ordered with the Storwize V7000 expansion enclosure:

- 0.6 m 12 Gb SAS cable (mSAS HD to mSAS HD)
- 1.5 m 12 Gb SAS cable (mSAS HD to mSAS HD)
- 3 m 12 Gb SAS cable (mSAS HD to mSAS HD)
- 6 m 12 Gb SAS cable (mSAS HD to mSAS HD)

System management cables

Storwize V7000 requires a Category 5 or Category 5E Ethernet cable terminated with an 8P8C modular connector (RJ45 compatible connector). This cable is not available for ordering with the machine and must be supplied by the customer.

Direct customer support

Technical support information is available in the [IBM Support Portal](#).

You may also contact your IBM representative.

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.

Terms and conditions

Volume orders

Contact your IBM representative.

IBM Global Financing

Yes

Products - terms and conditions

Warranty period

Three years

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.

Warranty service

If required, IBM provides repair or exchange service depending on the types of warranty service specified for the machine. IBM will attempt to resolve your problem over the telephone, or electronically via an IBM website. Certain machines contain remote support capabilities for direct problem reporting, remote problem determination, and resolution with IBM. You must follow the problem determination and resolution procedures that IBM specifies. Following problem determination, if IBM determines on-site service is required, scheduling of service will depend upon the time of your call, machine technology and redundancy, and availability of parts. If applicable to your product, parts considered Customer Replaceable Units (CRUs) will be provided as part of the machine's standard warranty service.

Service levels are response-time objectives and are not guaranteed. The specified level of warranty service may not be available in all worldwide locations. Additional charges may apply outside IBM's normal service area. Contact your local IBM representative or your reseller for country-specific and location-specific information.

CRU Service

IBM provides replacement CRUs to you for you to install. CRU information and replacement instructions are shipped with your machine and are available from IBM upon your request. CRUs are designated as being either a Tier 1 (mandatory) or a Tier 2 (optional) CRU.

Tier 1 (mandatory) CRU

Installation of Tier 1 CRUs, as specified in this announcement, is your responsibility. If IBM installs a Tier 1 CRU at your request, you will be charged for the installation.

Tier 2 (optional) CRU

You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge.

Based upon availability, CRUs will be shipped for next-business-day (NBD) delivery. IBM specifies, in the materials shipped with a replacement CRU, whether a defective CRU must be returned to IBM. When return is required, return instructions and a container are shipped with the replacement CRU. You may be charged for the replacement CRU if IBM does not receive the defective CRU within 15 days of your receipt of the replacement.

The following parts have been designated as Tier 1 CRUs:

- Battery
- Bezel
- Cache
- Canister
- Drive
- Filler panel
- I/O adapter
- Compression accelerator card
- I/O cable
- I/O transceiver
- Power cord

- Power supply unit

CRU and On-site Service

At IBM's discretion, you will receive specified CRU service, or IBM will repair the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM machine. The area must be clean, well lit, and suitable for the purpose.

Service level is:

- 9 hours per day, Monday through Friday, excluding holidays, next business day response. Calls must be received by 5:00 pm local time in order to qualify for next business day response.

Non-IBM parts service

IBM is now shipping machines with selected non-IBM parts that contain an IBM field replaceable unit (FRU) part number label. These parts are to be serviced during the IBM machine warranty period. IBM is covering the service on these selected non-IBM parts as an accommodation to their customers, and normal warranty service procedures for the IBM machine apply.

Warranty service upgrades

During the warranty period, warranty service upgrades provide an enhanced level of On-site Service for an additional charge. Service levels are response-time objectives and are not guaranteed. See the Warranty services section for additional details.

IBM will attempt to resolve your problem over the telephone or electronically by access to an IBM website. Certain machines contain remote support capabilities for direct problem reporting, remote problem determination, and resolution with IBM. You must follow the problem determination and resolution procedures that IBM specifies. Following problem determination, if IBM determines on-site service is required, scheduling of service will depend upon the time of your call, machine technology and redundancy, and availability of parts.

CRU and On-site Service

At IBM's discretion you will receive CRU service or IBM will repair the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM machine. The area must be clean, well lit, and suitable for the purpose. The following on-site response-time objectives are available as warranty service upgrades for your machine. Available offerings are:

- 9 hours per day, Monday through Friday, excluding holidays, 4 hour average, same business day response
- 24 hours per day, 7 days a week, 4 hour average response, same day
- 24 hours per day, 7 days a week, 2 hour average response, same day

Customer Replaceable Units (CRUs) may be provided as part of the machine's standard warranty CRU Service except that you may install a CRU yourself or request IBM installation, at no additional charge, under the CRU and On-site Service level specified above. For additional information on the CRU Service, see the warranty information.

Maintenance service options

Maintenance services

If required, IBM provides repair or exchange service depending on the types of maintenance service specified for the machine. IBM will attempt to resolve your problem over the telephone or electronically, via an IBM website. Certain machines contain remote support capabilities for direct problem reporting, remote problem

determination, and resolution with IBM. You must follow the problem determination and resolution procedures that IBM specifies. Following problem determination, if IBM determines on-site service is required, scheduling of service will depend upon the time of your call, machine technology and redundancy, and availability of parts. Service levels are response-time objectives and are not guaranteed. The specified level of maintenance service may not be available in all worldwide locations. Additional charges may apply outside IBM's normal service area. Contact your local IBM representative or your reseller for country-specific and location-specific information. The following service selections are available as maintenance options for your machine type.

On-site Service

IBM will repair the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM machine. The area must be clean, well lit, and suitable for the purpose.

Service levels are:

- 9 hours per day, Monday through Friday, excluding holidays, next business day response
- 9 hours per day, Monday through Friday, excluding holidays, 4 hour average response, same business day
- 24 hours per day, 7 days a week, 4 hour average response, same day
- 24 hours per day, 7 days a week, 2 hour average response, same day

Customer Replaceable Unit (CRU) Service

If your problem can be resolved with a CRU (for example, keyboard, mouse, speaker, memory, or hard disk drive), and depending upon the maintenance service offerings in your geography, IBM will ship the replacement CRU to you for you to install. CRU information and replacement instructions are shipped with your machine and are available from IBM upon your request.

Based upon availability, CRUs will be shipped for next business day delivery. IBM specifies, in the materials shipped with a replacement CRU, whether a defective CRU must be returned to IBM. When return is required, 1) return instructions and a container are shipped with the replacement CRU, and 2) you may be charged for the replacement CRU if IBM does not receive the defective CRU within 15 days of your receipt of the replacement.

CRUs may be provided as part of the machine's standard maintenance service except that you may install a CRU yourself or request IBM installation, at no additional charge, under any of the On-site Service levels specified above.

CRUs are designated as being either a Tier 1 (mandatory) or a Tier 2 (optional) CRU.

Tier 1 (mandatory) CRUs: Installation of Tier 1 CRUs, as specified in this announcement, is your responsibility. If IBM installs a Tier 1 CRU at your request, you will be charged for the installation.

For machines with On-site Same-day Response Service, IBM will replace a Tier 1 CRU part at your request, at no additional charge.

Tier 2 (optional) CRUs: You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge.

The following parts and feature(s) have been designated as Tier 1 CRUs:

- Battery
- Bezel
- Cache
- Canister
- Drive

- Filler panel
- I/O adapter
- Compression accelerator card
- I/O cable
- I/O transceiver
- Power cord
- Power supply unit

Models and feature codes for which there is a maintenance charge:

Description	Machine type	Model	Feature number
Storwize V7000 SFF Control	2076	624	
400GB 2.5 Inch Flash Drive	2076	624	AHH2
800GB 2.5 Inch Flash Drive	2076	624	AHH3
1.6TB 2.5 Inch Flash Drive	2076	624	AHH4
3.2TB 2.5 Inch Flash Drive	2076	624	AHH5
1.92TB 2.5" RI Flash Drive	2076	624	AHHA
3.84TB 2.5" RI Flash Drive	2076	624	AHHB

Non-IBM parts service

Under certain conditions, IBM provides services for selected non-IBM parts at no additional charge for machines that are covered under warranty service upgrades or maintenance services.

This service includes hardware problem determination (PD) on the non-IBM parts (for example, adapter cards, PCMCIA cards, disk drives, memory) installed within IBM machines and provides the labor to replace the failing parts at no additional charge.

If IBM has a Technical Service Agreement with the manufacturer of the failing part, or if the failing part is an accommodations part (a part with an IBM FRU label), IBM may also source and replace the failing part at no additional charge. For all other non-IBM parts, customers are responsible for sourcing the parts. Installation labor is provided at no additional charge, if the machine is covered under a warranty service upgrade or a maintenance service.

Usage plan machine

No

IBM hourly service rate classification

Two

When a type of service involves the exchange of a machine part, the replacement may not be new, but will be in good working order.

General terms and conditions

Field-installable features

Yes

Model conversions

No

Machine installation

Customer setup. Customers are responsible for installation according to the instructions IBM provides with the machine.

Graduated program license charges apply

No

Licensed Internal Code and Licensed Machine Code

This product does not contain Licensed Internal Code or Licensed Machine Code.

Educational allowance

A reduced charge is available to qualified education customers. The educational allowance may not be added to any other discount or allowance.

The educational allowance is 15% for the products in this announcement.

Prices

For additional information and current prices, contact your local IBM representative.

Description	Machine type	Model	Feature number
V7000 SFF Control	2076	624	
16Gb FC 4 Port Adapter Pair	2076	624	AHB3
10Gb Ethernet Adapter Pair	2076	624	AHB5
Encryption Enablement	2076	624	ACE1
Encryption USB Drive Pack	2076	624	ACEA
Compression Accelerator	2076	624	AHC1
Cache Upgrade	2076	624	ACHE
16Gb FC LW SFP Transceivers	2076	624	ACHU
Generic Bezel	2076	624	ACZA
Generic Packaging	2076	624	ACZF
RFID AG/AP: 902-928 Mhz	2076	624	A2EV
RFID EMEA: 865.6-867.8 Mhz	2076	624	A2EW
300GB 15K 2.5 Inch HDD	2076	624	AHE1
600GB 15K 2.5 Inch HDD	2076	624	AHE2
900GB 10K 2.5 Inch HDD	2076	624	AHF2
1.2TB 10K 2.5 Inch HDD	2076	624	AHF3
1.8TB 10K 2.5 Inch HDD	2076	624	AHF4
2TB 7.2K 2.5 Inch NL HDD	2076	624	AHG2

Description	Machine type	Model	Feature number
400GB 2.5 Inch Flash Drive	2076	624	AHH2
800GB 2.5 Inch Flash Drive	2076	624	AHH3
1.6TB 2.5 Inch Flash Drive	2076	624	AHH4
3.2TB 2.5 Inch Flash Drive	2076	624	AHH5
1.92TB 2.5" RI Flash Drive	2076	624	AHHA
3.84TB 2.5" RI Flash Drive	2076	624	AHHB
OEM Bulk Option 701	2076	624	ACX6
OEM Bulk Option 702	2076	624	ACX7
OEM Bulk Option 703	2076	624	ACX8
OEM Bulk Option 704	2076	624	ACX9
OEM Bulk Option 706	2076	624	ACV6
OEM Bulk Option 707	2076	624	ACV7
1m Fiber Cable (LC)	2076	624	5301
5m Fiber Cable (LC)	2076	624	5305
25m Fiber Cable (LC)	2076	624	5325
10m OM3 Fiber Cable (LC)	2076	624	ACSS
Power Cord - EMEA	2076	624	9716
Power Cord - Australia/NZ	2076	624	9717
Power Cord - Europe/Africa	2076	624	9718
Power Cord - Denmark	2076	624	9719
Power Cord - South Africa	2076	624	9720
Power Cord - Switzerland	2076	624	9721
Power Cord - Chile/Italy	2076	624	9722
Power Cord - Israel	2076	624	9723
Power Cord - Argentina	2076	624	9725
Power Cord - China	2076	624	9726
Power Cord - PDU Connection	2076	624	9730
Power Cord - Brazil	2076	624	9733
Power Cord - India	2076	624	9734
Power Cord - Japan	2076	624	9735
Power Cord - Korea	2076	624	9736

Description	Machine type	Model	Feature number
Power Cord - Chicago	2076	624	9737
Power Cord - US/ Group 1	2076	624	AHP1
Power Cord - Taiwan	2076	624	AHP2
JEMT Indicator	2076	624	0021
TAA Compliance	2076	624	0983
Cluster Unit 1 Indicator	2076	624	1201
Cluster Unit 2 Indicator	2076	624	1202
Cluster Unit 3 Indicator	2076	624	1203
Cluster Unit 4 Indicator	2076	624	1204
Bulk Order Indicator	2076	624	5555
OEM 1 FC Order Indicator	2076	624	ACW1
OEM 2 FC Order Indicator	2076	624	ACW2
OEM 3 FC Order Indicator	2076	624	ACW3
OEM 4 FC Order Indicator	2076	624	ACW4
OEM 5 FC Order Indicator	2076	624	ACW5
OEM 6 FC Order Indicator	2076	624	ACW6
OEM 7 FC Order Indicator	2076	624	ACW7
OEM 8 FC Order Indicator	2076	624	ACW8
OEM 9 FC Order Indicator	2076	624	ACW9
OEM 10 FC Order Indicator	2076	624	ACWA
OEM 11 FC Order Indicator	2076	624	ACWB
OEM 12 FC Order Indicator	2076	624	ACWC
OEM 13 FC Order Indicator	2076	624	ACWD
OEM 14 FC Order Indicator	2076	624	ACWE
OEM 15 FC Order Indicator	2076	624	ACWF
OEM 1 MTM Order Indicator	2076	624	ACY1
OEM 2 MTM Order Indicator	2076	624	ACY2
OEM 3 MTM Order Indicator	2076	624	ACY3
OEM 4 MTM Order Indicator	2076	624	ACY4
OEM 5 MTM Order Indicator	2076	624	ACY5
OEM 6 MTM Order Indicator	2076	624	ACY6
OEM 7 MTM Order Indicator	2076	624	ACY7

Description	Machine type	Model	Feature number
OEM 8 MTM Order Indicator	2076	624	ACY8
OEM 9 MTM Order Indicator	2076	624	ACY9
OEM 10 MTM Order Indicator	2076	624	ACYA
OEM 11 MTM Order Indicator	2076	624	ACYB
OEM 12 MTM Order Indicator	2076	624	ACYC
OEM 13 MTM Order Indicator	2076	624	ACYD
OEM 14 MTM Order Indicator	2076	624	ACYE
OEM 15 MTM Order Indicator	2076	624	ACYF
Order Type 1 - CTO	2076	624	ADN1
Order Type 2 - MTM Only	2076	624	ADN2
Order Type 3 - FC Only	2076	624	ADN3
Shipping and Handling NC	2076	624	AG00
Shipping and Handling 624	2076	624	AGBL
VersaStack Indicator	2076	624	AHZC
CSC Routing - Guadalajara	2076	624	ECSM
Month Indicator	2076	624	9461
Day Indicator	2076	624	9462
Hour Indicator	2076	624	9463
Minute Indicator	2076	624	9464
Quantity Indicator	2076	624	9465
Countable Member Indicator	2076	624	9466
Route to Power Mfg	2076	624	EFD0
Rack Indicator None	2076	624	4650
Rack Indicator Rack 1	2076	624	4651
Rack Indicator Rack 2	2076	624	4652
Rack Indicator Rack 3	2076	624	4653
Rack Indicator Rack 4	2076	624	4654
Rack Indicator Rack 5	2076	624	4655
Rack Indicator Rack 6	2076	624	4656
Rack Indicator Rack 7	2076	624	4657
Rack Indicator Rack 8	2076	624	4658
Rack Indicator Rack 9	2076	624	4659
Rack Indicator Rack 10	2076	624	4660

Description	Machine type	Model	Feature number	
Rack Indicator Rack 11	2076	624	4661	
Rack Indicator Rack 12	2076	624	4662	
Rack Indicator Rack 13	2076	624	4663	
Rack Indicator Rack 14	2076	624	4664	
Rack Indicator Rack 15	2076	624	4665	
Rack Indicator Rack 16	2076	624	4666	
Storage Subsystem ID 1	2076	624	9170	
Storage Subsystem ID 2	2076	624	9171	
Storage Subsystem ID 3	2076	624	9172	
Storage Subsystem ID 4	2076	624	9173	
Storage Subsystem ID 5	2076	624	9174	
Storage Subsystem ID 6	2076	624	9175	
Storage Subsystem ID 7	2076	624	9176	
Storage Subsystem ID 8	2076	624	9177	
Storage Subsystem ID 9	2076	624	9178	
Storage Subsystem ID 10	2076	624	9179	
Storage Subsystem ID 11	2076	624	9180	
Storage Subsystem ID 12	2076	624	9181	
Storage Subsystem ID 13	2076	624	9182	
Storage Subsystem ID 14	2076	624	9183	
Storage Subsystem ID 15	2076	624	9184	
Storage Subsystem ID 16	2076	624	9185	
Storage Subsystem ID 17	2076	624	9186	
Storage Subsystem ID 18	2076	624	9187	
Storage Subsystem ID 19	2076	624	9188	
Storage Subsystem ID 20	2076	624	9189	
Description	Machine type	Model	Feature number	Install type*
16Gb FC 4 Port Adapter Pair	2076	624	AHB3	Both
10Gb Ethernet Adapter Pair	2076	624	AHB5	Both
Encryption Enablement	2076	624	ACE1	Both

Description	Machine type	Model	Feature number	Install type*
Encryption USB Drive Pack	2076	624	ACEA	Both
Compression Accelerator	2076	624	AHC1	Both
Cache Upgrade	2076	624	ACHE	Both
16Gb FC LW SFP Transceivers	2076	624	ACHU	Both
Generic Bezel	2076	624	ACZA	Plant
Generic Packaging	2076	624	ACZF	Plant
RFID AG/AP: 902-928 Mhz	2076	624	A2EV	Plant
RFID EMEA: 865.6-867.8 Mhz	2076	624	A2EW	Plant
300GB 15K 2.5 Inch HDD	2076	624	AHE1	Both
600GB 15K 2.5 Inch HDD	2076	624	AHE2	Both
900GB 10K 2.5 Inch HDD	2076	624	AHF2	Both
1.2TB 10K 2.5 Inch HDD	2076	624	AHF3	Both
1.8TB 10K 2.5 Inch HDD	2076	624	AHF4	Both
2TB 7.2K 2.5 Inch NL HDD	2076	624	AHG2	Both
400GB 2.5 Inch Flash Drive	2076	624	AHH2	Both
800GB 2.5 Inch Flash Drive	2076	624	AHH3	Both
1.6TB 2.5 Inch Flash Drive	2076	624	AHH4	Both
3.2TB 2.5 Inch Flash Drive	2076	624	AHH5	Both
1.92TB 2.5" RI Flash Drive	2076	624	AHHA	Both
3.84TB 2.5" RI Flash Drive	2076	624	AHHB	Both
OEM Bulk Option 701	2076	624	ACX6	Field
OEM Bulk Option 702	2076	624	ACX7	Field
OEM Bulk Option 703	2076	624	ACX8	Field
OEM Bulk Option 704	2076	624	ACX9	Field
OEM Bulk Option 706	2076	624	ACV6	Field
OEM Bulk Option 707	2076	624	ACV7	Field
1m Fiber Cable (LC)	2076	624	5301	Both
5m Fiber Cable (LC)	2076	624	5305	Both

Description	Machine type	Model	Feature number	Install type*
25m Fiber Cable (LC)	2076	624	5325	Both
10m OM3 Fiber Cable (LC)	2076	624	ACSS	Both
Power Cord - EMEA	2076	624	9716	Both
Power Cord - Australia/NZ	2076	624	9717	Both
Power Cord - Europe/Africa	2076	624	9718	Both
Power Cord - Denmark	2076	624	9719	Both
Power Cord - South Africa	2076	624	9720	Both
Power Cord - Switzerland	2076	624	9721	Both
Power Cord - Chile/Italy	2076	624	9722	Both
Power Cord - Israel	2076	624	9723	Both
Power Cord - Argentina	2076	624	9725	Both
Power Cord - China	2076	624	9726	Both
Power Cord - PDU Connection	2076	624	9730	Both
Power Cord - Brazil	2076	624	9733	Both
Power Cord - India	2076	624	9734	Both
Power Cord - Japan	2076	624	9735	Both
Power Cord - Korea	2076	624	9736	Both
Power Cord - Chicago	2076	624	9737	Both
Power Cord - US/Group 1	2076	624	AHP1	Both
Power Cord - Taiwan	2076	624	AHP2	Both
JEMT Indicator	2076	624	0021	Plant
TAA Compliance	2076	624	0983	Plant
Cluster Unit 1 Indicator	2076	624	1201	Both
Cluster Unit 2 Indicator	2076	624	1202	Both
Cluster Unit 3 Indicator	2076	624	1203	Both
Cluster Unit 4 Indicator	2076	624	1204	Both
Bulk Order Indicator	2076	624	5555	Field
OEM 1 FC Order Indicator	2076	624	ACW1	Field
OEM 2 FC Order Indicator	2076	624	ACW2	Field

Description	Machine type	Model	Feature number	Install type*
OEM 3 FC Order Indicator	2076	624	ACW3	Field
OEM 4 FC Order Indicator	2076	624	ACW4	Field
OEM 5 FC Order Indicator	2076	624	ACW5	Field
OEM 6 FC Order Indicator	2076	624	ACW6	Field
OEM 7 FC Order Indicator	2076	624	ACW7	Field
OEM 8 FC Order Indicator	2076	624	ACW8	Field
OEM 9 FC Order Indicator	2076	624	ACW9	Field
OEM 10 FC Order Indicator	2076	624	ACWA	Field
OEM 11 FC Order Indicator	2076	624	ACWB	Field
OEM 12 FC Order Indicator	2076	624	ACWC	Field
OEM 13 FC Order Indicator	2076	624	ACWD	Field
OEM 14 FC Order Indicator	2076	624	ACWE	Field
OEM 15 FC Order Indicator	2076	624	ACWF	Field
OEM 1 MTM Order Indicator	2076	624	ACY1	Both
OEM 2 MTM Order Indicator	2076	624	ACY2	Plant
OEM 3 MTM Order Indicator	2076	624	ACY3	Plant
OEM 4 MTM Order Indicator	2076	624	ACY4	Plant
OEM 5 MTM Order Indicator	2076	624	ACY5	Plant
OEM 6 MTM Order Indicator	2076	624	ACY6	Plant
OEM 7 MTM Order Indicator	2076	624	ACY7	Plant
OEM 8 MTM Order Indicator	2076	624	ACY8	Plant

Description	Machine type	Model	Feature number	Install type*
OEM 9 MTM Order Indicator	2076	624	ACY9	Plant
OEM 10 MTM Order Indicator	2076	624	ACYA	Plant
OEM 11 MTM Order Indicator	2076	624	ACYB	Plant
OEM 12 MTM Order Indicator	2076	624	ACYC	Plant
OEM 13 MTM Order Indicator	2076	624	ACYD	Plant
OEM 14 MTM Order Indicator	2076	624	ACYE	Plant
OEM 15 MTM Order Indicator	2076	624	ACYF	Plant
Order Type 1 - CTO	2076	624	ADN1	Plant
Order Type 2 - MTM Only	2076	624	ADN2	Plant
Order Type 3 - FC Only	2076	624	ADN3	Field
Shipping and Handling NC	2076	624	AG00	Plant
Shipping and Handling 624	2076	624	AGBL	Plant
VersaStack Indicator	2076	624	AHZC	Plant
CSC Routing - Guadalajara	2076	624	ECSM	Both
Month Indicator	2076	624	9461	Plant
Day Indicator	2076	624	9462	Plant
Hour Indicator	2076	624	9463	Plant
Minute Indicator	2076	624	9464	Plant
Quantity Indicator	2076	624	9465	Plant
Countable Member Indicator	2076	624	9466	Plant
Route to Power Mfg	2076	624	EFD0	Plant
Rack Indicator None	2076	624	4650	Plant
Rack Indicator Rack 1	2076	624	4651	Plant
Rack Indicator Rack 2	2076	624	4652	Plant
Rack Indicator Rack 3	2076	624	4653	Plant

Description	Machine type	Model	Feature number	Install type*
Rack Indicator Rack 4	2076	624	4654	Plant
Rack Indicator Rack 5	2076	624	4655	Plant
Rack Indicator Rack 6	2076	624	4656	Plant
Rack Indicator Rack 7	2076	624	4657	Plant
Rack Indicator Rack 8	2076	624	4658	Plant
Rack Indicator Rack 9	2076	624	4659	Plant
Rack Indicator Rack 10	2076	624	4660	Plant
Rack Indicator Rack 11	2076	624	4661	Plant
Rack Indicator Rack 12	2076	624	4662	Plant
Rack Indicator Rack 13	2076	624	4663	Plant
Rack Indicator Rack 14	2076	624	4664	Plant
Rack Indicator Rack 15	2076	624	4665	Plant
Rack Indicator Rack 16	2076	624	4666	Plant
Storage Subsystem ID 1	2076	624	9170	Plant
Storage Subsystem ID 2	2076	624	9171	Plant
Storage Subsystem ID 3	2076	624	9172	Plant
Storage Subsystem ID 4	2076	624	9173	Plant
Storage Subsystem ID 5	2076	624	9174	Plant
Storage Subsystem ID 6	2076	624	9175	Plant
Storage Subsystem ID 7	2076	624	9176	Plant
Storage Subsystem ID 8	2076	624	9177	Plant

Description	Machine type	Model	Feature number	Install type*
Storage Subsystem ID 9	2076	624	9178	Plant
Storage Subsystem ID 10	2076	624	9179	Plant
Storage Subsystem ID 11	2076	624	9180	Plant
Storage Subsystem ID 12	2076	624	9181	Plant
Storage Subsystem ID 13	2076	624	9182	Plant
Storage Subsystem ID 14	2076	624	9183	Plant
Storage Subsystem ID 15	2076	624	9184	Plant
Storage Subsystem ID 16	2076	624	9185	Plant
Storage Subsystem ID 17	2076	624	9186	Plant
Storage Subsystem ID 18	2076	624	9187	Plant
Storage Subsystem ID 19	2076	624	9188	Plant
Storage Subsystem ID 20	2076	624	9189	Plant

* Install type:

- "Plant" denotes plant installation only.
- "Field" denotes field installation only.
- "Both" denotes both plant and field installation.

ServiceElect (ESA) charges

For ServiceElect (ESA) maintenance service charges, contact IBM Global Services at 888- IBM -4343 (426-4343).

IBM Global Financing

IBM Global Financing offers competitive financing to credit-qualified customers to assist them in acquiring IT solutions. Offerings include financing for IT acquisition, including hardware, software, and services, from both IBM and other manufacturers or vendors. Offerings (for all customer segments: small, medium, and large enterprise), rates, terms, and availability can vary by country. Contact your local IBM Global Financing organization or go to the [IBM Global Financing](#) website for more information.

IBM Global Financing offerings are provided through IBM Credit LLC in the United States and other IBM subsidiaries and divisions worldwide to qualified commercial and government customers. Rates are based on a customer's credit rating, financing terms, offering type, equipment type and options, and may vary by country. Other

restrictions may apply. Rates and offerings are subject to change, extension, or withdrawal without notice.

Financing solutions from IBM Global Financing can help you stretch your budget and affordably acquire the new product. But beyond the initial acquisition, our end-to-end approach to IT management can also help keep your technologies current, reduce costs, minimize risk, and preserve your ability to make flexible equipment decisions throughout the entire technology lifecycle.

Order now

To order, contact your Americas Call Centers, local IBM representative, or your IBM Business Partner. To identify your local IBM representative or IBM Business Partner call 800- IBM -4YOU (426-4968). For more information, contact the Americas Call Centers.

Phone: 800-IBM-CALL (426-2255)

Fax: 800-2IBM-FAX (242-6329)

For IBM representative: callserv@ca.ibm.com

For IBM Business Partner: pwcs@us.ibm.com

Mail:

IBM Teleweb Customer Support
ibm.com^(R) Sales Execution Center, Americas North
3500 Steeles Ave. East, Tower 3/4
Markham, Ontario
Canada L3R 2Z1

Reference:

YE001

The Americas Call Centers, our national direct marketing organization, can add your name to the mailing list for catalogs of IBM products.

Note: Shipments will begin after the planned availability date.

Trademarks

Real-time Compression and IBM Spectrum Virtualize are trademarks of IBM Corporation in the United States, other countries, or both. IBM, Storwize, System Storage, ibm.com, HyperSwap, Global Technology Services, Power and 400 are registered trademarks of IBM Corporation in the United States, other countries, or both. Other company, product, and service names may be trademarks or service marks of others.

Terms of use

IBM products and services which are announced and available in your country can be ordered under the applicable standard agreements, terms, conditions, and prices in effect at the time. IBM reserves the right to modify or withdraw this announcement at any time without notice. This announcement is provided for your information only. Additional terms of use are located at:

[Terms of use](#)

For the most current information regarding IBM products, consult your IBM representative or reseller, or visit the IBM worldwide contacts page

<http://www.ibm.com/planetwide/us/>