IBM 50 GB and 200 GB SATA 1.8-inch MLC SSDs offer a high-performance SATA storage device for System x servers

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At a glance

The new 1.8-inch form-factor drives provide solid state technology for IBM® System x® and IBM BladeCenter®.

Benefits include:

- Larger, 50 GB and 200 GB capacity for the single drive to accommodate loading applications along with OS booting
- Help in reducing potential points of failure internal to the blade server by delivering solid state reliability in the IBM storage family
- 1.8-inch, slim-line form factor that fits into a conventional disk drive bay
- Energy saving with as little as 2.3-watt power consumption per drive
- S.M.A.R.T. Technology, which, through the use of software utilities, can alert you of certain impending drive failures
- One-year limited warranty

Overview

The new IBM 50 GB and 200 GB SATA 1.8-inch MLC SSDs bring solid state high performance, reliability, and low-power capabilities to BladeCenter and System x storage. The new 50 GB and 200 GB SSD drives will each be available as a single 1.8-inch multilevel cell (MLC) drive.

Key features and benefits include:

- Low power requirements (2.3 watts per drive) help you better manage the power envelope of the datacenter.
- Uptime is up to three times that of conventional hard drives without compromising application performance or availability.
- Durability helps withstand challenging environmental conditions.
- These drives are ideal for local boot usage and web serving applications, and in environments where application data is accessed in external storage.

Performance

50 GB performance characteristics include:

- Formatted capacity: Up to 50,000 MB
• Drive to host interface that supports 3.0 Gb/s burst rate
• Internal transfer read rate: Up to 140 MB/s
• Internal transfer write rate: Up to 18 MB/s
• Random read (4K blocks): Up to 20,000 IOPS

200 GB performance characteristics include:
• Formatted capacity: Up to 200,000 MB
• Drive to host interface that supports 3.0 Gb/s burst rate
• Internal transfer read rate: Up to 150 MB/s
• Internal transfer write rate: Up to 35 MB/s
• Random read (4K blocks): Up to 20,000 IOPS

Reliability
• The absence of moving parts reduces potential failure points in the blade server.
• SATA compliance enables the drive to connect directly into an IBM BladeCenter.
• S.M.A.R.T Technology allows software utilities to alert you of certain impending drive failures so replacements can be made before a problem occurs.
• Rigorous testing through the ServerProven® program instills confidence that your storage subsystem is compatible and will function reliably.
• These SSD drives come with a one-year, limited warranty.

1 For information on IBM's Statement of Limited Warranty, contact your local IBM representative. Copies are available upon request.

Key prerequisites

IBM System x or BladeCenter system with SATA capability

Planned availability date

April 25, 2011

Description

IBM 50 GB SATA 1.8-inch MLC Solid State Drive (43W7726) and 200 GB SATA 1.8-inch SSD (43W7746)

These new drives bring solid state reliability and low-power capabilities to on-blade storage. These new options will be available as single 1.8-inch MLC 2.3-watt drives.

Configurator support

• Configuration and Options Guide (COG)
• IBM Advanced Solutions Integration Tool (ASIT)

Product positioning

The high-performance 50 GB and 200 GB SATA SSD options are positioned at the top of IBM's SATA SSD line based on solid state technology.

These SSD drives support entry-level server and workstation applications, such as:
• Transaction processing
• Data mining
• Data warehousing
• Professional video and graphics

**Product number**

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<th>Description</th>
<th>Part number</th>
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<tr>
<td>IBM 50 GB SATA 1.8-inch MLC SSD</td>
<td>43W7726</td>
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<tr>
<td>IBM 200 GB SATA 1.8-inch MLC SSD</td>
<td>43W7746</td>
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**Publications**

Publications are shipped with the announced product.

The IBM Systems Information Center provides you with a single information center 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. The IBM Systems Information Center is at


**IBM Publications Center Portal**

http://www.ibm.com/shop/publications/order

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, as well as payment options via credit card. A large number of publications are available online in various file formats, which can currently be downloaded free of charge.

Installation pubs ship with the SSD.

**Displayable softcopy publications**

None

**Source file publications**

None

**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 visit

http://www.ibm.com/services/
For details on available IBM Business Continuity and Recovery Services, contact your IBM representative or visit

http://www.ibm.com/services/continuity

For details on education offerings related to specific products, visit


Select your country, and then select the product as the category.

**Technical information**

**Specified operating environment**

**Physical specifications**

IBM 50 GB SATA 1.8-inch MLC SSD - 43W7726

- Approximate height: 5.35 mm (.21 in)
- Approximate width: 54.2 mm (2.14 in)
- Approximate depth: 70.0 mm (2.76 in)
- Approximate weight: <448 gms (<1 lb)

**Shipping dimensions**

- Height: 5.35 mm (.21 in)
- Width: 54.2 mm (2.14 in)
- Depth: 70.0 mm (2.76 in)
- Weight: <448 gms (<1.0 lb)

IBM 200 GB SATA 1.8-inch MLC SSD - 43W7746

- Approximate height: 5.35 mm (.21 in)
- Approximate width: 54.2 mm (2.14 in)
- Approximate depth: 70.0 mm (2.76 in)
- Approximate weight: <448 gms (<1 lb)

**Shipping dimensions**

- Height: 5.35 mm (.21 in)
- Width: 52.4 mm (2.14 in)
- Depth: 70.0 mm (2.76 in)
- Weight: <448 gms (<1.0 lb)

**Standards**

None

**Operating environment**

Temperature: - 0 to 70 degrees C (32 to 158 degrees F) at 0 to 914 m (0 to 3,000 ft)

Relative humidity: 5% to 90% (noncondensing)

Maximum altitude: 24,390 m (80,000 ft)

**Hardware requirements**
The HDDs must be installed in selected System x or BladeCenter servers.

**Software requirements**
The new IBM 50 GB and 200 GB SATA SSDs work with most operating systems.

For further information, contact your IBM representative.

**Compatibility**
For latest compatibility information, visit


**Note:** Some configurations may not be compatible.

**Limitations**
None

**User group requirements**
This announcement satisfies or partially satisfies the requirements from one or more of the worldwide user group communities. Groups include COMMON, COMMON Europe, Guide Share Europe (GSE), InterAction (Australia/New Zealand), Japan Guide Share (JGS), and SHARE Inc.

**Planning information**

**Customer responsibilities**
The new IBM 50 GB and 200 GB SATA 1.8-inch MLC SSD products are designated as customer setup. Customer installation instructions are shipped with each option part.

**Cable orders**
None

**Installability**
The IBM 50 GB or 200 GB SATA SSD require about 20 minutes for installation.

Installation includes unpacking, attaching customer-provided line cord, setting up, and powering on.

**Packaging**

**IBM 50 GB and 200 GB SATA 1.8-inch MLC SSD**

<table>
<thead>
<tr>
<th>Product</th>
<th>Package description</th>
<th>Boxes</th>
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<tr>
<td>IBM 50 GB SATA 1.8-inch MLC SSD</td>
<td>Option Unit Box</td>
<td>1</td>
</tr>
<tr>
<td>IBM 200 GB SATA 1.8-inch MLC SSD</td>
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Contents:
- Hard drive
- Installation pub and warranty
- Safety flyer

The 50 GB and 200 GB SATA SSDs are shipped as a single package. Other items are in zipped bags.
Retail only

Packaging dimensions and weight - 50 GB SSD (43W7726)
• Single box (HxWxD): 133 mm (5.23 in) x 174 mm (6.85 in) x 63 mm (2.48 in)
• Package weight: 808 g (1.8 lb)

Retail only

Packaging dimensions and weight - 200 GB SSD (43W7746)
• Single box (HxWxD): 133 mm (5.23 in) x 174 mm (6.85 in) x 63 mm (2.48 in)
• Package weight: 808 g (1.8 lb)

Note: All measurements are approximate.

Supplies
IBM 50 GB and 200 GB SATA 1.8-inch MLC SSDs can be purchased through dealers around the world.

Security, auditability, and control
It is a customer's responsibility to ensure that the server is secure to prevent sensitive data from being removed.

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

Global Technology Services
Contact your IBM representative for the list of selected services available in your country, either as standard or customized offerings, for the efficient installation, implementation, and/or integration of this product.

IBM Electronic Services
IBM has transformed its delivery of hardware and software support services to help you achieve higher system availability. Electronic Services is a web-enabled solution that offers an exclusive, no-additional-charge enhancement to the service and support available for IBM servers. These services are designed to provide the opportunity for greater system availability with faster problem resolution and preemptive monitoring. Electronic Services comprises two separate, but complementary, elements: Electronic Services news page and Electronic Services Agent.

The Electronic Services news page is a single Internet entry point that replaces the multiple entry points traditionally used to access IBM Internet services and support. The news page enables you to gain easier access to IBM resources for assistance in resolving technical problems.

The Electronic Service Agent™ is no-additional-charge software that resides on your server. It monitors events and transmits system inventory information to IBM on a periodic, client-defined timetable. The Electronic Service Agent automatically reports hardware problems to IBM. Early knowledge about potential problems enables IBM to deliver proactive service that may result in higher system availability and performance. In addition, information collected through the Service Agent is made available to IBM service support representatives when they help answer your questions or diagnose problems. Installation and use of IBM Electronic Service Agent
for problem reporting enables IBM to provide better support and service for your IBM server.

To learn how Electronic Services can work for you, visit

http://www.ibm.com/support/electronic

Terms and conditions

Field installable features
Yes

Option warranty period
One year.

50 GB and 200 GB SATA 1.8-inch MLC SSDs offer a one-year warranty.

- Warranty Period: One year
- Service Type (IOR/IOE/CCE/CCR): CRU
- Maintenance Agreement: No
- Optional Upgrade: No

An IBM part or feature installed during the initial installation of an IBM machine is subject to a full warranty effective on the date of installation of the machine. 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 effective on its date of installation. 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
Yes.

Machine code
No license terms apply.

Pricing

For all local charges, contact your IBM representative.

Announcement countries

All European, Middle Eastern, and African countries.

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