

Overview

Models

SATA 3 GB/second Interface Drives

HP 80 GB Solid State Drive (SSD)

BM848AA

HP 160 GB Solid State Drive (SSD)

QV064AA*

*Not available in all regions.

SATA 6 GB/second Interface Drives

HP 128 GB Solid State Drive (SSD)

QV063AA

Introduction

Boost the performance and robustness of your HP Business Desktop PC with an HP Solid State Drive.

The HP 80 GB, 128 GB, and 160 GB Solid State Drives are a drop-in replacement for the 2.5-inch or 3.5-inch (with bracket) hard disk drive of some HP Compaq Business Desktop PCs providing many performance and durability improvements over traditional Hard Disk Drive (HDD) technology.

With no moving parts, the HP 80 GB, 128 GB, and 160 GB Solid State Drives do not need to spin up or mechanically seek files in the way that a conventional hard disk drives does. The result is a quiet, cool, highly rugged storage solution that can offer faster system responsiveness. These drive characteristics enable significant improvement in PCMark05 v120 - hard drive performance over a standard 3.5-inch hard disk drive while significantly improving boot-up, shut down and application loading times as well as overall application responsiveness.

If you're configuring a new system or you just want to extend the lifecycle of an existing system, the HP 80GB, 128GB, and 160 GB Solid State Drives are one of the best performance upgrades you can make.

NOTE: GB = 1 billion bytes. Actual available capacity is less.

Performance

SATA 3GB/second Interface Drives

The HP Solid State Drive achieves sequential read rates of up to 250-megabyte (MB)/sec and sequential write rates of up to 70-megabytes (MB)/sec.

SATA 6GB/second Interface Drives

The HP Solid State Drive achieves sequential read rates of up to 450-megabyte (MB)/sec and sequential write rates of up to 260-megabytes (MB)/sec.

Overview

Benefits

The HP 80 GB, 128 GB, and 160 GB Solid State Drives bring these powerful benefits for storage solution:

- Take the worry out of storing your data with a hard drive with no moving parts
- Get faster transfer speeds and higher cell endurance with Intel NAND flash memory Multi Level Cell (MLC) components
- Significantly improve boot up, shut down and application loading times.
- Improved protocol for enhanced data integrity
- Performance increases: For example, up to 6 GB/s maximum external (burst) data transfer rate for the 128 GB SDD drive
- Native Command Queuing allows the hard drive to have several write or read commands outstanding at the same time
- Supports the ATA Data Set Management Command (Trim Attribute) to help maintain your SSDs performance at "fresh-out-of-the-box" levels, and is specifically designed to run with Microsoft Windows 7*.
- Includes installation kit that contains: 3.5" desktop drive bay adapter to 2.5" SSD adapter bracket, screws, installation guide, and warranty documentation.
- Blazing fast responsiveness and performance
- Solid, reliable, silent operation
- Low power consumption

Compatibility

The HP 128 GB Solid State Drive is compatible with the HP Compaq 6000 Pro MT, HP Compaq 6000 Pro SFF, HP Compaq 4300 Pro SFF, HP Compaq 4300 Pro AiO, HP Compaq 6005 Pro MT, HP Compaq 6005 Pro SFF, HP Compaq 6005 Pro USDT, HP Compaq 6200 Pro MT, HP Compaq 6200 Pro SFF, HP Compaq 6300 Pro MT, HP Compaq 6300 Pro SFF, HP Compaq 6300 Pro AiO, HP Compaq 8200 Elite SFF, HP Compaq 8200 Elite CMT, HP Compaq 8200 Elite MT, HP Compaq 8200 Elite USDT, HP Compaq 8300 Elite SFF, HP Compaq 8300 Elite CMT, HP Compaq 8300 Elite MT, HP Compaq 8300 Elite USDT, HP Compaq 8300 Pro AiO, HP Compaq 6305 Pro MT, HP Compaq 6305 Pro SFF, HP TouchSmart 9300 Elite, HP rp5800 Retail System, HP ap5000 Retail System, and HP RP7 Retail System.

The HP 80 GB, and 160 GB Solid State Drives are compatible with the HP Compaq 6000 Pro Small Form Factor and Microtower PC, the HP Compaq 6005 Pro Small Form Factor, Microtower and Ultra-slim Desktop PCs, the HP Compaq 6200 Pro Small Form Factor and Microtower PC, the HP Compaq 8000 Elite Convertible Minitower, Small Form Factor and Ultra-slim Desktop PCs, HP Compaq 8000f Elite Ultra-slim Desktop PC, the HP Compaq 8100 Elite Convertible Minitower and Small Form Factor Desktop PCs, the HP Compaq 8200 Elite Convertible Minitower, Microtower, Small Form Factor and Ultra-slim Desktop PCs, and the HP TouchSmart 9300 Elite Business PC.

NOTE: Please check this product's web page on HP.com for current compatibility information.

NOTE: Not all solid state drive models are available in all regions.

NOTE: Use of HP System Software Recovery Disks (SSRD) is not supported on 80GB or 128GB SSD models due to minimum image size requirements (>=140GB) for the SSRD.

Operating Systems supported: Windows 8 Pro (160-GB SSD only), Windows 8 (160-GB SSD only), all 32-bit and 64-bit versions of Microsoft Windows 7*, Vista** and XP*. No driver is required for this device. Native support is provided by the operating system.

* This system may require upgraded and/or separately purchased hardware and/or a DVD drive to install the Windows 7 software and take full advantage of Windows 7 functionality. See <http://www.microsoft.com/windows/windows-7/> for details.

** Certain Windows Vista product features require advanced or additional hardware. Windows Vista Upgrade Advisor can help you determine which features of Windows Vista will run on your computer. To download the tool, visit: <http://www.windowsvista.com/upgradeadvisor>. For Windows Vista system requirements, visit: <http://www.windowsvista.com/systemrequirements>.

Overview

Service and Support

Your Option Limited Warranty is a one (1) year (HP Option Limited Warranty Period) parts replacement warranty on any HP-branded or Compaq-branded options (HP Options). If your HP Option is installed in an HP Hardware Product, HP may provide warranty service either for the HP Option Limited Warranty Period or the remaining Limited Warranty Period of the HP Hardware Product in which the HP Option is being installed, whichever period is the longer but not to exceed three (3) years from the date you purchased the HP Option.

Technical Specifications

SATA 3GB/second Interface Drives

80 GB Solid State Drive	Unformatted Capacity*	80 GB
	Architecture	Multi Level Cell (MLC) NAND Flash with wear leveling 10 channel controller
	Interface type	SATA 3Gb/sec
	Dimensions-external (W x H x D)	2.74 x 0.37 x 4 in (6.98 x 0.95 x 10.2 cm)
	Weight	0.18 lb (80 g)
	Bandwidth Performance	Sustained Sequential Read Up to 250 MB/s
		Sustained Sequential Write Up to 70 MB/s
	Bandwidth Performance	Random Read (4KB) up to 35K IOPs
		Random Write (4KB) up to 6.6K IOPs
	Latency	Read 65 ms
		Write 85 ms
	Power	DC power requirement 5 VDC 5%-100 mV ripple p-p
		Total power consumption 0.15 Watt (Active); 0.075 Watt (Idle)
	Useful drive life	5 years 35TB written, up to 20GB/day for 5 years
	Environmental (all conditions, non-condensing)	Temperature (operating) 32° to 158° F (0° to 70° C)
		Relative Humidity (operating) 5% to 95%
		Maximum Wet Bulb Temperature (operating) 84° F (29° C)
		Shock (operating) 1,500 G/0.5 msec
	Regulations	UL, CSA, EN 60950-2000, CISPR Pub 22 Class B, CNS 13438, AS/NZS CISPR 22:2002 Class B, R1113 and C1172 Class B
	Option kit contents	HP 80 GB Solid State Drive, documentation, 3.5-inch bay adapter bracket, 3.5-inch bay adapter bracket screws

* For solid state disk drives, GB means 1 billion bytes. 80GB is the unformatted capacity of this drive before a portion of the drive is reserved for flash management features. Actual capacity will vary by content

Technical Specifications

160 GB Solid State Drive	Unformatted Capacity*	160 GB	
	Architecture	Multi Level Cell (MLC) NAND Flash with wear leveling 10 channel controller	
	Interface type	SATA 3Gb/sec	
	Dimensions-external (W x H x D)	2.74 x 0.37 x 4 in (6.98 x 0.95 x 10.2 cm)	
	Weight	0.18 lb (80 g)	
	Bandwidth Performance	Sustained Sequential Read	Up to 250 MB/s
		Sustained Sequential Write	Up to 70 MB/s
	Bandwidth Performance	Random Read (4KB)	up to 35K IOPs
		Random Write (4KB)	up to 6.6K IOPs
	Latency	Read	65 ms
		Write	85 ms
	Power	DC power requirement	5 VDC 5%-100 mV ripple p-p
		Total power consumption	0.15 Watt (Active); 0.075 Watt (Idle)
	Useful drive life	5 years	35TB written, up to 20GB/day for 5 years
	Environmental (all conditions, non-condensing)	Temperature (operating)	32° to 158° F (0° to 70° C)
		Relative Humidity (operating)	5% to 95%
		Maximum Wet Bulb Temperature (operating)	84° F (29° C)
		Shock (operating)	1,500 G/0.5 msec
	Regulations	UL, CSA, EN 60950-2000, CISPR Pub 22 Class B, CNS 13438, AS/NZS CISPR 22:2002 Class B, R1113 and C1172 Class B	
	Option kit contents	HP 160 GB Solid State Drive, documentation, 3.5-inch bay adapter bracket, 3.5-inch bay adapter bracket screws	

* For solid state disk drives, GB means 1 billion bytes. 160GB is the unformatted capacity of this drive before a portion of the drive is reserved for flash management features. Actual capacity will vary by content

Technical Specifications

SATA 6GB/second Interface Drives

128 GB Solid State Drive	Unformatted Capacity*	128 GB
	Architecture	Multi Level Cell (MLC) NAND Flash
	Interface type	SATA 6GB/sec
	Dimensions-external (W x H x D)	2.75 x 0.276 x 3.96 in (6.985 x 0.7 x 10.05 cm)
	Weight	0.16 lb (73 g) max
	Bandwidth Performance	Sustained Sequential Read Up to 450 MB/s
		Sustained Sequential Write Up to 260 MB/s
	Bandwidth Performance	Random Read (4KB) up to 46K IOPs
		Random Write (4KB) up to 56K IOPs
	Latency	Read 55µs (TYP)
		Write 55µs (TYP)
	Power	DC power requirement Min 4.5 V; Max 5.5 V
		Total power consumption 160 mW (Active) ; <85 mW; (Idle)
	Useful drive life	MTBF 1.2 million device hours**
	Environmental (all conditions, non-condensing)	Temperature (operating) 32° to 158° F (0° to 70° C)
		Relative Humidity (operating) 5% to 95%
		Shock (operating) 1,500 G/1.0 msec
	Regulations	UL, CSA, EN 60950-2000, CISPR Pub 22 Class B, CNS 13438, AS/NZS CISPR 22:2002 Class B, Korea KCC, CE Mark
	Option kit contents	HP 128 GB Solid State Drive, documentation, 3.5-inch bay adapter bracket, 3.5-inch bay adapter bracket screws, SATA cable

* For solid state disk drives, GB means 1 billion bytes. 128GB is the unformatted capacity of this drive before a portion of the drive is reserved for flash management features. Actual capacity will vary by content

** The product achieves a mean time between failure (MTBF) based on population statistics not relevant to individual units.

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