Hewlett Packard Enterprise Центр поддержки HPE

HPE 24 Bay 3Gb SAS Expander Card - Overview

Product description

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Product description

The HPE Smart SAS Expander Card enhances the Smart Array controller family by allowing support for more then 8 internal hard diskdrives on select ProLiant servers when connected to a Smart Array P410 Controller (SA-P410) or Smart Array P410i Controller (SAP410i).The full height, Serial Attached SCSI (SAS) expander card supports up to 24 internal drive bays plus an external connectionfor tape. The HPE SAS Expander Card is ideal for ProLiant server user that want to RAID more than 8 internal hard disk drives orfor ProLiant server user who purchase an additional internal drive cage and want to be able to RAID across all internal drives.

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Product features

Feature	Description
Model	Option part number - 468406-B21 Spare part number - 487738-001
The Smart Array advantage	HPE's innovative design and integration work of the Smart Array family of products, including the HPE SAS Expander Card connected to a SA-P410 or SA-P410i Controller creates user value that is unmatched in the industry. Use of Smart Array products across multiple applications results in a much lower Total Cost of Ownership (TCO) than any other server storage RAID product. The HPE Smart Array family brings an unparalleled return on investment through: • **Data compatibility** among all models of Smart Array controllers allows simple and easy upgrades anytime needs for higher performance, capacity, and availability increase. Even successive generations of Smart Array controllers understand the data format of other Smart Array Controllers. • **Consistent configuration and management tools**. All Smart Array products utilize a standard set of management and utility software. These tools minimize TCO by reducingtraining requirements and technical expertise necessary to install and maintain the HPE server storage. • **Universal hard drive** form factor is for use across multiple HPE servers, disk enclosures and storage systems. With compatibility across many enterprise platforms, user are free to deploy and re-deploy these drives to quickly deliver increased storage capacity, migrate data between systems, and easily manage spare drives. • **Pre-Failure warranty** means HPE Insight Manager not only reports when a drive is going to fail but allows replacement of failing drives prior to actual failure. For complete details, consult the HPE Support Centeror refer to HPE Server documentation. • Smart Array Advanced Pack (SAAP) delivers value added software features with the Smart ArrayController, which will further enhance performance, reliability, and availability of user data.
Key features	• 3 Gb/s SAS technology delivers high performance and data bandwidth up to 300 MB/s perphysical link and contains full compatibility with 1.5 Gb/s SATA technology. (6 Gb/s SAS and 3Gb/s SATA capable with future firmware upgrade will allow for data bandwidth up to 600 MB/sper physical link.) • Mix-and-match SAS and SATA hard drives, lets user deploy drive technology as needed to fit your computing environment. • Supports up to 24 internal drive bays plus an external connection for tape (Supports 3 drivebackplanes with each holding 8 drive bays)
Management features	Upgradeable firmware via HPE firmware CD or Click here to view Enterprise Support .

Ports	• 24 internal drive bays plus external port for tape
	• 8 Mini SAS 4i ports
	• 2 Mini SAS 4i ports intended for attachment to the Smart Array controller (e.g. P410 or P410i)
	  ○ 3 Gb/s SAS bandwidth = 2400 MB/s
	  ○ 6 Gb/s SAS bandwidth = 4800 MB/s (available with future firmware upgrade)
	• 6 Mini SAS 4i ports intended for attachment to server drive back planes
	  ○ Supports up to 24 drive bays (3 drive back planes with each holding 8 drive bays)
	• 1 Mini SAS 4x port
	  ○ Intended for attachment to a SAS tape drive, autoloader, or library
	  ○ 3 Gb/s SAS bandwidth = 1200 MB/s
	  ○ 6 Gb/s SAS bandwidth = 2400 MB/s (Available with future firmware upgrade)

Performance	HPE's High Performance Architecture sets new boundaries of industry performance expectations: • 3 Gb/s SAS (300 MB/s bandwidth per physical link) (6 Gb/s SAS capable) • 1.5 Gb/s SATA (150 MB/s bandwidth per physical link) (3 Gb/s SATA capable)

Feature	Description
Capacity	Given the increasing need for high performance and rapid capacity expansion, the SAS Expander Cardand the SA-P410 or SAP410i Controller offers: • Up to 14TB of total storage with 14 x 1TB 3.5-inch SATA MDL HDD • Up to of 7.2TB total storage with 24 x 300GB 3G SAS 10K SFF DP ENT HDD
Fault recovery	The HPE SAS Expander Card helps to minimize downtime. • **Recovery ROM:** This feature protects the user from a firmware image corruption by storing aredundant copy of the firmware image. If the active firmware image becomes corrupt, the controller will use the redundant firmware image and continue operating.
Server compatibility	ProLiant DL (Rack-optimized): • HPE ProLiant DL170e G6 • HPE ProLiant DL370 G6 • HPE ProLiant DL380 G6 • HPE ProLiant DL380 G7 • HPE ProLiant DL385 G5p • HPE ProLiant DL385 G6 • HPE ProLiant DL385 G7 • HPE ProLiant DL580 G5 • HPE ProLiant DL785 G5 • HPE ProLiant DL785 G6 ProLiant ML (Expansion-optimized): • HPE ProLiant ML350 G6 • HPE ProLiant ML370 G6 **NOTE:** End user needs to order 8 in Mini SAS to Mini SAS cables (496012-B21) when connecting the Smart Array P410 controller to a SAS expander card in a G6 server or ProLiant DL385 G5p. The 8 in Mini Sas To Mini SAS cables are not needed when connected the Smart Array P410i Controller to a SAS Expander Card in a G6 server or ProLiant DL385 G5p.
Operating systems	• Microsoft Windows 2003 x64 Edition • Microsoft Windows 2003 x86 Edition • Microsoft Windows 2008 Server x64 • Microsoft Windows 2008 Server x86 • Microsoft Window Vista Enterprise • Novell Open Enterprise Server, NetWare 6.5 • Oracle Enterprise Linux (OEL) • Red Hat Enterprise Linux 4, 5 (x64 and x86) • SUSE Linux Enterprise Server 9 (x64 and x86) • SUSE Linux Enterprise Server 10 (x64 and x86) • SUSE Linux Enterprise Server 11 (x64 and x86) • VMWare • UnixWare

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Link to product specification

Click here to view HPE 24 Bay 3Gb SAS Expander Card specification .

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Link to warranty information

Click here to check the warranty status .

Click here for detailed information regarding worldwide limited warranty and technical support .

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Link to product related documents

Click here to view the list of product related documents .

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