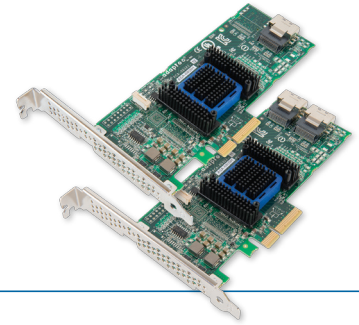


# Adaptec PCIe Gen2 6Gb/s SAS and SATA HBA Family (6405H, 6805H)



## 4- and 8-port PCIe Gen2 HBAs offer broad device compatibility, scalability, and flexibility

The Series 6H family of Adaptec by PMC SAS/SATA host bus adapters (HBA) offers the ideal economical solution for customers requiring high-performance I/O connectivity.

The HBAs connect to hard disk drives (HDDs), solid-state drives (SSDs), removable media, and SAS tape drives, and support the migration of disks from onboard SATA interfaces or other SATA/SAS I/O controllers.

### Flexible, Scalable, Customizable

Using PMC's PM8001 SAS protocol controller and a PCIe Gen2 interface, Series 6H HBAs support both Serial Attached SCSI (SAS) and Serial ATA (SATA) interfaces to provide the flexibility to use cost-effective, high-capacity SATA drives and/or high-performance SAS drives.

Compatibility with a multitude of storage devices enables system builders to develop server, storage, and backup solutions tailored to meet specific customer needs.

Series 6H HBAs also support SAS expanders, allowing end users to scale-up and design an optimal price-per-drive solution.

Series 6H HBAs feature a form factor shorter than low-profile MD2, enabling easy installation and cable connections in dense server environments where space is at a premium.

The PCIe x4 bus expands connectivity from high-end servers into workstation-class and industrial PC systems. Up to 8 SAS ports allow for maximum I/O throughput, and the OS drivers use MSI-X to leverage all available host CPU cores to achieve maximum performance.

### Broad Operating System Support

Extensive operating system support includes major software releases for Windows 8, Windows 7, Windows Server 2012, Windows 2008R2 & SBS 2011, VMware 5.x, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, Ubuntu Linux, Debian Linux, and FreeBSD.

### Compatibility, Reliability, and Support

Series 6H HBAs have been extensively tested with third-party systems and devices to deliver the utmost in compatibility. These HBAs are equipped with both uEFI and legacy BIOS options as well as a CTRL-A configuration utility and HII-based BIOS tools.

Series 6H HBAs are backed by a three year warranty and the company's technical support team.

### Product Highlights

- Designed to meet individual performance and budget needs
- 6Gb/s throughput at each port
- Supports SAS and SATA HDDs, SSDs and SAS tape drives
- PCIe Gen2 x4 host interface
- Shorter than low-profile MD2 form factor
- Connectors out the back allow for easy cable connections
- Up to 280,000 IOPS @ 4KB block size
- Up to 1600 MB/s sequential throughput (64KB blocks)
- Support for SAS expanders supporting up to 128 devices
- Enclosure management support via LED header and SES2/SGPIO
- Driver support for Windows, VMware and Linux

# Adaptec PCIe Gen2 6Gb/s SAS and SATA HBA Family (6405H, 6805H)

Adaptec Series 6H Family							
<b>Why to buy?</b>	Cost effective I/O solution supporting SAS and SATA HDDs, SSDs, removable media, SAS tape drives.						
<b>Customer Needs</b>	I/O connectivity offers broad compatibility, support for SAS expanders, and enclosure management; flexibility to install SAS and SATA drives.						
<b>Features</b>	<ul style="list-style-type: none"> <li>– Four (6405H) or eight (6805H) 6Gb/s ports</li> <li>– PMC PM8001 SAS protocol controller supports SAS and SATA HDDs, SSDs and SAS tape drives</li> <li>– Up to 280,000 IOPS at 4KB block size</li> <li>– Up to 1600 MB/s sequential throughput (64KB blocks)</li> <li>– Support for SAS expanders</li> <li>– Enclosure management support via LED header and SES2/SGPIO</li> <li>– PCIe Gen2 x4 host interface</li> <li>– Shorter than Low-profile MD2 form factor</li> </ul>						
<b>Management Utilities</b>	<table border="0"> <tr> <td>Adaptec BIOS Configuration Utility (ACU)</td> <td>Adaptec uEFI BIOS Configuration Utility</td> </tr> <tr> <td>– Legacy configuration utility</td> <td>– HII based configuration utility</td> </tr> <tr> <td>– Flashable BIOS support</td> <td>– Flashable BIOS support</td> </tr> </table>	Adaptec BIOS Configuration Utility (ACU)	Adaptec uEFI BIOS Configuration Utility	– Legacy configuration utility	– HII based configuration utility	– Flashable BIOS support	– Flashable BIOS support
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– Legacy configuration utility	– HII based configuration utility						
– Flashable BIOS support	– Flashable BIOS support						
<b>Operating Systems</b>	Windows 8, Windows 7, Windows Server 2012, Windows 2008R2, SBS 2011, Storage Server, Red Hat Enterprise Linux, Debian Linux, FreeBSD, VMware, SUSE Linux Enterprise Server, and Ubuntu Linux. The latest drivers are available at <a href="http://www.adaptec.com/support">www.adaptec.com/support</a> .						
<b>Physical Dimensions</b>	2.535"H x 6.095"L (64mm x 155mm)						
<b>Operating Temperature</b>	0°C to 55°C with 200 LFM airflow						
<b>Operating Current</b>	0.09A@3.3V and 0.7A@12V						
<b>Regulatory Certification</b>	FCC, C-tick, CE, VCCI, CNS, KCC, UL, BSMI						
<b>MTBF</b>	2,000,000 hours at 40°C						
<b>Warranty</b>	3 years						
<b>Accessories</b>	Serial Attached SCSI (SAS) cables ( <a href="http://www.adaptec.com/cables">www.adaptec.com/cables</a> )						

Adaptec by PMC HBA	ASA-6405H	ASA-6805H
<b>Order Part Number</b>	2278000-R (Single)	2277900-R (Single)
<b>Form Factor</b>	MD2- Low Profile 2.535"H x 6.095"L	MD2- Low Profile 2.535"H x 6.095"L
<b>Ports</b>	4 Internal	8 Internal
<b>Connectors</b>	1 SFF-8087 (Internal)	2 SFF-8087 (Internal)
<b>Host Bus Interface</b>	4-Lane PCIe Gen2	4-Lane PCIe Gen2
<b>Processor</b>	PMC PM8001	PMC PM8001



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