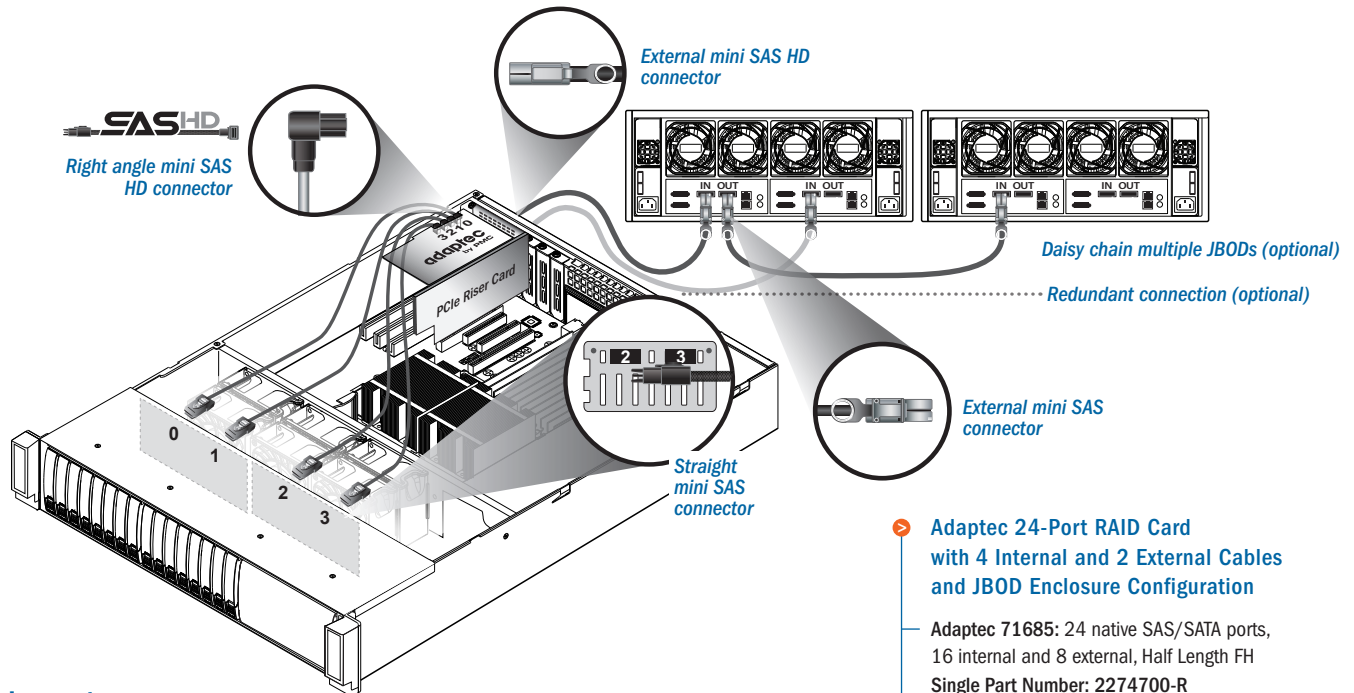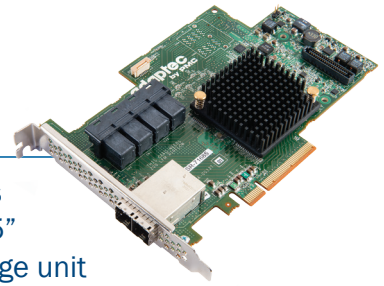# Adaptec 71685 in 2U Chassis

Adaptec 71685 board in riser card with right angle mini SAS HD cable connectors and external cable connector in a generic 2U chassis with 16 storage bays for 2.5" drives with backplanes with mini SAS connectors and an external rackmout storage unit

External mini SAS HD connector

Right angle mini SAS HD connector

Daisy chain multiple JBODs (optional)

Redundant connection (optional)

PCIe Riser Card

External mini SAS connector

Straight mini SAS connector

Requirements:

2U chassis are one of the most common rack-mount configurations because of the low profile footprint, and the industry's adoption of 2.5-inch Small Form Factor (SSF) drives for maximum storage capacity. For the most storage intensive applications, external JBOD rack mount systems are also a key component of this configuration. This presents some challenges for RAID adapter cards with respect to:

(1) Height of the boards
(2) Limited performance of a PCIe Gen3 RAID card with only 8 ports
(3) Cables with straight connectors
(4) Expander modules/expander backplanes

Adaptec by PMC Series 7 RAID Solution:

- The Adaptec 24-port RAID adapter, a Half length FH card, easily plugs into a PCI Gen3 slot, with 200 FLP airflow with a PCIe riser card and delivers maximum performance for up to 24 drives without the need of an expander.

- Two external connectors allow for a redundant connection to JBOD (optional). Option to daisy chain multiple JBODs is also possible.

- Adaptec's new right-angle connectors are an ideal solution; the straight connector cables can also be used in this configuration. For more information on SAS HD cables visit: www.adaptec.com/cables

The illustration above is specific to an Adaptec RAID adapter with 16 internal and 8 external ports. If no external JBOD system is required, Adaptec Series 7 also has an adapter configuration with 24 internal ports. You will find that integration guide at: http://www.adaptec.com/en-us/_common/compatibility/

Adaptec 24-Port RAID Card with 4 Internal and 2 External Cables and JBOD Enclosure Configuration

Adaptec 71685: 24 native SAS/SATA ports, 16 internal and 8 external, Half Length FH
Single Part Number: 2274700-R

Adaptec ACK-I-rA-HDmSAS-mSAS-.8M is an internal "right angle" Mini Serial Attached SCSI HD x4 (SFF-8643) to Mini Serial Attached SCSI x4 (SFF-8087) cable. **Part Number: 2280200-R**

The Adaptec ACK-I-HDmSAS-mSAS-1M is an internal Mini Serial Attached SCSI HD x4 (SFF-8643) to Mini Serial Attached SCSI x4 (SFF-8087) cable. It measures 1 meter and is used for connecting a SAS/SATA adapter to a SAS/SATA backplane. **Part Number: 2279700-R**

The Adaptec ACK-E-HDmSAS-mSAS-2M is an external Mini Serial Attached SCSI HD x4 (SFF-8644) to Mini Serial Attached SCSI x4 (SFF-8088) cable. It measures 2 meters. **Part Number: 2280300-R**

HDDs and SDDs – check the compatibility guide at http://www.adaptec.com/en-us/_common/compatibility/

Adaptec Flash Module 700 (AFM-700) Optional: Add-on super capacitor module for maintenance-free cache protection with real-time monitoring.

71685IntegGuide_112712_US   Information subject to change without notice.