

mAGE424U40-PCI-E-EXP

4U 24-bay PCI-e rackmount RAID Chassis
with PCI-E Slot Expander

Installation Guide





Overview

Being built based on the newest PCI-e architecture. The creative design allows the chassis to be either PCI-e slot expandable or capacity expandable. And the chassis is compatible with both SAS and SATA hard drives.

Package Check List

- A** Enclosure x 1
- B** HDD Tray x 24 (Installed in chassis)
- C** PCI-e x8 Host Adaptor x1
- D** PCI-e x8 cable(1.5meter) x1
- E** Internal miniSAS(SFF8087) to miniSAS(SFF8087), 30cm x6
- F** Power Cord x 3
- G** Hard Drive Mounting Screw x 96
- H** Key for HDD tray x 2

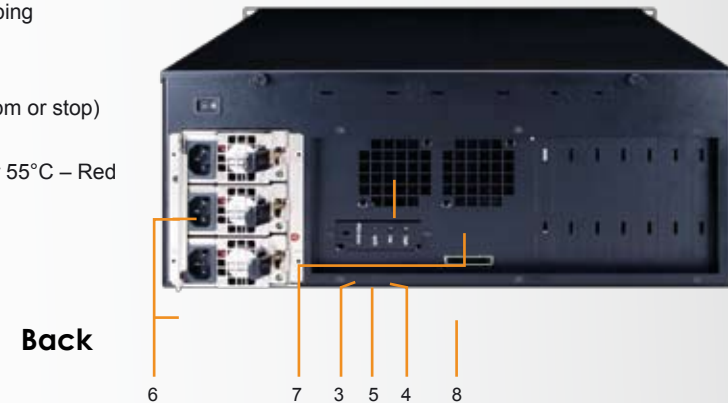


Description of Panel Layout



Front Panel

- 1. HDD Power LED**
- 2. HDD Status LED**
- 3. Mute Button**
Reset for Buzzer Beeping
- 4. Fan Status LED**
Normal – Green;
Fail – Red (too slow rpm or stop)
- 5. Temperature LED**
Normal – Green; Over 55°C – Red

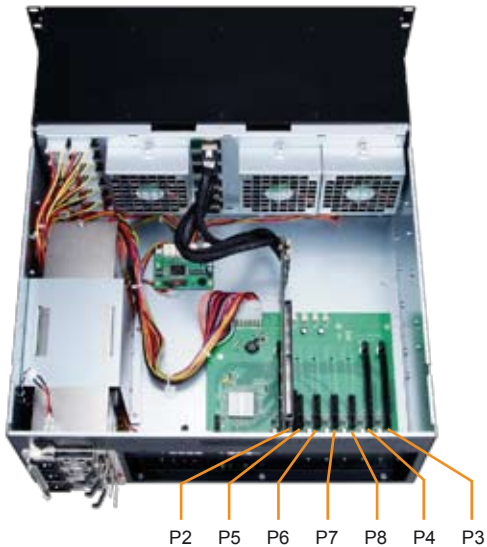


Back

- 6. Power Cord Receptacle**
- 7. How-Swappable Blower Modules**
- 8. PCI-e x8 connector**
Connecting External PCI-e cable to Host

mAGE424U40-PCI-E-EXP

Hardware Configuration



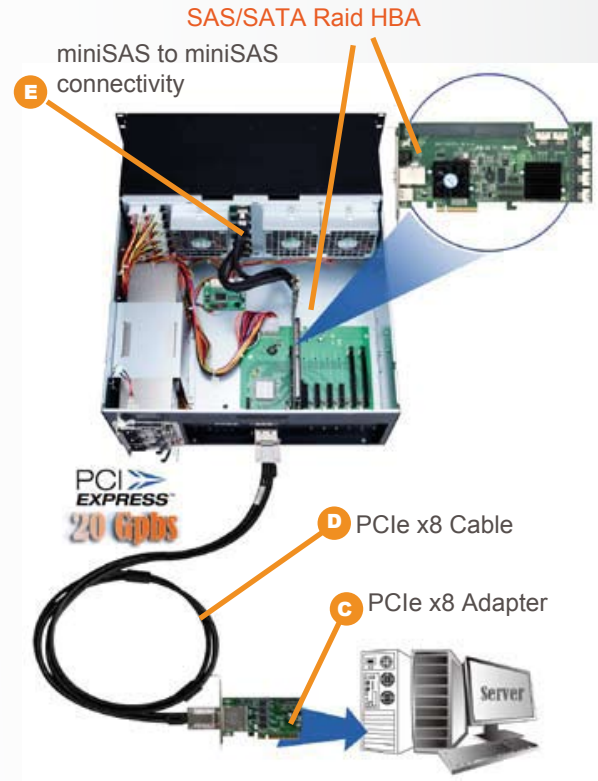
- P2: 8-Lane PCI-e Slot**
(Nearest backplane Connection, which is recommended for Raid Card)
- P3: 8-Lane PCI-e Slot**
- P4: 8-Lane PCI-e Slot**
- P5: 4-Lane PCI-e Slot**
- P6: 4-Lane PCI-e Slot**
- P7: 4-Lane PCI-e Slot**
- P8: 4-Lane PCI-e Slot**

Notice 1

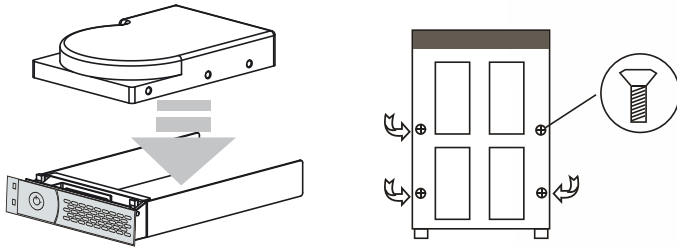
There must be at least one PCI-e (PCI Express) x8 or x16 “slot” in the HOST (Workstation or Computer). But the slot could be PCI-e x4 even it is PCI-e x8 or PCI-e x16 in appearance. Please check the User Manual of the Motherboard or server to make the specification. mAGE424U40-PCI-E-EXP could not work properly under PCI-e x4.

Build up Procedures

1. Open the chassis by removing the cover.
2. Place PCI-e x8 SAS or SATA control card (HBA) and other PCI-e cards into proper PCI-e slots of mAGE424U40-PCI-E-EXP and fix them with thumbscrews on the bracket of the cards.
3. Connect all miniSAS to miniSAS cables between the HBA and backplane. Connect the first (top) of miniSAS connector on the backplane to Channel 1~4 miniSAS connector on the HBA, the second to Channel 5~8 miniSAS connector of HBA, the third to Channel 9~12 miniSAS connector of HBA etc...



4. Close the chassis and immobilize it on the server rack or other proper place.
5. Connect the chassis and the **HOST** with PCI-e x8 cable. Then connect it with power source.
6. Take out all the trays.
7. Place all Hard Drives in the tray and fix them with Hard Drive Mounting Screws. Put them back to mAGE424U40-PCI-E-EXP.



Operation

1. Turn on the power of chassis before you turn on the power of the **HOST**.
2. After all Drives are identified by the **HOST**, please follow the operation procedure indicated by HBA.

If you have any further question, please contact your regional distributor, or iStarUSA
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Q&A

Questions and Answers

1. What if my PCI-e slots are all occupied?

Remove one of the PCI-e cards and replace it with Host Adaptor Card. Then place the removed card into mAGE424U-PCI-E-EXP. See Hardware Configuration.

2. If I move a PCI-e card from Workstation (Host) to mAGE424U40-PCI-E-EXP, will it work well and how do I install the driver?

Yes, don't worry. It will work in mAGE424U40-PCI-E-EXP as well as it was in the HOST. And the installation procedure of the driver is the same.

3. According to iStarUSA's catalogue, the chassis supports SGPIO, what's that for?

When any hard drive fail occurs, the red LED indicator on that tray will light. SGPIO function will be effective while SAS/SATA Raid HBA supports SGPIO function as well. (For instance, Areca's Raid Card)

4. Why does my monitor go blue and the HOST doesn't work after I build up the system?

It's probably because the **HOST** can only offer PCI-e x4 channel, even the slot appearance is 16-Lane. mAGE424U40-PCI-E-EXP could not work properly under PCI-e x4.