

Quick Installation Guide



N2215 SAS/SATA HBA for IBM System x



Thank you for purchasing the N2215 SAS/SATA HBA for IBM® System x®. Please take a few minutes to read this quick installation guide before you install the HBA.

For more information about any topic covered in this guide, refer to the N2215 SAS/SATA HBA for IBM System x User's Guide.

Statement 1:



DANGER

Electrical current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- Connect all power cords to a properly wired and grounded electrical outlet.
- Connect to properly wired outlets any equipment that will be attached to this product.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following table when installing, moving, or opening covers on this product or attached devices.

To Connect:	To Disconnect:
1. Turn everything OFF.	1. Turn everything OFF.
2. First, attach all cables to devices.	2. First, remove power cords from outlet.
3. Attach signal cables to connectors.	3. Remove signal cables from connectors.
4. Attach power cords to outlet.	4. Remove all cables from devices.
5. Turn device ON.	

To install the HBA, follow these steps:

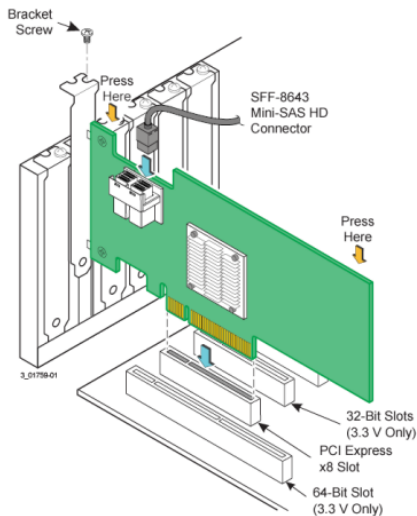
1. **Unpack the HBA, and inspect it for damage.** Unpack the HBA in a static-free environment. Touch the static-protective package that contains the HBA to any unpainted surface on the outside of the server; then, grasp the HBA by the top edge or upper corners, remove it from the package, and inspect it for damage. Contact your IBM sales representative or IBM reseller if the HBA appears to be damaged.



ATTENTION: Make a backup of your data before changing your system configuration to avoid the risk of data loss.

2. **Prepare the server.** Turn off the server, and disconnect the power cord from the rear of the power supply.
3. **Remove the cover from the chassis.**
4. **Replace the mounting bracket (system dependent).** If required for your system, replace the full-height mounting bracket that ships on the HBA with the low-profile bracket supplied. Save and reuse the two screws that attach the long bracket to attach the short bracket.

5. **Insert the HBA in an available PCIe slot.** Locate an empty x8 PCIe slot. Remove the expansion-slot cover for the selected PCIe slot. Save the bracket screw, if applicable. Align the HBA with a PCIe slot. Press down gently, but firmly, to correctly seat the HBA in the slot. The following figure shows how to insert the HBA in a PCIe slot.



NOTE: The shape, size, and locations of components on your HBA and its bracket might vary from this illustration. The controller requires a x8 PCIe slot.

6. **Secure the HBA bracket to the system chassis.** Install the bracket screw, if applicable, or engage the system retention mechanism to secure the HBA to the system chassis.
7. **Connect SAS cables between the HBA and the SAS backplane or any other SATA or SAS devices.** Connect internal mini-SAS HD cables between the HBA and the SAS backplane or any other SAS or SATA devices. The preceding figure shows the locations of the HBA connectors. The HBA has two SFF-8643, internal x4, mini-SAS HD connectors.
8. **Replace the cover and any power cords, and power on the system.** Replace the chassis cover, reconnect any power cords, and reconnect any network cables. Turn on the power.

TECHNICAL SUPPORT

For assistance installing, configuring, or using the HBA, go to <http://www.ibm.com/supportportal/>

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