

NA221A-G3

External PCIe 3.0 expansion chassis Single slot with built-in 65W power supply



User Manual

First edition, Sep. 2019

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1. Overview

Based on the latest PCIe Gen3 technology and architecture, the revolutionary design of NA221A-G3 allows high-performance PCIe add-on card to work with any host computer with PCIe slot to meet professionals' requirement for any demanding configuration in support of production. This user's manual will help you set up the Netstor NA221A-G3 enclosure with your computer system.

2. Package Checklist

Before installing the unit, verify the package contains the following items.

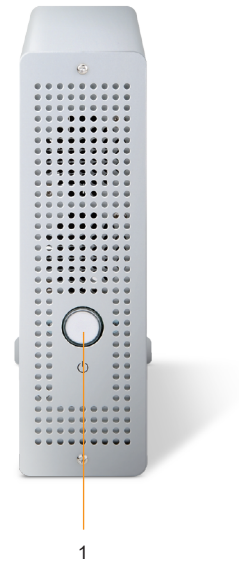
- A** Enclosure x 1
- B** PCIe 3.0 x4 host card x 1
- C** External PCIe 3.0 x4 data cable (1.5-meter) x 1
- D** Power cord x 1
- E** Carry bag x 1

Notify your sales representative if any of the above items is missing or damaged.

3. Panel Layout

1. Power-on indicator LED

- This power-on indicator LED only indicates the power status. When NA221A-G3 is powered on, it shows blue. When enclosure is powered off, it shows no light.



2. External PCIe 3.0 ×4 Port

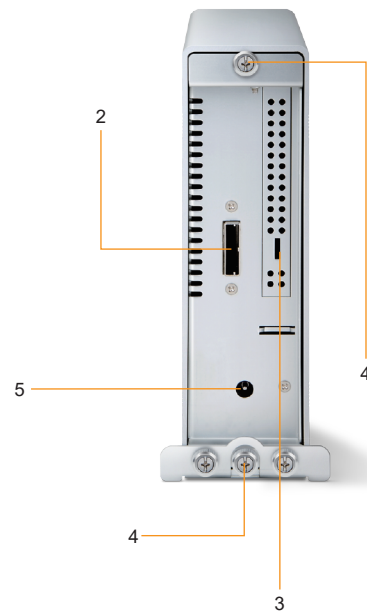
- For connecting to the host computer

3. PCIe slot for expansion

4. Thumbscrews.

- Loosening them for removing the outer casing.

5. Power cord receptacle

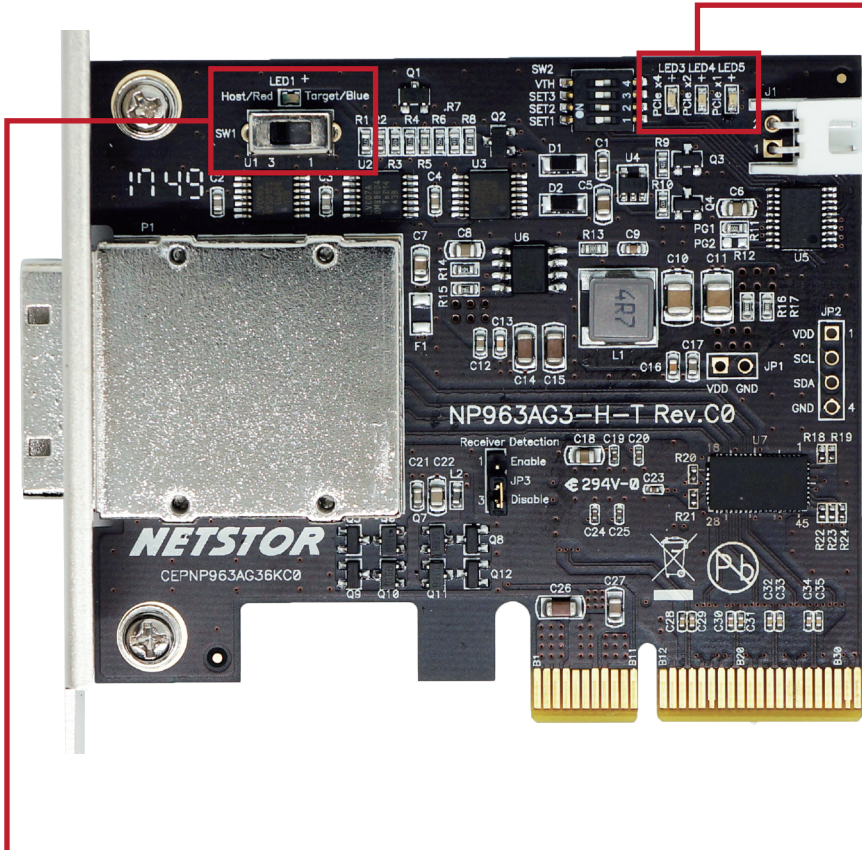


4. LED Status on Host card and Target card



LED3 ~ LED5 show solid green light: PCIe x4 connection between computer and NA221A-G3 is linked

LED3 ~ LED5 no light: PCIe connection between computer and NA221A-G3 is NOT linked



SW1 switch:

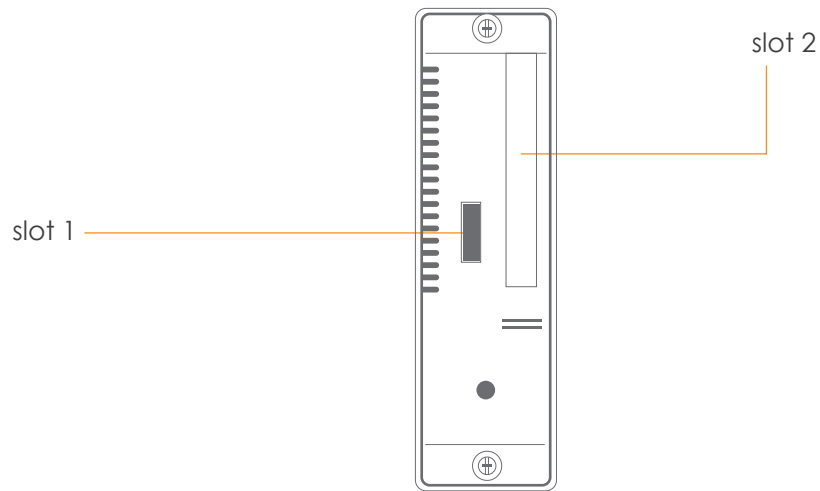


When SW1 switch is turned to the left position, the NP963AG3 card will be set as the host card. The LED1 will show red light to indicate the NP963AG3 card is configured as the host card.



As SW1 switch is turned to the right position, the NP963AG3 card will be set as the target card. The LED1 will show blue light to indicate the NP963AG3 card is configured as the target card.

5. PCIe Card Hardware Configuration



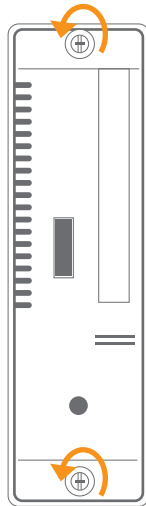
Slot 1 : PCIe 3.0 ×4 target card

Slot 2 : PCIe x16 slot (supports PCIe card x16/x8/x4/x1)

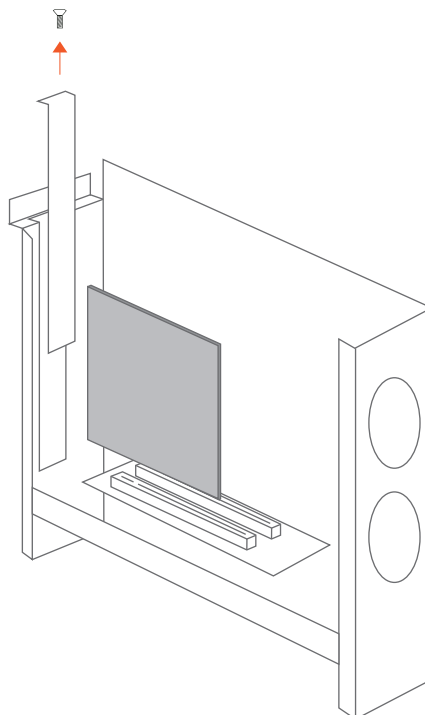
6. Installation of PCIe Add-on Card in NA221A-G3

Before proceeding to card installation procedure, disconnect NA221A-G3 from power source for prevention of electric shock or damage to PCIe add-on card.

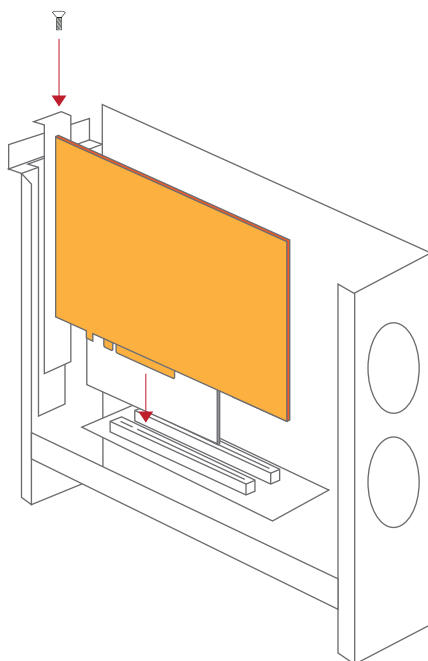
1. Loosen the thumbscrews and remove NA221A-G3 enclosure's outer casing.



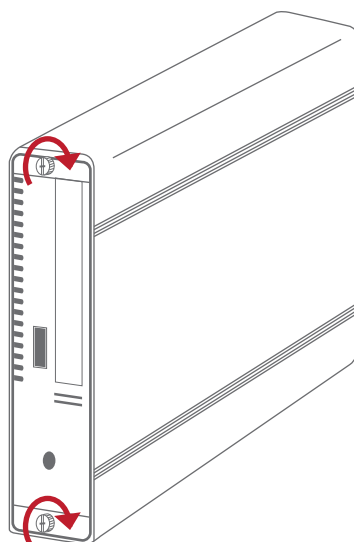
2. The PCIe slot at rear panel of NA221A-G3 is pre-covered by removable L-shape metal bracket. Loosen the screw of the removable L-shape metal bracket for PCIe add-on card installation.



3. Insert PCIe add-on card in the PCIe slot within the enclosure and tighten it with the screw on PCIe add-on card's bracket.



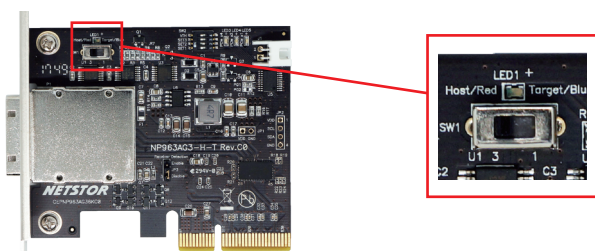
4. Restore NA221A-G3's outer casing and tighten the thumbscrews.



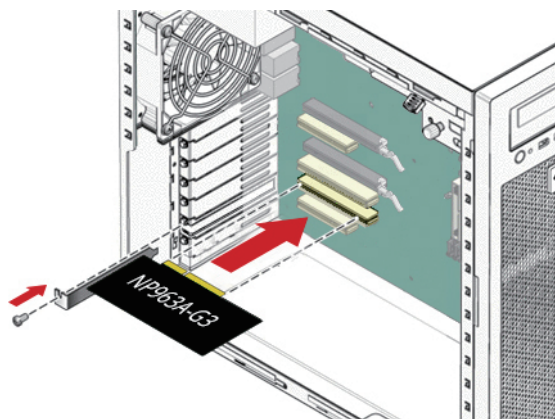
7. Installation of Netstor PCIe 3.0 ×4 Host Card in Computer

Before the installation of Netstor host card in host computer, make sure the computer is at the powered off status.

1. Open the cover of computer chassis.
2. Locate one available PCIe 3.0/2.0 ×4/x8/x16 slot on the motherboard within the computer.
3. By default, Netstor host card's SW1 switch is set to the left position for being a host card. Double check whether host card's SW1 switch is still as default as the left position. Note after powering on, the LED1 on host card will show red light to indicate it is the right configuration of being a host card.



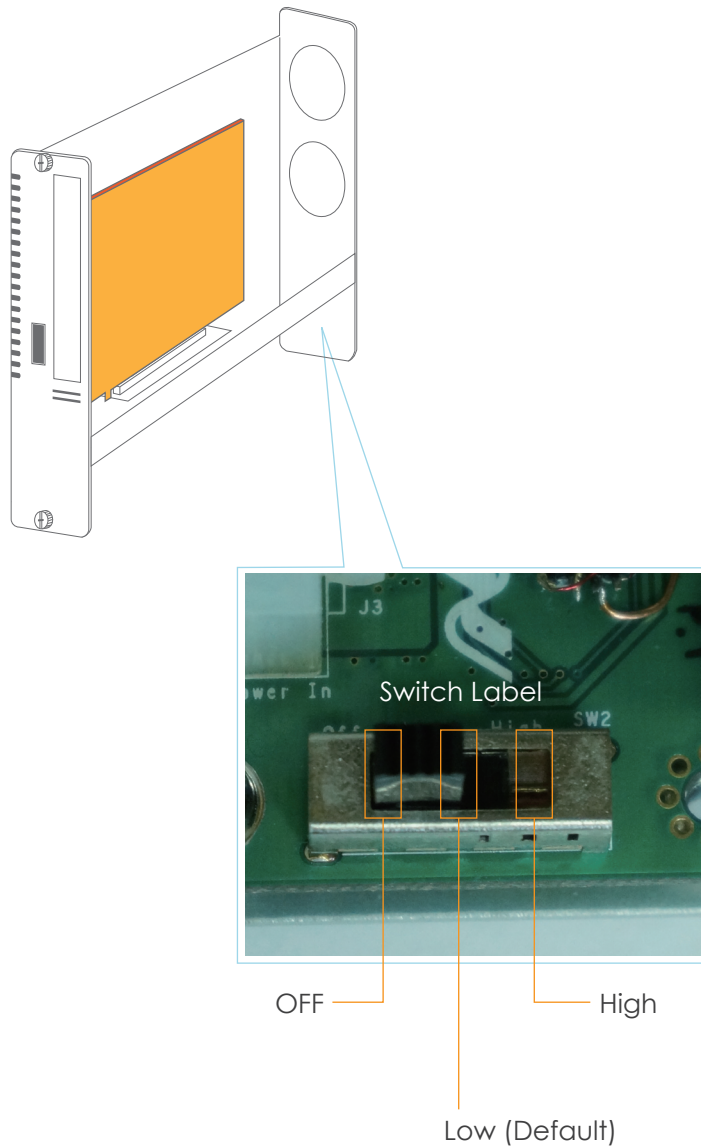
4. Install Netstor PCIe 3.0 ×4 host card in the available PCIe 3.0/2.0 ×4/x8/x16 slot in computer. Use the screwdriver to tighten the screw to host card's bracket in order to have the host card fastened to the computer chassis.



5. Restore computer chassis' cover.

8. Fan Speed Adjustment

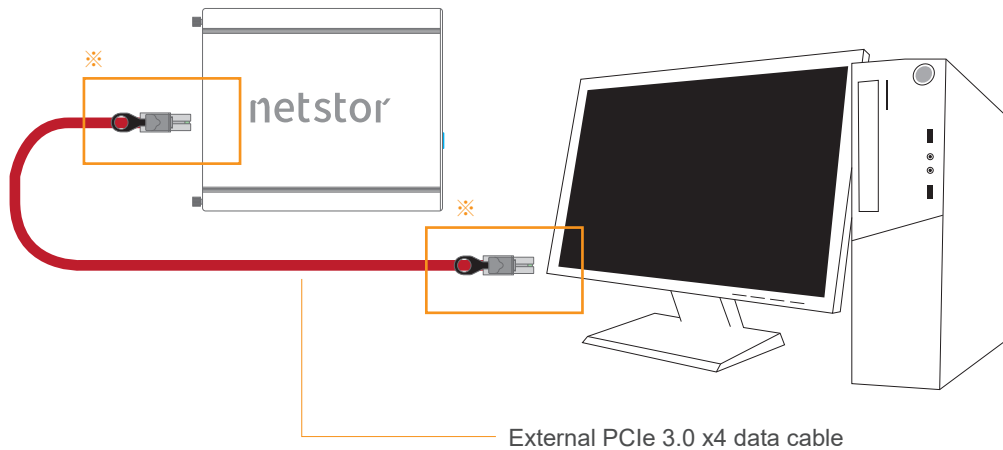
To adjust the fan speed of 4×4 cm cooling fans in the front of the NA221A-G3, remove Netstor enclosure's outer casing. At the bottom part of the PCB board that is beneath the 4×4 cm cooling fan, there is an SW2 fan speed switch with labels "Off", "Low", and "High". The default setting is set at Low for the low fan speed. Users can choose to set at Off for disabling the fan, or to set at High for the high fan speed according to their application situation.



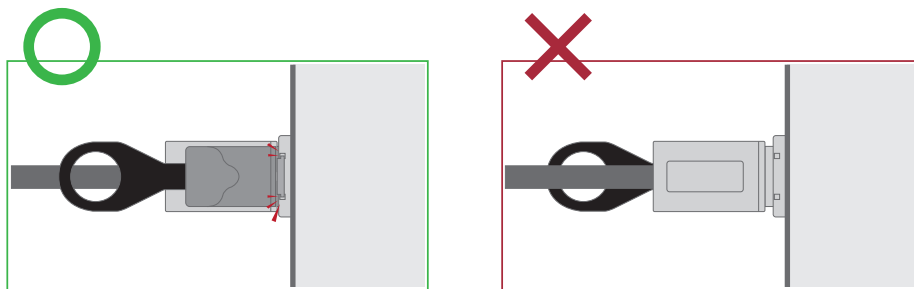
9. Operation and Verification

9.1 Windows Operating System

1. Connect NA221A-G3 chassis with power source, and then connect Netstor chassis and host computer with the included external PCIe 3.0 x4 data cable.



※ Note the ring-pull of the external PCIe x4 data cable connector must be at the same side as Nestor host card and target card's obverse side when cable is connected to the host/target card.



2. Power on the computer, and the Netstor unit will power on along automatically.
As the Netstor unit is powered on, Netstor enclosure's front power-on indicator LED will show blue light.



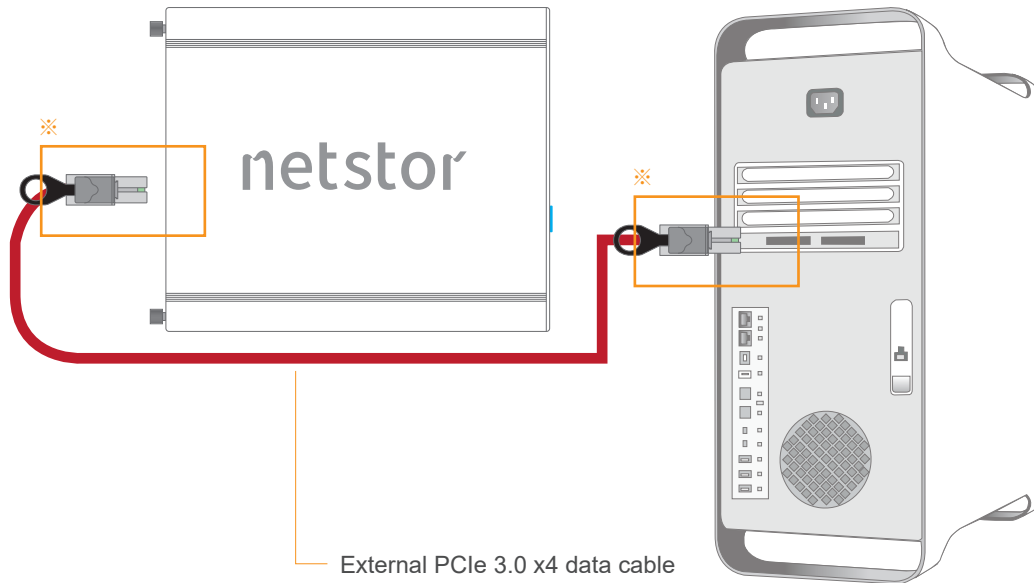
3. Verify the third-party PCIe card installed in NA221A-G3. At Windows' desktop, right click **This PC**, and select **Manage**. As window of Computer Management pops up, click **Device Manager** in the left column, click **View** at the top menu bar, and select **Devices by connection**.
4. Click **ACPI x64-based PC**, select **Microsoft ACPI-Compliant System**, and click **PCI Express Root Complex**. Open the PCI Express Root Port, and the third-party PCIe card installed in NA221A-G3 will be shown, meaning that the PCIe card in the Netstor enclosure is recognized correctly by the host computer.
5. After the Windows driver for the third-party PCIe card in NA221A-G3 is installed on the Windows operating system, the PCIe card in Netstor unit will work properly with the host computer.

Conduct the method below to turn off the system:

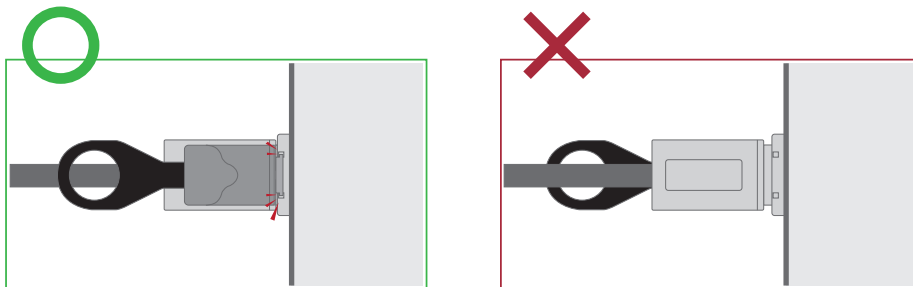
Power off the computer, and the Netstor unit will power off along automatically. As the Netstor unit is powered off, Netstor enclosure's front power-on indicator LED will not show light.

9.2 macOS

1. Connect NA221A-G3 chassis with power source, and then connect Netstor chassis and tower Mac Pro with the included external PCIe 3.0 x4 data cable.



※ Note the ring-pull of the external PCIe x4 data cable connector must be at the same side as Nestor host card and target card's obverse side when cable is connected to the host/target card.



2. Power on the computer, and the Netstor unit will power on along automatically. As the Netstor unit is powered on, Netstor enclosure's front power-on indicator LED will show blue light.
3. Verify the third-party PCIe card installed in NA221A-G3. At macOS's desktop, click the Apple icon on top left of the screen, select **About This Mac**, click **System Report**, and the System Information pane will pop up.

4. At System Information pane, click **PCI** in the left column, and the third-party PCIe card installed in the NA221A-G3 enclosure will be shown in the information area.
5. Verify the driver for the third-party PCIe card in Netstor unit is installed on macOS. As seeing the PCIe card is listed in PCI section at the last step, there will be a section **Driver Installed** indicating the status of PCIe card's driver. If it shows "No" for the status, find and install the macOS driver for the PCIe card, and then the status will become "Yes" to mean the driver of the PCIe card is installed properly.
6. After the macOS driver for the third-party PCIe card in NA221A-G3 is installed on the macOS operating system, the PCIe card in Netstor unit will work properly with the host computer.

Conduct the method below to turn off the system:

Power off the computer, and the Netstor unit will power off along automatically. As the Netstor unit is powered off, Netstor enclosure's front power-on indicator LED will not show light.

If you have any questions, please contact your regional distributor, or Netstor Technology, Taiwan.



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