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Quick Installation Guide

Gen5 x16 NVMe Switch Adapter

ARC-1389-8N

Adapter Architecture

- PCIe Gen 5.0 x16 lane host interface
- Device interface PCIe Gen 5.0 x4 M.2 slot
- In-box (native) NVMe driver support

Step 1: Unpack

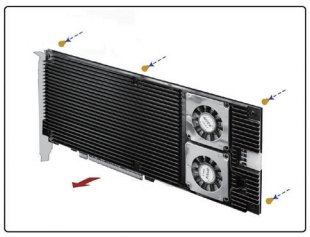
Inspect ARC-1389-8N M.2 switch adapter from the package. If it appears damaged, or if any items of the contents listed below are missing or damaged, please contact your dealer or distributor.

Checklist

- 1 x RAID adapter in an ESD-protective bag

Step 2: Mount the M.2 NVMe SSD

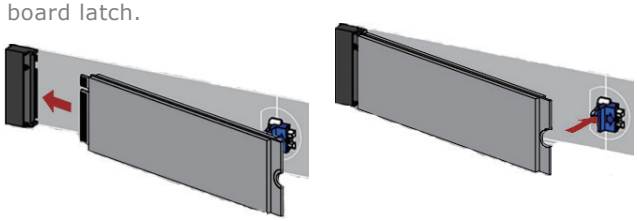
1. Remove six screws that secure unit's front heatsink and remove the blue film for M.2 NVMe from the thermal pads on the ARC-1389-8N PCB board.



2. Install the NVMe SSDs to the ARC-1389-8N.

If you use 2280 M.2 NVMe SSD...

(1) Gently insert the SSD into slot and fasten SSD with the board latch.

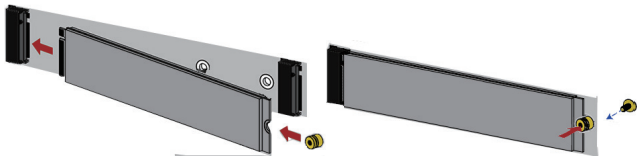


(2) Repeat steps (1) to install the remaining SSDs.

If you use 22110 M.2 NVMe SSD...

(※1) Turn the latch 90° clockwise or counterclockwise to remove board latch and also remove eight screws on the board

(※2) Gently insert the SSD into slot, meawhile put the screw into the groove and fasten the screw to secure SSD.

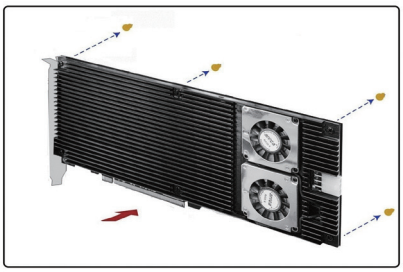


(※3) Repeat s.teps ※1 to ※2 to install the remaining SSD.

3. Install the heat sink to the ARC-1389-8N PCB board.

(1) Remove the blue film for M.2 NVMe and PCIe switch chip from the thermal pad on the heatsink.

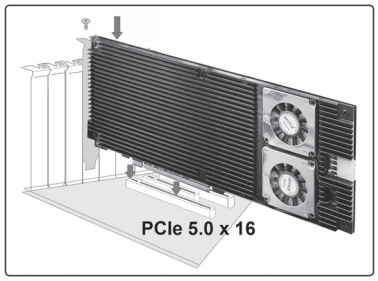
(2) Refasten six screws to secure unit's front heatsink.



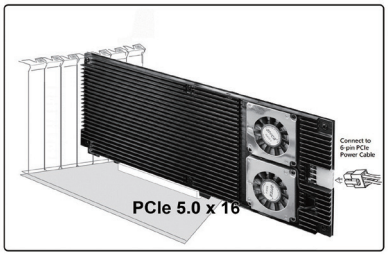
Step 3: Power PC/Server Off and Disconnect Power Cable

Step 4: Install the Switch Adapter

(1). Remove the mounting screw and existing bracket from the rear panel behind the selected PCIe 5.0 slot. Align the gold-fingered edge on the card with the selected PCIe 5.0 x16 slot. Press down gently but firmly to ensure that the card is properly seated in the slot. Then, screw the bracket into the computer chassis.



(2) Connect the 6-pin PCIe power cable to the external power connector on the right side of the ARC-1389-8N.



Step 5: Adding a CBM Backup Module (Optional)

Please refer to Appendix B of user manual.

Step 6 : Power up the System

Step 7: Install the Adapter Driver

ARC-1389-8N NVMe switch adapter uses OS NVMe host (native) driver, no driver installation needed. All major operating systems natively support native NVMe driver. User does not need to install device drivers, or software management suite. All attached M.2 NVMe SSDs on the ARC-1389-8N will be automatically recognized by the operating system. If you don't monitor information from the adapter, belows step 8 and step 9 can be ignored.

Step 8: Install ArcHTTP Proxy Server(optional)

ArcHTTP has to be installed for GUI switch console (switch storage manager) to run. It is used to launch the web browser switch storage manager. It also runs as a service or daemon in the background that allows capturing of events for mail and SNMP traps notification.

Follow the steps below to install the ArcHttp utility.

1. Download ArcHttp proxy server (or Switch software) from Areca website: *https://www.areca.com.tw/support/downloads.html*
2. Follow the steps on the user manual to complete the installation

If you need additional information about installation and start-up of this function, see the ArcHTTP Proxy Server Installation section in Chapter 4 of the user manual.

Step 9: Manage Adapter (optional)

Adapter can be monitored by using any of these tools:

- McBIOS switch Setup Utility
  — BIOS-based menus and keyboard navigation.
- Switch Storage Manager
  — Web browser firmware-based manager, which is accessible via the web browser installed on your operating system through ArcHttp utility.

※ Method 1: McBIOS Switch Setup Utility

The McBIOS switch setup utility is a menu-driven program, residing in the firmware, which allows you to scroll through various menus and sub-menus and select among the predetermined configuration options.

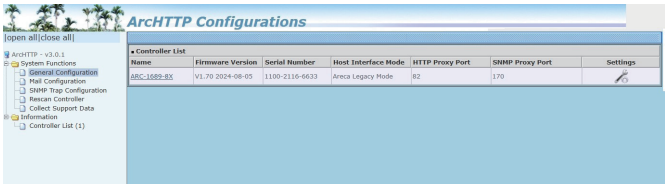
1. Enter themotherboard BIOS setup, in the boot order list,add UEFI OS to the 1st priority boot. Restart your motherboard to boot from UEFI OS.
2. When booted, the McBIOS switch setup window appears showing the main menu of the switch that are installed in the system.
3. The McBIOS switch setup utility appears showing a selection dialog box listing the switch adapters, select your adapter, then press ***Enter*** to show the switch setup utility message.
4. Follow the switch setup utility to complete the configuration.

※ Method 2: Switch Storage Manager From ArcHTTP

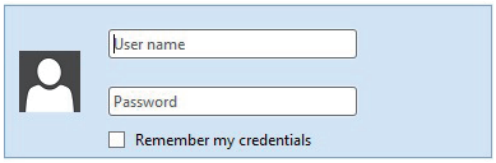
1. Start ArcHTTP– Browser Edition:
   (1) In Windows, right-click on "Start" menu and choose "Programs". Clicking "MRAID" program icon starts the ArcHTTP utility (From the Start menu, choose Programs > MRAID > ArcHTTP).
   (2) In a Linux/FreeBSD, launch your switch storage manager by entering http://[Computer IP Address]:[Port Number] in the web browser. there is one desktop

2. When you double-click on the "ArcHTTP64" or enter http://[Computer IP Address]:[Port Number], it shows all switch adapters available on the system and create an individual switch adapter icon located on right column of the "ArcHTTP Configurations" screen

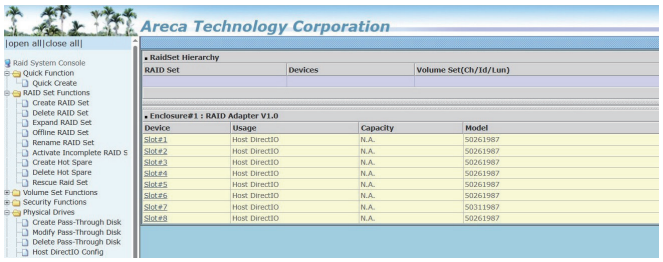
3. Locate "ARC-1389-8N Web Management" and launch the selected switch storage manager.



4. Type the User Name and Password when the login page prompt. The switch adapter default User Name is "admin" and Password is "0000". After logging in, the switch storage manager process starts.



5. Click on the "RAID Set Hierarchy" in the main menu, all M.2 NVMe devices attached on the adapter are automatically configured as Host Direct IO mode. A Host DirectIO disk is not controlled by the NVMe switch adapter firmware. The disk is available directly to the operating system as an individual disk. It is typically used on a system where the operating system is on a disk not controlled by the switch adapter firmware.



See chapter 5 of ARC-1389-8N user manual for information on using switch storage manager.

If you need more detail information, please download user manual from the website below:

- *https://www.areca.com.tw/products/nvme-1389-8n.html*
- *https://www.areca.com.tw/support/downloads.html*

ARC-1389-8N Specifications

Model Name	ARC-1389-8N
PCIe Switch	PEX89048 48 Lanes Gen5 Switch
Host Interface	PCIe 5.0 x16 Lanes
Form Factor	107.2(H) x 262(L) mm
Device Connector	8 x M.2 Connector
Max M.2 Devices Support	4 x 2280 + 4 x 22110 FF
Device Interface	Gen 5.0 x4 (NVMe)
Management Port	In-Band: PCIe
Power Loss Protection (PLP) Support	Yes
Hold-up Supercapacitor	ARC-1689-CBM (optional)
Device Driver	In-box (Native) NVMe driver
Software Package	Same as ARC-1886 Tri-Mode RAID Adapter

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