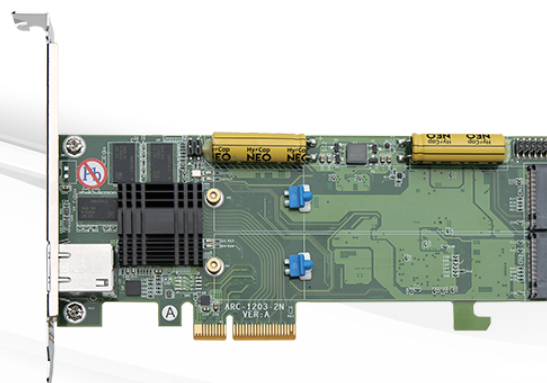# Areca ARC-1203-2N

2 Ports PCIe 2.0 x 4 to M.2 NVMe RAID Adapters

Step 1: Unpack

Inspect ARC-1203-2N RAID controller 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 bracket
· 1 x RAID Adapter in an ESD-protective bag
· 1 x ARC-1203-2N quick installation guide

Step 2: Mount the M.2 NVMe SSD

If you use 2280 M.2 NVMe SSD...
(1) Gently insert the SSD into slot and fasten SSD with the board latch
(2) Repeat step 1 to install the remaining SSDs

If you use 22110 M.2 NVMe SSD...
(※1) Turn the latch 90° clockwise or counterclockwise to remove it and also remove two 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

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

Step 4: Install the NVMe RAID Adapters

Remove the mounting screw and existing bracket from the rear panel behind the selected PCIe Express slot. Align the gold-fingered edge on the card with the selected PCIe Express 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.

Step 5: Connect Monitor Port - LAN Port

User can remote manage the ARC-1203-2N without adding any user specific software (platform independent) via standard web browsers directly connected to the Gigabit Ethernet RJ45 LAN port.

Step 6: Power up the System

Step 7: Install the Controller Driver

For NVMe Mode

ARC-1203-2N RAID adapter use OS NVMe host (native) driver, no driver installation needed.

For Areca Legacy Mode Only

For a new system:

• Driver installation usually takes places as part of operating system installation. Please refer to Chapter 4 "Driver Installation" of the user manual for the detailed installation procedure.

In an existing system:

• To install the controller driver into the existing operating system. For the detailed installation procedure, please refer to the Chapter 4 "Driver Installation" of the user manual.

Step 8: Install ArcHTTP Proxy Server (Optional)

ArcHTTP has to be installed for GUI RAID console (MRAID storage manager) to run. It is used to launch the web browser McRAID 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 MRAID 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 5 of the user manual. For SNMP agent function, please refer to Appendix C of the user manual.

Step 9: Configure RAID Set & Volume Set

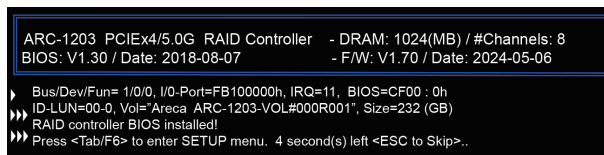You can create and configure an RAID controller using any of these tools:
• McBIOS RAID Utility
  — BIOS-based menus and keyboard navigation.
• McRAID Storage Manager
  — web browser firmware-based utility, which is accessible via the web browser installed on your operating system. It can be launched through ArcHttp utility or onboard LAN port.

※ Method 1: McBIOS RAID manager (Not For Mac User)

The McBIOS RAID manager 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. For Legacy BIOS Environment

(1). Power on your computer. When prompted, press Tab or F6 to enter the McBIOS RAID manager message.

```
ARC-1203  PCIEx4/5.0G  RAID Controller    - DRAM: 1024(MB) / #Channels: 8
BIOS: V1.30 / Date: 2018-08-07            - F/W: V1.70 / Date: 2024-05-06

  Bus/Dev/Fun= 1/0/0, I/0-Port=FB100000h, IRQ=11,  BIOS=CF00 : 0h
  ID-LUN=00-0, Vol="Areca  ARC-1203-VOL#000R001", Size=232 (GB)
  RAID controller BIOS installed!
  Press <Tab/F6> to enter SETUP menu.  4 second(s) left <ESC to Skip>..
```

(2). If you have more than one controller in your system, the McBIOS RAID manager window appears showing a selection dialog box listing the RAID controllers, select your controller, then press Enter.
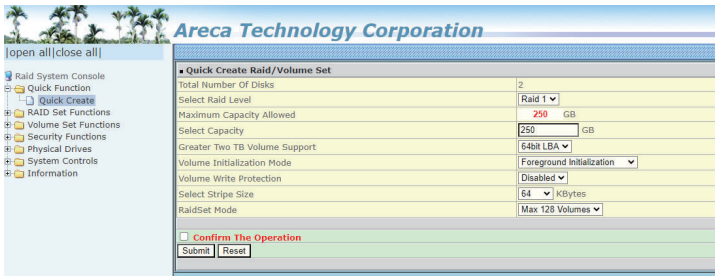(3). Follow the McBIOS RAID manager to complete the configuration.

2. For UEFI BIOS Environment

(1). Enter the Motherboard Bios Setup, in the Boot Order list, add the Areca UEFI OS in the 1st Priority Boot.
(2). For NVMe mode, you have to choose controller to enter the McBIOS RAID manager message.
(3). Follow the McBIOS RAID manager to complete the configuration.

※ Method 2: MRAID Manager Via LAN Port

User can remote manage the ARC-1203-2N without adding any user specific software (platform independent) via standard web browsers directly connected to the Gigabit Ethernet RJ45 LAN port. You can find controller Ethernet port default IP address in McBIOS RAID manager "System Information" option. Launch the Web Browser-based MRAID storage manager by entering http://[IP Address] in the web browser.

Type the User Name and Password. The RAID controller default User Name is "admin" and the Password is "0000". After entering the user name and password, click the button to access the MRAID storage manager.
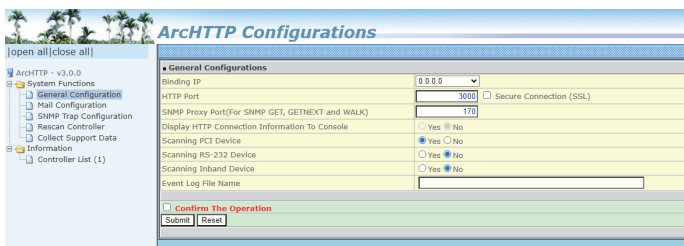

Click on the "Quick Create" in the main menu, your volume is automatically configured based on the number of disks in your system. You can create a RAID set associated with exactly one volume set.

See the chapter 6 of Web Browser-based Configuration on the user manual detailing the MRAID storage manager to customize your RAID configuration.

※ Method 3: MRAID Storage Manager Via 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) On a Mac, there is one MARID icon showing on your desktop. This icon is for you to start up the ArcHTTP utility.
2. When you double-click on the "ArcHTTP64", it shows all RAID adapters available on the system and create an individual RAID adapter icon located on left column of the "ArcHTTP Configurations" screen.
3. Locate "ARC-1203 Web Management" and launch the selected MRAID storage manager.

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

5. Click on the "Quick Create" in the main menu, your volume is automatically configured based on the number of disks in your system. You can create a RAID set associated with exactly one volume set.

The user can change the Raid Level, Capacity, Initialization Mode, and Stripe Size. Tick on the "Confirm The Operation" check box and click on the "Submit" button, the RAID set and volume set will start to initialize. If you prefer to customize your volume set, please use the "Raid Set Functions" and "Volume Set Functions". See chapter 6 of ARC-1203 user manual for information on customizing your RAID volumes using MRAID storage manager.

If you need more detail information, please download ARC-1203 user manual from the website below:

- *https://www.areca.com.tw/products/sataadapters_1203.html*
- *https://www.areca.com.tw/support/downloads.html*

Product Features	ARC-1203-2N
Form Factor	64.4(H) x 168(L) mm
I/O Processor	512MB on-board DDR3-1066 SDRAM
On-Board Cache	ARM_based 1066MHz storage I/O processor
Drive Connector	2 x M.2 connectors, PCIe 2.0 x 1
Enclosure Ready	In-Band: PCIe / Out-of-Band: LAN Port
CBM Support	Supercapacitor on-board