Areca ARC-1203 series

2/4/8 Ports PCIe 2.0 to 6Gbps SATA RAID Adapters

Step 1: Unpack

Inspect ARC-1203 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
- 2 x internal SATA cable (only for ARC-1203-2i)
- 1 x 6Gb/s SATA RAID controller in an ESD-protective bag
- 1 x ARC-1203 series quick installation guide

Step 2: Power PC/Server Off

## Step 3: Install the 6Gb/s SATA RAID Controllers

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.
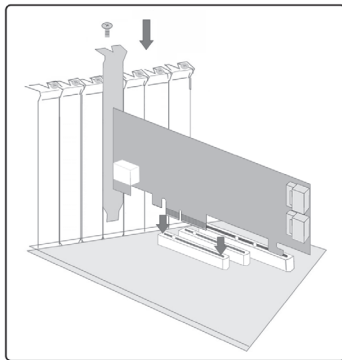
Step 4: Mount the Drives

You can connect the SATA drives to the controller through direct cable and backplane solutions. ARC-1203 SATA RAID adapters can only support up to 2/4/8 directly attached disks(without expansion capability).

Step 5: Install SATA Cable
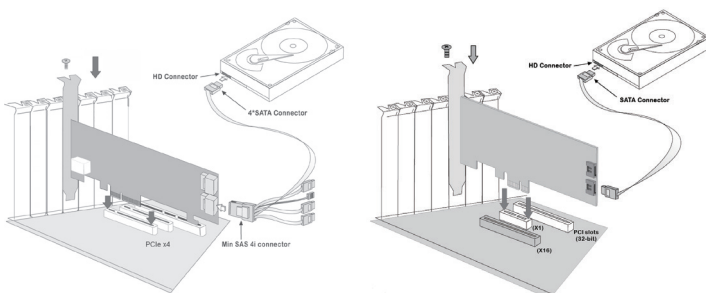
Step 6: Adding a BBM Backup Module (Optional)

Please refer to Appendix B and Appendix C of user manual.

Step 7: Connect Monitor Port - LAN Port

User can remote manage the ARC-1203-4i/8i without adding any user specific software (platform independent) via standard web browsers directly connected to the 10/100Mbit RJ45 LAN port.

Step 8: Power up the System

Step 9: Install the Controller Driver

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 10: 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 11: 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. Power on your computer. When prompted, press Tab or F6 to enter the McBIOS RAID manager message.

```
ARC-1203  PCIEx4/5G  RAID  Controller - DRAM: 1024(MB) / #Channels: 8
BIOS: V1.24 / Date: 2016-04-15 - F/W: V1.54 / Date: 2018-01-10

Bus/Dev/Fun= 4/0/0, I/0-Port=28000000h, IRQ=11,  BIOS=C800 : 0h
ID-LUN=00-0, Vol="Areca  ARC-1203-VOL#000R001", Size=3.6 (TB)
ID-LUN=00-1, Vol="Areca  ARC-1203-VOL#001R001", Size=3.6 (TB)
ID-LUN=00-2, Vol="Areca  ARC-1203-VOL#002R001", Size=3.6 (TB)
RAID controller BIOS not installed
  Press <Tab/F6> to enter SETUP menu.  9 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 SATA RAID controllers, select your controller, then press Enter.

3. Follow the McBIOS RAID manager to complete the configuration.
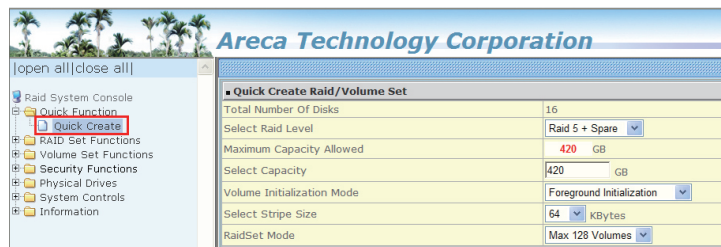
※ Method 2: MRAID Manager From LAN Port

User can remote manage the ARC-1203-4i/8i 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.

User name

Password

☐ Remember my credentials

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.

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|open all|close all|

Raid System Console
Quick Function
  Quick Create
RAID Set Functions
Volume Set Functions
Security Functions
Physical Drives
System Controls
Information

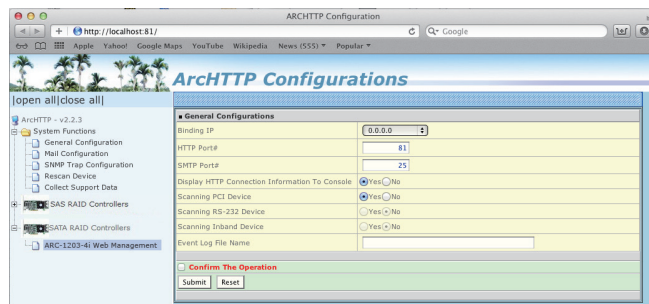| Quick Create Raid/Volume Set	
Total Number Of Disks	16
Select Raid Level	Raid 5 + Spare
Maximum Capacity Allowed	420 GB
Select Capacity	420 GB
Volume Initialization Mode	Foreground Initialization
Select Stripe Size	64 KBytes
RaidSet Mode	Max 128 Volumes

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 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) 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.

ArcHTTP Configurations

|open all|close all|

ArcHTTP - v2.2.3
System Functions
  General Configuration
  Mail Configuration
  SNMP Trap Configuration
  Rescan Device
  Collect Support Data
SAS RAID Controllers
SATA RAID Controllers
  ARC-1203-4i Web Management

General Configurations	
Binding IP	0.0.0.0
HTTP Port#	81
SMTP Port#	25
Display HTTP Connection Information To Console	●Yes○No
Scanning PCI Device	●Yes○No
Scanning RS-232 Device	○Yes●No
Scanning Inband Device	○Yes●No
Event Log File Name	

☐ Confirm The Operation
Submit Reset

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. A hot spare option is also created, depending on the exist configuration. 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.

※ Method 4: Front LCD Panel with Keypad (Optional)

You can use LCD front panel and keypad function to simply create the RAID volume. The LCD status panel also informs you of the disk array's current operating status at a glance. For additional information on using the LCD to configure the RAID controller see the LCD manual on the website. The LCD provides a system of screens with areas for information, status indication, or menus. The LCD screen displays up to two lines at a time of menu items or other information.

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-1203-2i	ARC-1203-4i	ARC-1203-8i
Form Factor	64.4(H) x 134(L) mm	64.4(H) x 168(L) mm	
I/O Processor	256MB on-board DDR3-1066 SDRAM	512MB on-board DDR3-1066 SDRAM	
On-Board Cache	ARM_based 1066MHz storage I/O processor		
Drive Support	Up to 2 / 4 / 8 x 6Gb/s SATA HDDs/SSD		
Driver Connector	2 Discrete SATA latch connector	1xSFF-8087	2xSFF-8087
Enclosure Ready	In-Band: PCIe / Out-of-Band: Push Button and LCD	In-Band: PCIe / Out-of-Band: LCD, and LAN Port	
BBM Support	ARC-6120BA-T121-12G		

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