# Thunderbolt ARC-5026 RAID Storage (Thunderbolt/USB 3.0 to 6Gb/s SATA RAID storage)

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areca At the Heart of Storage



# **Thunderbolt Technology**

Your ARC-5026 features two cutting-edge interfaces, Thunderbolt and SuperSpeed USB 3.0. Thunderbolt technology is a revolutionary high-speed, dual protocol I/O technology designed for performance, simplicity and flexibility. Thunderbolt I/O technology lets you move data between high-resolution displays and high-performance data devices on a single, compact port. Both data and display signals can be sent and received at the same time through dual 10Gbps channels. A single cable attached to one of the ports provides 2 channels able to achieve the 10Gbps speeds flowing both ways simultaneously. A single Thunderbolt port supports hubs as well as a daisy chain of up to seven Thunderbolt devices. To improve bandwidth transmission, Thunderbolt has implemented two duplex (PCIe and DisplayPort) channels into the controller and each channel can provide full bi-directional performance.

# **Unparalleled Performance**

ARC-5026 is 4-bay 6Gb/s SATA Thunderbolt/USB 3.0 storage with RAID control capabilities solution for Mac environment. Thunderbolt host interface make ARC-526 RAID storage well suited for SOHO group professional who work at home and or in the office. Thunderbolt technology is developed for high speed data transfers. The data transfer rate at the speed of 10Gb per second. Thunderbolt port is shared by multiple devices and can transfer data equally distribute to all connected devices. ARC-5026 incorporated on-board high performance ARM based storage I/O processor and with 1GB DDR3 SDRAM memory on-board with ECC protection to deliver true high performance hardware RAID for the demands of serious to deliver true high performance hardware RAID for the demands of serious HD media creators needs. For example, the benefit for video editor by using ARC-5026 to unleash their professional creativity work in real-time, with the high-bandwidth allow large amount of audio and video capture/mixing devices transferred faster with low latency and high-accurate synchronization at 10Gbps.

# Easy RAID Management

Configuration and monitoring can be managed through in-band Thunderbolt port using firmware-embedded web browser-based RAID manager(McRAID). This McRAID web browser-based RAID manager allows local or remote to access it from any standard internet browser via in-band Archttp utility. ARC-5026 Thunderbolt RAID storage also provides API library for customer to combine with its own monitor utility. The Disk Stress Test (DST) utility kicks out disks meeting marginal spec before the RAID unit is actually put on-line for real business. The intelligent cooling continuously adapts to environmental conditions by automatically controlling the speed of the cooling fans. This super silent design, optimizing balance between noise reduction and necessary cooling, makes ARC-5026 well suited for audio/video application especially the rapidly growing demand from the video editing markets.

# Unsurpassed Data Availability

Designed and leveraged with Areca's existing high performance solution, the RAID storage delivers high-capacity at the best of cost performance value. It supports the hardware RAID 6 engine to allow two HDDs failures without impact the existing data and performance. Its high data availability and protection derives from the many advance RAID features. ARC-5026 Thunderbolt/USB 3.0 SATA RAID storage allows easy scalability from JBOD to RAID. With innovative new ROC 6Gb/s SATA feature and support for SATA, and SSDs, the ARC-5026 RAID storage provides powerful small-workgroup server, power users and consumers with superior levels performance and enterprise level data protection for external storage. The world today, large amounts of arrays data needs by the Professional content creation application for - video editing, capturing or transferring video, managing 3D graphics design, producing video presentations and regularly data backup. ARC-5026 Thunderbolt/USB 3.0 SATA RAID storage unit is the best solution

# **Controller Architecture**

- ARM\_based storage I/O processor
- 1GB on-board SDRAM with ECC protection
- Write-through or write-back cache support
- Support 4 internal 6Gb/s SATA ports
- Multi-RAID storage support for large storage requirements
- NVRAM for RAID event & transaction log
- · Redundant flash image for controller availability

### **RAID Features**

- RAID level 0, 1, 10(1E), 3, 5, 6, Single Disk or JBOD
- Multiple RAID selection
- Support up to 1MB stripe size
- · Online array roaming
- Offline RAID set
- Online RAID level/stripe size migration
- Online capacity expansion and RAID level migration simultaneously
- Online volume set growth
- Instant availability and background initialization
- Multiple pairs SSD/HDD disk clone function
- SSD automatic monitor clone (AMC) support
- Support global and dedicated hot spare
- Automatic drive insertion/removal detection and rebuilding
- Greater than 2TB capacity per disk drive support
- Greater than 2TB per volume set (64-bit LBA support)
- Support intelligent power management to save energy
  and extend service life

### **Drive Support**

• Up to 4 x 6Gb/s SATA/SSD

# Monitors/Notification

- System status indication through individual activity/fault LED, and alarm buzzer
- SMTP support for email notification
- SNMP support for remote manager
- Enclosure management ready

#### **Host Connection**

#### Thunderbolt-to-SATA

- Two Thunderbolt technology ports
- Simultaneous bi-directional, 10Gbps transfers over a single cable
- Dual-protocol support (PCI Express and DisplayPort)
- · Compatible with existing DisplayPort devices
- Daisy-chaining devices

#### USB 3.0-to-SATA

- One USB 3.0 port
- Offers a 10x speed increase over USB 2.0 high-speed to 5 Gbps
- Auto-negotiate to USB 2.0 speeds

#### **RAID Management**

- Field-upgradeable firmware in flash ROM
- Firmware-embedded web browser-based McRAID storage manager, SMTP manager, and SNMP function via ArcHttp proxy server
- Support Command Line Interface (CLI)
- · API library for customer to write monitor utility

### Software Drivers

- Mac OS X 10.6.x/10.7.x/10.8.x
- Windows 7/8

(For latest supported driver version visit http://www.areca.com.tw)

# ARC-5026 RAID Storage

Form Factor	Compact – 4 Disk Compact Tower
Operation temperature	5°∼35°C (41° to 95°F)
Operation humidity	10% ~ 85 %, Non-condensing
Cooling Fan	1 x 2700rpm/0.135A Brushless Fan
Power Supply/In/out	135W / 100-240V AC / +19V/7.1A
Dimension (W x H x D)	123 x 165.6 x 232 mm (4.84 x 6.51 x 9.11 in)
Weight (Without Disk)	8.0 lbs / 3.6Kg

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