areca®

Areca ARC-8050T2

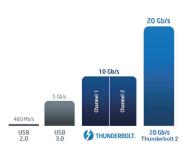## Thunderbolt™ 2 Technology

Highlights

- High performance 20Gbps Thunderbolt 2 interface

- Support simultaneous 4K in/output workflow

- Dual Thunderbolt 2 ports for daisy-chaining

- Configuration by the Thunderbolt/LAN port/LCD

- Support bootable drive via Thunderbolt

- Advanced configuration for video optimized performance settings

- Delivers enterprise-class data protection and security

- Controller-level hardware encryption

- Support BBM option for cache protection

- Intelligent power On/Off function for data integrity

- Thunderbolt cable included

Thunderbolt™ 2 Performance

480 Mb/s	5 Gb/s	10 Gb/s		20 Gb/s	
USB 2.0	USB 3.0	Channel 1	Channel 2	20 Gb/s Thunderbolt 2	

Thunderbolt ARC-8050T2 RAID Storage

Unleash Your Creativity Faster Than Ever

Thunderbolt 2 is full backward compatibility to the same cables and connectors used with today's Thunderbolt. It pushes speed to 20Gb/s and enables 4K video file transfer and display simultaneously. ARC-8050T2 is equipped with dual Thunderbolt 2 ports for connecting to any Thunderbolt 2-enabled host such as the new Mac Pro, and offers an additional Thunderbolt 2 port for daisy-chaining other peripherals. The Thunderbolt daisy-chaining allows connection of up to six devices, so customers can connect ARC-8050T2 for massive amounts of video storage with a single Thunderbolt connection to their host computer. ARC-8050T2 can meet the demand of users when working with rich, ultra-high resolution media through Thunderbolt 2 interface.

Unparalleled Performance for 4K Workflow

ARC-8050T2 is the most complete 6Gb/s SAS 8-bay Thunderbolt 2 box with RAID control capabilities solution for both PC and Mac. ARC-8050T2 incorporated on-board dual core 800Mhz RAID-On-Chip and with 1GB DDR3-1333 memory to deliver true high performance hardware RAID protection against drive failure.This combination helps to provide a high performance storage device perfect for the video editor working with Real time multi-stream HD and 4K workflows. It runs efficiently without disruption or major drops in performance to meet the requirements of 4K data workflow. It is so quick it allows for 4K displays at the same time as daisy chaining ARC-8050T2 and doing a simultaneous 4K output and file transfers while maintaining maximum throughput.

Enterprise-class Data Availability and Security

ARC-8050T2 supports the hardware RAID 6 engine to allow two HDDs failures without impact the existing data and performance. It allows users to hot swap drive in the event of a drive failure with zero downtime. Its high data availability and protection derives from many advanced RAID features on ARC-8050T2 RAID box design. Intelligent power On/Off function on storage turns power in unison with the host computer power status. It can intelligently power down the unit after the thunderbolt host shuts down everything for data integrity. ARC-8050T2 also supports a battery backup option that protects all data in cache memory in the event of unexpected power outage. Board-level hardware encryption manages any kinds of drives attached to ARC-8050T2 without impacting the performance for higher levels of security.

Enabling an Easy-to-Manage Storage

Configuration and monitoring can be managed either through the LCD control panel, Thunderbolt interface or LAN port. The intelligent cooling continuously adapts to environmental conditions by automatically controlling the speed of the cooling fans for the rapidly growing demand from the video editing markets. You can even configure ARC-8050T2 to intelligently spin down drives during periods of inactivity to further reduce noise and save energy. Areca solution of Thunderbolt 2 provides user the capability of adding bootable drive via Thunderbolt on Apple thunderbolt-capable machine.

Controller Architecture

- 800 MHz dual core ROC for RAID core and SAS microcode
- 1GB on-board DDR3-1333 SDRAM with ECC protection
- Support bootable from RAID storage volume
- Controller level hardware encryption support
- Redundant flash image for adapter availability
- System status indication through LCD, LED and alarm buzzer
- Intelligent power On/Off function
- Battery backup module ready (optional)

RAID Features

- RAID level 0, 1, 1E, 3, 5, 6, 10, 30, 50, 60, Single Disk or JBOD
- Multiple RAID selection
- Support up to 1MB stripe size
- Online array roaming
- Online RAID level/stripe size migration
- Support global hot spare and local hot spare
- Instant availability and background initialization
- Advanced configuration for smooth data streaming
- Disk scrubbing/ array verify scheduling support
- Multiple pairs SSD/HDD disk clone function
- SSD automatic monitor clone (AMC) support
- Complete configuration management suite
  - McRAID manager – browser-based management tool (LAN or Thunderbolt)
  - Push Buttons and LCD Display panel for setup and status
  - Command Line Interface (CLI)- scriptable configuration tool
  - API libraries support - combine GUI with user management utility
  - SNMP support for remote monitoring
  - SMTP support for email notification

Function Advantages

Feature 1	Bootable Drive Support
Provides user the capability of adding bootable drive via Thunderbolt on Apple thunderbolt-capable machine.	

Feature 2	Advanced Configuration
Provide optimized parameter to adjust controlled firmware behavior for smooth data streaming.	

Feature 3	Controller-level Hardware Encryption
Board-level hardware encryption manages any kinds of drives attached to ARC-8050T2 without impacting the performance for higher levels of security.	

Feature 4	BBM Support
Supports a battery backup option that protects all data in cache memory in the event of unexpected power outage for data availability.	

Feature 5	Intelligent Power On/Off Function
Turns ARC-8050T2 power in unison with the host computer power status for data integrity.	

Feature 6	Front Panel LCD and Buttons
Easy access for configuration and status report.	

Product Features

Form Factor	Compact – 8 Bays Disk Tower
Host Connection	Two 20 Gb/s Thunderbolt 2 Technology Ports
Disk Support	8 x 6Gb/s SAS/SATA 3.5"/2.5"HDDs/SSDs
OS Support	Mac OS X 10.8.5 or Higher & Windows 7/8
Enclosure Management	Thunderbolt Port, LAN Port, and LCD
Cooling Fan	2 * 2700rpm/0.135A Brushless Fan
Operating Temperature	0 ~ 40 ˚C
Operation Humidity	5% ~ 95 %, Non-condensing
Power Supply/In/out	270W / 90-256V AC / +12V/26A, +5V/18A, +3.3V/16A
Dimension (W x H x D)	5.7 x 11.8 x 11.4 in (146 x 302 x 290 mm)
Weight(W/O Drives)	14.9 lbs / 6.8Kg

Thunderbolt 2 Technology

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At the Heart of Storage