Appendix A

Upgrading Flash ROM Update Process

Since the PCI SATA II RAID controller features flash firmware, it is not necessary to change the hardware flash chip in order to upgrade the RAID firmware. The user can simply re-program the old firmware through the in-band McRAID manager. New releases of the firmware are available in the form of a DOS file at shipped CD or Areca's FTP. The file available at the FTP site for each model contains the following file in each version:

ARCXXXNNN.BIN Software Code Binary (where "XXXX" refers to the model name and "NNNN" refers to the software code type)

ARCXXXBIOS.BIN:---→ PCI card BIOS for system board using ARCXXXBOOT.BIN---→ RAID controller hardware initialization ARCXXXFIRM.BIN:---→RAID kernel program ARCXXXMBR0.BIN---→Master Boot Record for supporting Dual Flash Image in the SATA II RAID controller

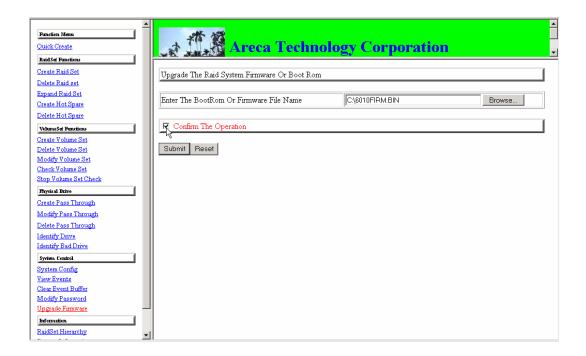
README.TXT contains the history information of the software code change in the main directory. Read this file first before upgrading the properly binary file. Select the right file to upgrade. Normally, user upgrades the ARCXXXBIOS.BIN for system M/B compatibility and ARCXXXFIRM.BIN for RAID function upgrade.

Upgrading Software Code Through HTTP Proxy Web Browser Management

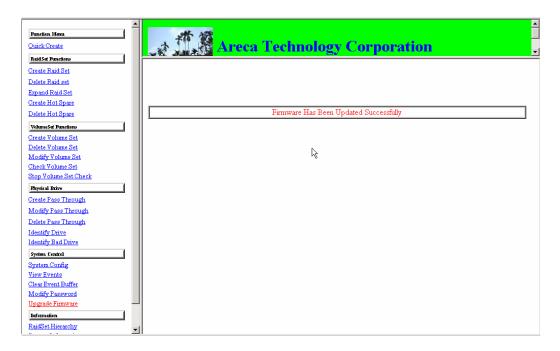
The software code can be downloaded to the RAID controller by using a HTTP web browser manager. You must complete the appropriate installation procedure before proceeding with this software code upgrade. Please refer to chapter 6.1, "Web browser-based RAID configuration for details on establishing the connection.

Get the new version software for your PCI SATA II RAID controller. For Example, download the bin file from Areca's web site onto the C:

- To upgrade the RAID subsystem software code, move the mouse cursor to "Upgrade Firmware" link. The "Upgrade The Raid System Firmware" screen appears.
- **2.** Click Browse. Look in the location where the upgrade software is located. Select the File name click "**open**".
- 3. Click the "Confirm The Operation" and press the "Submit" button.
- 4. The Web Browser begins to download the software binary to the controller and start to update the flash ROM.



5. After the firmware upgrade is complete, a bar indicator will show "Firmware Has Been Updated Successfully"



6. After the new software code completes download, user should find a chance to restart the controller for the new software code to take effect.

NOTE: The user doesn't need to reconfigure all of the settings after the new software code upgrade is complete, because all of the settings will keep up the last setting value before upgrading.