

BIOS and BMC Firmware Update Instructions

Overview

The following instructions outlines the steps required to update the BIOS and BMC on DRAGEN V3 servers.

Requirements

Download dragen_bios_v1.08.zip which contains the following files:

- afulnx_64
- 87897A.108
- Axiomtek_EM500_20201214.rom.ima

Changelog

BIOS V1.08:

- Enable EIST (Intel turbo mode)
- Gray out "BMC support"
- Enable LAN PXE function and display BIOS control item to enable/disable it
- Update SPS firmware to 4.1.4.381.0

BMC 2.06:

- Gray out BMC bonding
- Change the behavior of ipmi chassis power cycle to force a system shutdown after 10 seconds, now we don't wait for the OS to finish a graceful shutdown but will remove the power and put it back again.

Procedure

- 1. Turn on the instrument and log in as the root account.
- 2. Check the current BIOS and BMC version by entering the following command in the terminal:

\$ echo ""; echo "BIOS Version"; dmidecode | grep Ver; echo ""; echo "BMC Firmware Revision"; ipmitool mc info | grep "Firmware Revision"

Example output:

BIOS Version
Version: V1.08
Version: Default string
Version: Default string
Version: Default string
Specification Version: 2.0

Version: Intel(R) Xeon(R) Gold 6226 CPU @ 2.70GHz Version: Intel(R) Xeon(R) Gold 6226 CPU @ 2.70GHz

BMC Firmware Revision Firmware Revision: 2.06



The latest version of BIOS is v1.08 and BMC v2.06.x. Please proceed with the instruction below to update your BIOS and BMC.

Note: BIOS v5.04 is an older version than v1.08

3. To update the BIOS to version V1.08

a. Run the following command from the terminal:

\$ afulnx_64 87897V.108 /p /b /n /x

- **b.** Wait for the command to finish, successfully: if an error occurs repeat the command.
- **c.** Reboot the system.
- **d.** Run the following command from the terminal:

\$ afulnx_64 87897V.108 /p /b /n /x /ME

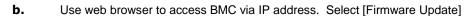
- **e.** Wait for the command to finish, successfully: if an error occurs repeat the command.
- **f.** Reboot the system.
- **g.** Rerun Step 2 to confirm BIOS is now V1.08

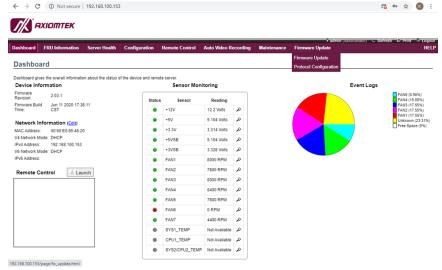
4. To update the BMC

a. Use ipmitool lan print to identify BMC IP address

```
user@em500:~$ sudo su
[sudo] password for user:
root@em500:/home/user# ipmitool lan print
Set in Progress
                        : Set Complete
Auth Type Support
                        : MD5
Auth Type Enable
                        : Callback : MD5
                        : User
                                    : MD5
                        : Operator : MD5
                          Admin
                                    : MD5
                                    : MD5
                        : OEM
IP Address Source
                        : DHCP Address
IP Address
                         : 192.168.100.153
Subnet Mask
                        : 255.255.255.0
```

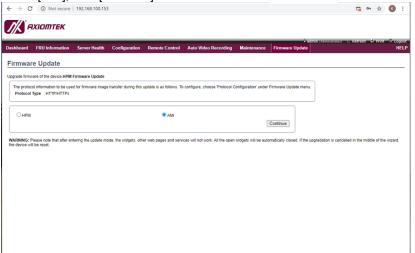
June 28, 2021



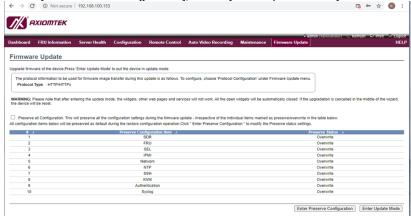


c. Select [AMI], click [Continue]

illumına®



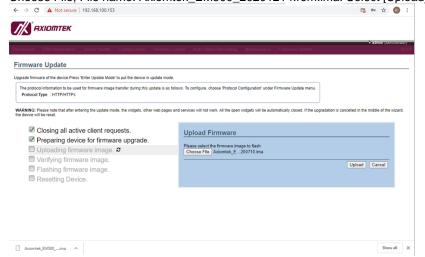
d. Select [Preserve all Configuration], Select [Enter Update Mode]



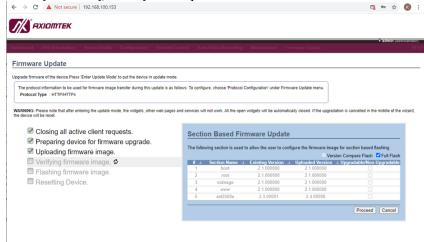
June 28, 2021



e. Choose File, File name: Axiomtek_EM500_20201214.rom.ima. Select [Upload].



f. Select [Full Flash], select [Proceed].



Note: configuration was not preserved, admin password will be reset back to default "admin".

- g. After 5 minutes, log back into BMC web UI.
- h. Confirm Dashboard shows Firmware Revision: 2.06.1