

MegaRAC[®] MMC Firmware Solution

Management Firmware for AdvancedMC Management Module Controllers



AMI's MMC Firmware Solution is fully compliant with the AdvancedTCA and Advanced Mezzanine Card specifications. The firmware provides key features such as: Event Generation, E-Keying, IPMB-L, Module Hot Swap and MMC Commands. Being built on top of AMI's IPMI 2.0 firmware and backward compatible with IPMI 1.5, the firmware module can be easily expanded and customized: e.g. features such as SOL and SMBUS Interface can be supported.

Data Sheet

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HIGHLIGHTS

- > AdvancedMC and AvancedTCA compliant
- > MMC controller support: Renesas H8S/2168, 2167 and 2166
- > IPMB-L support
- > MMC Required Commands
- > Optional side-band LAN (with DHCP), KCS interface, BT interface, Serial over LAN, SMBUS interface
- > Optional TCP/IP Stack with DHCP (requires dedicated NIC SMSC LAN91C113)
- > FRU control
- > E-Keying support
- > Optional Platform Development Kit (PDK) for porting/customization

The Advanced Mezzanine Card supports the required MMC commands:

The Advanced Mezzanine Card Specification, released by PICMG in January 2005, defines the format and management interfaces for mezzanine cards utilized within ATCA and microTCA systems. Such cards can be utilized in a variety of ways, also combined with proprietary architectures, to enhance OEMs and TEMs proprietary architectures: good mezzanine cards can be used wherever they fit.

The AMC mezzanine architecture requires hot swap support and integrated system management. The latter enables individual AMC modules to be remotely monitored, controlled, and replaced in the field. AMC features high-bandwidth I/O interface and high-power handling capability in a versatile form factor.

When compared to an IPMC controller for ATCA board, the MMC firmware has a limited subset of functions:

- > Read the site number for the AMC card itself (read GA Address)
- > Read current state of AMC (closed, open or quiesced)
- > Internal watchdog and/or strobe external watchdog timer
- > FRU device control: cold reset, warm reset, graceful reboot, Diag intr, quiesce
- > LED control: blue LED, LED1 and additional LEDs as requested.

AMI's MMC Firmware Solution

- > IPMI Commands
- > Get Device ID (IPMI command)
- > Broadcast 'Get Device ID'
- > Set Event Receiver
- > Get Event Receiver
- > Get Device SDR Info
- > Get Device SDR
- > Get Device SDR Repository
- > Get FRU Inventory Area Info
- > Read FRU Data
- > Write FRU Data
- > Get PICMG Properties
- > FRU Control
- > Get FRU LED properties
- > Get LED Color Capabilities
- > Set FRU LED State
- > Get FRU LED State
- > Get Device Locator Record ID
- > Set AMC Port State
- > Get AMC Port State

The strength of AMI's MMC firmware offering lies in its versatility: OEMs can use the basic AMC feature subset or combine a number of features of AMI's IPMI 2.0 firmware.

AMI's MMC firmware is part of AMI's wide offering of premium remote management products, including software, remote management cards, KVM products and embedded KVM. AMI is an ideal development partner, combining a strong OEM/ODM focus with long-standing remote management expertise.

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