

MegaRAC® G4

Remote Management Controller



The MegaRAC® G4 PCI-based remote management controller can be used in any server with a free PCI slot for sophisticated remote management. G4 provides out-of-band, lights-out manageability for BIOS-level system access and control, even when the OS is unavailable or the system is powered down.

A 100% OS independent solution, G4 has the ability to provide high quality and high performance KVM redirection over the Internet. The MegaRAC G4 does not require any drivers or agents to be installed at the managed server.

Data Sheet

04 30 2008

HIGHLIGHTS

- > Remote power control (Reset/On/Off) of the managed server through IPMI BMC or Feature Connector
- > Text/Graphics KVM/IP at any power state
- > High performance device redirection enables remote OS installation and software/patch updates
- > Monitors and manages all environmental sensors
- > Notifies system administrators with alert
- > SNMP and email notification
- > Onboard customizable web based interface
- > Operating System Agnostic
- > Low cost

AMI's MegaRAC® G4 is the newest generation within AMI's remote management controller family.

MegaRAC G4 is a low cost, half-height or full height PCI-card that can be installed onto regular server platforms or into blade servers. It has connections for USB, Ethernet and an external wall-adaptor. The card can connect to an IPMI BMC and to reset/power controls.

MegaRAC G4 implements KVM over LAN, enabling total control of system resources from a remote location, including Keyboard, Video & Mouse for full graphics and text redirection. The card displays the image it receives through the VGA connector in a web-browser on a remote PC. Mouse and keyboard activity is provided to the motherboard's web-browser through USB.

MegaRAC G4 features AMI's unique, patent-pending AAVICA-II compression engine, featuring video capture of up to 1280 x 1024. The technology uses intelligent algorithms to significantly reduce network traffic and provide high-performance graphical redirection. The engine interfaces with the server's DVO video interface and USB bus.

G4 reads status information and controls system power through an IPMI Baseboard Management Controller, allowing the remote to fully manage and monitor an IPMI host system.

With a special Feature Connector, MegaRAC G4 can manage system power independently of the BMC.

Additionally, the G4 can emulate a Mass Storage Device, such as a floppy, CDROM or hard-drive and enable the installation of software programs from a remote location.

AMI's MegaRAC G4 brings numerous features to OEMs and system integrators:

- * GUI and Soft Processor based sensor customization for I2C bus monitoring with PMCP
- * Monitoring utilizes an external BMC or sensors on I2C bus
- * Supports MegaRAC Studio for OEM extensions and customization
- * Implements object oriented web development for plug-ins
- * Provides processing power to extend manageability in the future with the highest ROI
- * Provides a Memory Management Unit (MMU) based platform for robust plug-in support.



MegaRAC® G4

Remote Management Controller

Features

Key Features

Bracket option, full-height PCI or half-height PCI “Half-Height” PCI, allowing for installation into 2U rack-mounted units

Operating System Agnostic

Uses existing Motherboard VGA or video card

No installation of Video drivers required

VGA splitter-cable for local monitor

Automatic detection of local monitor

Headers for remote control of power and reset

Has internal USB-header, reducing the number of external cables needed

Internal USB-header connects to on-motherboard USB

Has built in USB-hub, allowing front-panel USB connections to still operate

USB 2.0 Mass-Storage Redirection

USB 1.1 HID (Keyboard and Mouse)

RS-232 serial-port for local management console or Serial-Over-LAN

Motherboard sensor monitoring through IPMI 2.0

No power-adaptor required, (uses PCI-Standby Voltage)

Optional external wall-adaptor for complete light-out management

Local RS-232 debug-port for diagnostic and firmware upgrade

Cross browser and cross platform support

Processor and Memory

32-Bit 133 MHz RISC

200 MIPS

16K I-Cache / 16K D-Cache

32 MB SDRAM Memory

16-Bit, 16 MB Flash

Form Factor

Bracket option, full-height or half-height PCI

Half-height PCI allows for installation into 2U rack-mounted units

AMI MG9074 KVM Engine

VGA input for KVM from motherboard VGA or external VGA

Hardware based capture and compression

AMI's patent pending AAVICA-II compression engine fully built in to the hardware

High performance 30+ frames per second

1280x1024, 1024x768, 800x600, 640x480

Color depth: 16-bit

Max refresh rate: 60 Hz

Analog VGA input

Low network band-width requirement

Auto session timeout for security

Local pass-through output to monitor using splitter cable

Media Redirection

Simultaneous floppy and CD/ DVD redirection

USB 2.0 based CD/DVD redirection

Support for USB key

Auto session timeout for security

IPMI 2.0 based management

Manages IPMI 2.0 based BMC

Runs virtual BMC stack for BMC-less systems presenting as a full IPMI 2.0 BMC

Customizable sensor management

Event Log and Alerting

Read Log events

Sensor readings

SNMP trap

Sophisticated User Management

IPMI based user management

Added security with SSL (HTTPS)

Multiple user permission level

Multiple user profiles

Active Directory/LDAP Client support

Direct LDAP support from the device

Windows Active Directory and Open-LDAP support

Web Interface Multilanguage support

Full Unicode support

Multiple language support for multiple clients simultaneously

Web based configuration

Full configuration using web UI

Fail-safe firmware upgrade

OEM Tools (Sold separately)

AMI-PMCP for designing platform sensors

MegaRAC Studio for GUI customization

Power Supply

Operational even when the main system is powered-off, operation on:

- PCI 3.3V Standby Power, or
- External wall adapter

* No power-adaptor required (uses PCI-Standby Voltage)

Feature Summary

Bracket option, full-height PCI or half-height PCI “Half-Height” PCI, allowing for installation into 2U rack-mounted units

Operating System Agnostic

Uses existing Motherboard VGA or video card



American Megatrends Inc.

5555 Oakbrook Parkway Suite 200, Norcross,
GA 30093 | t: 770.246.8600

Sales & Product Information

sales@ami.com | t: 800.828.9264

Technical Support

support@ami.com | t: 770.246.8645

www.ami.com