

AMI MG9073S Enclosure Management Controller

with Dual SGPIO and IPMI Notification



The AMI MG9073S is a low-cost, ultra-small, single-chip solution for Enclosure Management to use with SAS and SATA Backplanes for controlling up to 8 drives.

A true single-chip solution, the AMI MG9073S helps optimize backplane layouts with the latest enclosure management technologies. This highly integrated and space-optimized chip features an internal oscillator, is available in LQFP-32 Package (9mm x 9mm), and omit the usual components that drive backplane costs up such as external crystal, flash memory, EEPROM and LED Driver.

BENEFITS

Multiple controllers can support up to 24 drives. The AMI MG9073S implements Enclosure management protocol SGPIO per SFF-8485 for SAS HBA and SATA HBA, supporting LEDs, BMC accesses MG9073S through SMBus to know the status of the drives, and for firmware upgrade. Drive presence, and SMBUS for connection to a host-BMC.

LED BLINKING PATTERN

In 2-LED mode, MG9073S follows the blinking pattern as defined in the following table for various drive states:

Drive State:	2-LED Blinking Pattern	
	Activity (Green) LED	Activity (Red) LED
Drive Present, No Activity	OFF	X
Drive Present, Activity	4Hz	X
Locate (Identify)	X	4Hz
Fail	X	ON
Rebuild	X	1Hz

HIGHLIGHTS:

- Support Enclosure Management for SAS/SATA Drives
- Support Enclosure Management through 2 channels of SGPIO (SFF-8485)
- Supports Present & Status LEDs for each drive
 - Directly drives 2 LEDs for up to 4 slots
 - With Latches drives 3 LEDs for up to 8 drives
- Supply range (2.5V - 5.25V)
- Small LQFP-32 Package
 - 9mm X 9 mm pin outline
 - 7mm X 7 mm housing
- Internal Oscillator
 - No external crystal needed
- Part ships ready to use, no firmware or programming required
- SMBUS connection to host BMC
- SMBus Alert supported to notify BMC about critical events on the backplane
- Firmware Upgradeable through SMBus from host BMC
- Diagnostics and FW upgrade tools available for Windows, Linux, EFI and DOS
- Lead Free, RoHS Compliant and Green Packaging



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For more information: <http://www.ami.com/products/backplanes-and-enclosure-management>

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