AMIBIOS® 98

AMIBIOS 98

American Megatrends has achieved a track record for superior firmware solutions, established through the modularity, compatibility, and flexibility of its AMIBIOS core. Based on that core foundation, AMIBIOS 98 delivers innovative new features to benefit both system manufacturers and end users. These benefits include reducing OEM time-to-market, increasing OEM customization and customer support capabilities, and allowing users greater autonomy and ease-of-use in managing their own systems.

AMIBIOS 98's modular structure offers highly advanced BIOS functions, extensive power management, state of the art OEM utilities, and portability to various CPUs and chipsets. Designed to exceed the demands of today's notebooks, and to integrate tomorrow's technologies, AMIBIOS 98 offers the most advanced features available. These include hot technologies and initiatives such as Wired for Management, ACPI, Advanced Power Management (APM) 1.2, hot plugability, Plug and Play and PCI.

Leading Edge Technology

ACPI

ACPI technology gives today's PC operating systems such as Windows98™ or Windows NT5.0 the ability to control system configuration and power management. AMI's ACPI ready AMIBIOS provides an orderly transition from present day legacy hardware to ACPI hardware. With its rich ASL code base, that supports all ACPI defined devices including dock, AMIBIOS provides the most flexible ACPI solution for systems in the industry.

SMBIOS 2.1 and Beyond

To help deliver maximum availability of system information and ultimate manageability AMIBIOS exceeds the SMBIOS 2.1 specification, as well as fully complying with Desktop Management Interface (DMI) 2.1 and System Management BIOS (SMBIOS) standards that have been established by the Desktop Management Task Force (DMTF). These standards and specifications enable administrators and users to easily view detailed system configuration information, using programs such as AMI_ClientCare and Intel LanDesk Client Manager. The ability to update OEM specific fields such as Asset or serial number increases asset management capabilities.

I_2O

As the leader of I_2O BIOS compliance working group, American Megatrends helped initiate I_2O by developing the specification. Today AMIBIOS provides full support for booting from I_2O storage devices, which includes detection and initialization of all I_2O processors in the system and establishment of I_2O message communication. AMIBIOS also provides full support for an I_2O aware PC operating system to install and boot on I_2O device.

USB

AMIBIOS 98 stands as the first BIOS to offer full support for the Universal Serial Bus (USB) standard. The USB technology enables users to quickly and easily attach and reconfigure a wide range of peripheral devices, including keyboards, Mice, FDD, and printers. With comprehensive support for both USB host controllers and USB devices, AMIBIOS 98 offers the ability to fully utilize USB technology now. Support for Intel's Universal Host Controller Interface (UHCI) and Open Host Controller Interface (OHCI) ensure compatibility and usability well into the future. AMI's USB-WARE serves as a total firmware system solution for anyone using a USB microcontroller.

KEY FEATURES & FUNCTIONALITY

- ACPI ready
- SMBIOS 2.1 Compliant.
- Quick boot Support
- Flexboot Support
- Silent boot support.
- Advanced IDE Features
- LS-120, MO, Zip, DVD, and CD-ROM Support
- I_2O support
- Year 2000 Compliant and Ready
- USB Support
- SMBus support
- Support for major CPU and Chipsets in the industry

ACPI

- Fully ACPI Ready.
- ACPI system States: S1 , S2, S3 and S4 BIOS
- ACPI device state : D1, D2, D3
- Remote Wake Up Via Modem & Network
- CPU clock control and Thermal Management
- Huge ASL code base to support all system devices

SMBIOS 2.1 Support

- Full implementation of DMI 2.0, 2.1 / SMBIOS2.1
- Complete support of GPNV
- AMI DMI workshop to Create, View or Update DMI Structures
- Fully compliant with AMI Client Care, LDCM, or Open View
- Windows 95 Browser
- Windows NT Browser

I_2O support

- Detection and initialization of all IO processors in the system
- Dusplays details of I_2O storage devices detected in the system
- Allows booting to a selectable I_2O aware PC operating system

American
Megatrends

USB Support
- Full Bus Enumeration
- UHCI & OHCI Support
- Hot Insertion of USB Devices
- Hub Device Support
- Legacy Keyboard, FDD, and Mouse Support

FLEX Boot
- Multi-Level Password Protection for Boot
- AMI's "Boot from Any Device" Including CD-ROM, LS-120, Zip, and SCSI
- Auto Boot without User Intervention

Enhanced IDE Support
- IDE Bus Master Mode
- Hard Disk support for bigger than 8GB drive
- Auto Detect and Auto Configuration
- Multisector and 32-Bit Transfer
- LBA Mode
- CD-ROM boot
- Zip drive support Including A: Drive
- LS 120 floptical support
- Advanced PIO Modes 3 & 4
- Ultra DMA 33
- Native Mode Support
- S.M.A.R.T support

Legacy Power Management
- Highly Sophisticated Legacy Power Management Features for Maximum Power Savings
- APM 1.2 support
- Hotkey support
- Resume on alarm, modem ring
- Password protected resume from suspend
- OEM APM Function Support

System States
- Full-On
- APM / Hardware Doze
- Stand-by
- Suspend to DRAM

Device Power management support
- Video Logic Power Down
- HDD, FDD & FDC Power Down
- Sound Chip Power Down
- Super I/O Chip Power Down

CPU / Chipset Support
- Support for All Current CPUs
- Support for All Current Chipsets
- 2.9, 3.3 or 5 Volt Operation
- Supports all super I/O and Audio controller

PCI Support
- PCI Specification 2.1
- PCI-PCI Bridge Specification 1.0
- Full Bus Master Capability
- Hot-Plug PCI

Additional Features
- Auto Time Adjust for Daylight Savings and Leap Year
- AMI AnyLanguage Support
- Hot Key Support
- Built in BIOS POST Diagnostics
- Multilevel password protection

OEM Utilities
- CPU-Xpert
- Module Script Generator
- Module Manipulator
- Flash ROM Utility
- DMI workshop to create, update, browse DMI structures.
- AMI Health Monitoring Program (Optional)
- ClientCare WfM Utility (Optional)
- Fully Customized Diagnostics Utility (Optional)
- Embed Utility - Allows OEMs to embed option ROMs into AMIBIOS
- DOS / NT utility to prepare the Hard Disk for Suspend to disk.
- AMISCRN Utility- Allows Creation of Customizable OEM Logo screen for Boot Up, Zero Volt Suspend, & Zero Volt Resume

Hi-Flex Setup
- Industry Standard Setup Text Based Menus

OEM Specific Setup (Option)
- Provided by OEM for Consistency Across Product Lines

American Megatrends