



OPSD BIOS ENGINEERING

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FROM: iPG / OPSD BIOS Engineering

SUBJECT: 4D4KL0X0.86A Standard BIOS P09

About This Release

- 4D4KL0X0.86A.0018.P09

Features/Errata Fixed In This Release

P09

- Added support for PIIX4E device
- Added latest BIOS update code for Pentium® II processors

P08

- Updated L2 ECC Cache support to disable the L2 ECC Cache at all processor speeds when the feature has been set to DISABLE in setup

P07

- Added BIOS update code for Pentium® II processors (A1 Stepping)

P06

- Updated SCSI Option ROM to add back in the missing Ultra SCSI, SCAM and CD-ROM boot features left out in the previous version.

P05

- Fixed hang during Intel BIOS Update API writing new processor updates into the flash ROM.
- Fixed issue where Wake on Ring would not work if the system shut off due to AC power loss and then power was restored.
- Fixed issue of system power on when AC power is restored regardless of the AC loss setting if Wake on Ring is set to "Power On".
- Added dynamic DMI type 10 structures for SCSI, LAN and AUDIO components.
- Fixed issue where turning off the system in a hung condition by holding the power button for four seconds would cause the system to power back on if ECC memory was enabled.
- Fixed issue where the SLEEP switch would not wake the system from SUSPEND.
- Fixed a issue with Wake on LAN and Wake on Ring. If these events are received during normal operation, the system would power back on when turned off.
- Ensured that an NMI is generated when multi-bit ECC errors occur.
- Included new Adaptec* SCSI Option ROM to fix issue of tape drives being recognized as disk drives.
- Added setup option for single/dual color LED.
- Added setup option for Fan monitoring mux.

P04

- Added support for 3Mode floppies.
- Fixed issue with 3Mode driver 1024fd.exe inability to install if no media is inserted in the drive.
- Added a setup option to enable/disable the execution of the embedded PXE support. The option “Embedded PXE Support:”, is added to the Advanced Peripheral Configuration menu. Selecting “Enabled” allows the embedded PXE option ROM to be executed for all onboard/add-in Intel EtherExpress™ PRO/100B LAN devices. Selecting “disabled” prevents the execution of the embedded PXE option ROM for onboard/add-in EtherExpress™ PRO/100B LAN devices. This allows LSA boot to be disabled, without completely disabling the on-board LAN controller.
- Added an option to enable/disable the L2 Cache ECC support.
- Turn on the Power LED earlier.
- Changed FAN Mux monitor default to the REAR Chassis fan.
- Initialize ECC Memory after video is available.
- Fixed issue with system not booting when both LAN and SCSI are disabled.
- Fixed issue of system not booting without a video card.
- Fixed PC97 APM 1.2 test issue with reporting Resume on Modem Ring not supported.
- Fixed key click functionality.
- Fixed intermittent crash when scanning an option ROM greater than 64K bytes.
- Added Hard Drive pre-delay for improved compatibility with some hard drives and CD-ROM drives.
- Fixed issue which caused intermittent failures with INT 13h function 41h (Check Extensions Present).
- Improved handling of LS-120 on Microsoft Windows* boot.
- Added legacy USB support.
- Enable USB legacy during POST, and disable before INT 19h if disabled in setup.
- Fixed issue with invalid PCI memory or I/O requirements not being properly rejected.
- Added support for ECC Event Logging.
- Changed DMI type 4 structure for processor upgrade to “SLOT 1”.
- Fixed issue with APM1.2 HCT failing because Resume on Timer from STANDBY is not supported.
- Fixed issue with Wake on Modem header always waking the system.
- Fixed issue where IRQ 14 or IRQ 15 are not properly freed when IDE channel(s) are disabled in setup.
- Added “Dual “ in POST messages before processor ID to indicate when two processors are installed.
- Fixed issue of no beep codes when VGA card is not installed.
- Fixed Wake on External Modem Ring functionality.

P03

- Included all 5 languages (US English, French, German, Italian and Spanish) in the BIOS without the need to flash in separately.
- Added support for detection of next-generation Pentium® II Processors.

P02

- Fixed issue with the system hanging when booting with SCSI and LAN disabled.
- Display BIOS ID without time/date for production BIOS.
- Fixed issue with PnP BIOS function calls from 32-bit protected mode Operating Systems.

P01

- Initial BIOS Release
- Add AC Loss functionality to the BIOS.
- Added the new BIOS update for Pentium® II processor C-1 stepping
- Free IRQ 12 when no PS/2 mouse is connected.
- Changed default for wake on ring to DISABLED.
- Fixed DMI information for PCI slot numbering.
- Changed setting of the WSC# disable bit in register 51h of the 440LX PAC from '1' to '0', as it should be for designs which include an I/O APIC.
- Fixed issue with diagnostics which disable or enable the processor cache while running on the second processor.
- Fixed issue of system hanging when the power button is pressed during the initial Windows NT* 4.0 blue boot screen.
- Changed setup default for AC Power Loss to "STAY OFF".