# intel

# **BIOS ENGINEERING**

Intel Corporation, 5200 NE Elam Young Parkway Hillsboro, OR 97124-6497

DATE: November 14, 2001

SUBJECT: MV850.10A.86A Standard Production BIOS P05

## About This Release

- MV850.10A.86A.0011.P05.0111141738
- PXE-2.1 [Intel Boot Agent Version 4.0.19 (build 83)] for ICH2 LAN Controller

## Features/Errata Fixed in This Release

#### P05-0011

- Added code to disable the USB controller #2 on the ICH2 if NEC USB 2.0 chip is detected.
- Added code to disable USB controller #1 on the ICH2 if NEC USB 2.0 chip is detected and there is no USB 1.1 installed.
- Added code to not display the "High Speed USB" BIOS option if NEC USB 2.0 chip is not detected.
- Changed USB legacy default to disabled.
- Added Pentium 4 code updates.
- Fixed S3 issue when using USB 2.0.
- Disabled NEC USB Port 5 on CNR Slot if CNR is not on the board.

#### P04-0009

- Added System Locked Pre-installation (SLP) string that is now not linked to Type 1 SMBIOS.
- Added a message prompt to the POST screen to boot from the network by pressing F12 during POST.
- Added Boot from device selection menu to select a boot from device by pressing F8 during POST.
- Fixed issue of INT13 seek command (function 0Ch) was not writing the Sector Number register.
- Fixed an issue whereby the Reset Configuration Data question in setup was not resetting to No after being previously set to a Yes and system was rebooted.
- Added code to program the Subsystem ID and Subsystem Vendor ID into the NEC USB 2.0 part.
- Added a BIOS configuration SETUP option to enable/disable to skip booting from USB boot devices.
- Added a BIOS configuration SETUP option to enable/disable setting of the ISA Enable Bit for PCI bridges.
- Added a BIOS configuration SETUP option to enable/disable the NEC EHCI controller. This will correct the yellow bang found in Windows ME and 98 for this device.
- Fixed issue whereby the PS/2 mouse was being displayed in Device Manager when no PS/2 mouse was attached to the system.
- Added support for Heceta 6
- Corrected USB legacy support for SIO enabled.
- Corrected language information for Type 13 structure.

#### P03-0008

- Fixed the issue in which the BIOS incorrectly reports that the board can wake via USB from S4 (this is not possible).
- Fixed the issue of the RPG Boards that always forces the setup question to S1.
- Changed banner to P03-0007.
- Adding new SMM code and APIC support.
- Added AMI BBS 3.1.
- Added BICK support.
- Added processor support
- Allow CTRL, ALT, and SHIFT key states to be preserved throughout POST, so that shift states will be available to the OS for Safe Mode entry, bypass startup files.
- Fixed yellow bang in device manager when PS/2 devices were missing.

- Fixed a problem where pressing F10 while in Setup caused "Entering Setup..." to appear on the bottom of the screen.
- Fix a potential issue where the boot sequence will take longer since the boot data are not correctly initialized.
- Added setting of bit1 SMBIOS BIOS Characteristics Extension Byte2 to indicate BIOS support for function key-initiated network service boot.
- Fixed problem where some programs were detecting some types of Intel® Pentium® 4 processors as Intel Celeron® processors.
- Added WFM 2.0 Remote Lockout support.
- Added support to boot from network directly if F12 Key is pressed during POST.
- Updated to rev1.5 of the 82850 memory reference code.
- Fixed issue where pressing keys during Option ROM scan hangs the system.
- Fixed issue where the system was always reporting 80-conductor IDE cable type (regardless of actual cable type) when certain ATAPI devices were connected as the slave device on an IDE channel.
- When loading custom defaults, the boot order would not always be restored correctly.
- Fixed issue where ATAPI Removable Devices that support UDMA modes were not getting programmed for UDMA mode.
- Fixed issue with a TBU not being seen in Windows 2000 when set as a master and a HDD is set as a slave on the same channel.
- Fixed the problem where Custom CMOS defaults cannot be copied correctly to OEM CMOS through OEM CMOS int 15h function.
- Fixed an issue where the Fault Tolerant Boot Block Test would fail and not be able to boot if ECC was enabled during the test.
- Fixed issue where manufacturing default was incorrect when a CDROM was not installed in the system.
- Implemented the release of IRQ 12 when the PS/2 mouse is not installed in the system.
- Fixed issue where system could not transition from S3 to S4 in Microsoft\* Windows\* operating systems using the timed Power Options.
- •

#### P02-0005

- Enabled COMB to wake on Ring from sleep.
- Sleep state default now updated dynamically for OEM and Boxed boards depending on SIO GPIO.
- Resolved intermittent failure when using 4 PCI HAVAC5 cards, and 1 AGP HAVAC2 cards.
- Removed PCI slot 6 IRQ priority from setup screen.
- Resolved COMB failure.
- Updated the Processor speed for Manufacturing default to 1.9G
- Added support for NEC\* USB 2.0 controller. This does not include any legacy USB support on the NEC part
- Fixed an issue where the Fault Tolerant Boot Block Test would fail and not be able to boot if ECC was enabled during the test.
- Changed text strings that appear in BIOS Setup screens.
- Updated SMBIOS data structures.
- Added support to SMBIOS to indicate proper number of PCI slots dynamically.
- Changed a register in the SIO such that each USB port gets its power separately rather than shared.

#### P01-0002

- Initial release.
- ٠