BIOS ENGINEERING

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DATE:	October 6, 2004
TO:	OPSD Business Unit
CC:	iPG / OPSD BIOS Engineering
FROM:	iPG / OPSD BIOS Engineering
SUBJECT:	WD84510A.86B Standard S845WD1-E BIOS Production 0012

About This Release

- WD84510A.86B.0020.P12.0410052327
- FastTrak100 (tm) BIOS Version 2.30.0140.13
- Ultra100 BIOS Version 2.01.0140.9
- ATI RAGE SDRAM BIOS P/N GR-xlints3y.010-4.332
- Intel(R) Boot Agent Version 4.1.0.8, PXE 2.1 Build 083 (WfM 2.0), RPL V2.73

Features/Errata Fixed in This Release

P12-0020

- Updated to latest Promise ATA Op-ROM "FastTrak100 (tm) BIOS Version 2..30.0140.13"
- Removed microcode M04F0A14 to make room for latest Promise ATA Op-ROM.

P11-0019

- Upgraded Promise ATA op-rom to "FastTrak100 (tm) BIOS Version 2..30.0140.13"
- Updated to latest system configuration data.

P10-0018

- Fixed issue where press power button after the first "exit Intel Boot Agent" message, the server restarts rather than power off.
- Updated to latest system configuration data.

P09-0017

- Fixed issue where HCT 11.1 reported "Unreported Memory WHQL Failures" under WinXP.

P08-0015

- Fixed issue where o/b NIC was not working under Red Hat 8.0
- Fixed issue where WHQL on Windows 2000 Advanced Server reported un-known reference "_OSI" in name space.

P07-0013

- Fixed issue where the Promise RAID Op-ROM causes data loss in certain configurations.
- Upgraded Promise ATA op-rom to "Ultra100 BIOS Version 2.01.0140.9"

P06-0012

- Added MPS 1.4 support for non-ACPI OS
- Added latest HT fixes
- Added support to newest processor
- Fix issue where wrong cache size was being reported for new processor stepping
- Fixed issue where Windows .NET would hang during installation.
- Fixed SMBIOS memory structure mismatch vs silk screen
- Fixed issue where P4 1.6G Northwood chip posts as a Celeron 1.6
- Change primary display back to AGP as per TME request.
- Change external cache default to write back
- Fixed issue where Maxtor 3000LE USB hard drive was not detected by BIOS.
- Fixed issue where the Setup Boot order did not display all the HDDs connected to certain SCSI cards
- Fixed issue where SUT locks up after video bios if 3 Gainesville NICs attached.

P05-0009

Added Straight ATA support on RAID through NIC switch.
Fixed issue where SUT will hang at EDh when resume from S3 on a HT system.
Fixed issue where LDCM reported wrong silk screen for PCI slot#1 & AGP slot. Also fix issue where in use status was wrongly reported for PCI.

P04-0007

Added Hyper-Threading support
Added Serial Console Redirection support.
Added workaround for Win98SE and ME issue where the default Microsoft PS/2 mouse driver does not allow the mouse to wake the system from S3.
Added work around for fail on TCPIP Ping wake from S3.
Added chassis intrusion enhancements.
Added new Processor BIOS Update for Pentium(R) IV Family.
Update Intel Boot Agent to rev. 4.1.08
Add SMART HDD enable/disable questions to setup (one for each PM/PS/SM/SS)
Added support for Intel(R) Integrator Toolkit.
Fix issue where IOMEGA zip drive still appear under the floppy group in boot sequence page when configured to hard drive.
Fix issue where with multiple Option ROMs installed POST does not display all installed Option ROMs.
Fix issue where ATI Rage video lost if user press ESC or discard changes & quit from BIOS setup when CMOS bad.
Fixed a potential system hang problem after CMOS corruption and incorrect CUSTOM CMOS defaults were installed.
Fix issue where I15MFG failed & returned an unexpected error code when running DA27h test.

P03-0005

- Added support for extending option ROM space by 32K.
- Fixed an issue with the system hanging when a Geforce4 card and a Promise RAID controller is in the system and the OHCI data area is in option ROM space.
- Added BIOS workaround for issue where the WHQL ACPI HCT would hang when ran with no IDE devices connected to the system.
- Fixed issue where SUT hang half way if RAID IDEs are not attached when user apply the restart option after standby under WinXP, ME & 2K.
- Fixed issue where Win98SE failed to restart to DOS mode.

P02-0003

- Fixed issue where LSI22903 locked up the SUT before POST.
- Fixed issue where on-board video will lost if CMOS corrupted.
- Program year 2002 instead of 1990 if CMOS corrupted as per TDE request to prevent attended message popup in XP.

P01-0002

Fixed the issue of Reset Config Data question in setup not being reset to "No" after being set to "Yes" and system rebooting.
Fixed security hole where the user had access to F8 and F12 functionalities even when the Supervisor password set.
Fixed issue where Mylex AcceleRAID 352, AcceleRAID 170, Intel Goodwin does not allow user into their respective configuration screen.
Disabled game port & midi support as hardware is not present.
Fixing the problem where memory size differences would occur when using iTK to load defaults.
Added support to scan User Binary code before Video init such that if resource allocations are required they will be provided by the BIOS.
Fixed issue where o/b devices SSID will not be get programmed if an AGP card that has a "PCI to PCI bridge" is installed.
Fixed issue where LDCM 6.3 causes STOP 0x2C blue screen when event log support is enabled.
Changed the primary display default to PCI instead of AGP as per TDE request (for their Single Boot Video Test Solution)

B-0002

Fix issue where BIOS did not log ECC multi bit error.
Fix issue where SUT won't Wake On LAN from S5 using on board dual LAN & PCI add-in NIC cards.
Added capability to disable/enable ATA RAID and ATI Rage in BIOS setup.
Fix issue where unlocked CPU ratio will change to default when F9 load default is executed.
Fix issue where multiple languages were not able to be selected.
Fix LED blink and solid indication for working and standby state.
Added work around to automatically disable ATA RAID when no IDEs are attached or not enough op-rom space available for the o/b RAID.
Reserved PCI order to give higher precedence to PCI add-in devices over the on board devices.
Fixed issue where SSID/SVID field of ATA RAID & ATI Rage is not able to program with Intel ID.
Fixed issue where ESCD cross reference test fail due to ESCD/PCI mismatch when on-board RAID is disabled.
Removed serial port mode for COM B due to no support for IR.
Updated silk screen label & miscellaneous SMBIOS information.
Updated string token for memory bank to 1-based numbering.

B-0001

- Initial Beta Release
- Added 48 bit LBA support for large disk drive (>160GB)
- Fixed issue where PCI add-in video is not allowed on PCI slots.
  Fixed issue where S3 will bounce back if USB devices were enabled for power management.
  Implemented front panel button support by using ACPI interface.
  Fixed issue where LANx enable/disable option will disappear if previous selection is "disabled"

Known Errata with This Release