PRODUCTS: D945PSN, D945PLM, D945PVS, D945PAW, D945PLRN (Standard BIOS)

BIOS Version 0065

About This Release:
- January 16, 2006
- SN94510J.86A.0065.2006.0116.1603
- SATA RAID info: Intel(R) RAID for SATA - v5.1.2.1002
- Initializing Intel(R) Boot Agent FE v4.1.17
- Initializing Intel(R) Boot Agent GE v1.2.28

New Fixes/Features:
- Added new audio SSID.
- Fixed issue where Default Modules were not getting loaded upon Iflash "/md" switch.

BIOS Version 0063

About This Release:
- December 27, 2005
- SN94510J.86A.0063.2005.1227.1431
- SATA RAID info: Intel(R) RAID for SATA - v5.1.2.1002
- Initializing Intel(R) Boot Agent FE v4.1.17
- Initializing Intel(R) Boot Agent GE v1.2.28

New Fixes/Features:
- Added New Intel Splash Screen logo.
- Removed C1E option from setup.
- Changed ASF Table to signify that ASF PXE boot is supported when ASF is supported.
- Fixed an issue where the system hangs while resuming from S3 with certain processors. This fix also addresses Core speed difference failure.
- Fixed "NULL" string in F10 boot menu.
- Fixed issue where serial ports would stop functioning after call to INT14 Function 04 (Extended COM Port Initialize).
- Modified USB Ports Enable/Disable Setup Option to Maintenance Page.
- Fixed a problem where the BIOS update would report an error trying to flash update the microcode.
- Fixed issue where Iflash, reboot method (/rb), would fail to update the BIOS ID.
- Allow system to wake from S4 via PCI/PCIe devices when ACPI Suspend State set to S1.

BIOS Version 0057

About This Release:
- December 06, 2005
- SN94510J.86A.0057.2005.1206.1043
- SATA RAID info: Intel(R) RAID for SATA - v5.1.2.1002
- Initializing Intel(R) Boot Agent FE v4.1.17
- Initializing Intel(R) Boot Agent GE v1.2.28

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New Fixes/Features:
- Fixed issue where operating system could not get Wake up cause after resuming S4.
- Added "Serial Port" question in Setup.
- Added feature to enable USB bootable devices to boot the system first.
- Fixed Setup Browser would not refresh with F9 default Language.
- Fixed illegal pop-up message box display in setup.
- Added HPET support.
- Modified BIOS password character length to 2 through 19.
- Added feature to display BIOS Setup string "Intel(R) Integrator Toolkit has modified this BIOS." when appropriate.
- Added support for multiple EHCI controllers with USB Legacy.
- Removed FSB Override display option underneath existing FSB display option in Main menu.
- Allowed PCI and PCIe devices to wake from S4 when 'ACPI Suspend State' set to S1.
- Added support for SST25VF080B SPI flash.
- Fixed BIOS Version update failure during Iflash update.
- Fixed IFlash Update hang with FWH.
- Fixed a problem where the PCI slot 2 would not work if the system was in manufacturing mode.
- Fixed boot order for SCSI HDD.
- Fixed PXE intermittent fail to download Remote Boot Image (NBP).
- Fixed issue where certain SCSI card would not function properly.
- Fixed issue where certain hard drives hang during certain DOS IDE reads or writes.
- Fixed issue where certain Video card combinations would cause system hang when Primary Video Adaptor option set to Ext PCI Graphics.
- Fixed CPU microcode did not get updated for dual core CPU.
- Added USB Ports Enable/Disable Setup Option.
- Added VT Enabled/Disable setup option.
- Added feature to fill in Socket Designation field within SMBIOS Type 4 structure.
- Fixed issue where operating system installation or boot hung with Intel SCRU42X RAID card.
- Fixed error when installing operating system over IDER.
- Fixed the issue where during the first boot BIOS is forced to be in legacy mode.
- Allowed Ctrl+Alt DEL when no boot device detected by EFI Bios.

Known Errata:
- BIOS recovery from CD is temporarily removed.

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BIOS Version 0050
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About This Release:
- September 16, 2005
- SN94510J.86A.0050.2005.0916.1734
- SATA RAID info: Intel(R) RAID for SATA - v5.1.1.1002

New Fixes/Features:
- Fixed issue where system could not boot Windows XP installation CD from certain SATA CD-ROM.
- Fixed issue where certain USB thumb drive is not seen in BIOS SETUP.
- Disabled Compliance Test Pattern in MFG mode by default.
- Added Auxiliary Fan Speed display in Hardware Monitoring page of Setup.

Known Errata:
- BIOS recovery from CD is temporarily removed.

BIOS Version 0048

About This Release:
- September 9, 2005
- SN94510J.86A.0048.2005.0909.1250
- SATA RAID info: Intel(R) RAID for SATA - v5.1.1.1002

New Fixes/Features:
- Added features for the new D945PSN board sku.
- Fixed SMBIOS Type 16 Memory Error Correction reporting.
- Fixed Discard Changes pop-up message box display in setup.
- Fixed a problem where F2 enter setup key only worked after Option ROM scan.
- Improved ATAPI CD read performance for AMT IDER CD device read access.
- Fixed flash issue with BMP logo where badges would disappear.
- Fixed a problem where the microcode updates did not work if the flash update was using non-reboot method.
- Fixed User Access Level question scope in Full Access mode.
- Fixed IFlash update hang.

Known Errata:
- BIOS recovery from CD is temporarily removed.

BIOS Version 0047

About This Release:
- August 22, 2005
- SN94510J.86A.0047.2005.0822.1530
- SATA RAID info: Intel(R) RAID for SATA - v5.1.1.1002
- Initializing Intel(R) Boot Agent FE v4.1.17
- Initializing Intel(R) Boot Agent GE v1.2.28

New Fixes/Features:
- Updated the ICH7 RAID option ROM to version Intel(R) RAID for SATA v5.1.1.1002.
- Fixed intermittent system hang or long delay just before boot to USB device.
- Fixed long delay in POST with Iomega ZIP 750 attached as a single master drive in the system.
- Fixed issue where certain KVM switch would reset just before system boot.
- Fixed issue where RedHat* Linux install would hang with 4 SATA drives attached to the system.
- Fixed issue where PCI SERR and NMI are being disabled at system boot.
- Fixed issue where certain combinations of PS/2 and USB keyboards and mice would not function with USB legacy.
- Fixed issue where some USB thumb drives are not detected on hard power-on.
- Corrected functionality of the "USB ZIP Emulation Type" BIOS SETUP question.
- Added support for USB mass device emulation in BIOS SETUP boot order.
- Added setup option for USB Legacy Enable/Disable.
- Fixed "Exit Discard Changes" functionality in Setup.
- Fixed dual display of message pop-up box in Setup.
- Fixed Key Help alignment & format in setup.
- Lowered FSB to Processor Multiplier Ratio in Setup.
- Added support for PERR/SERR events detection and logging.
- Fixed issue where 16-bit PCMCIA cards were not detected correctly in Windows.
- Fixed USB boot issue to match "Boot to USB" setup question.
- Fixed USB Floppy not bootable when Legacy Floppy installed without a media.
- Fixed priority issue in Advance Boot Mode when Legacy Floppy is installed without a media.

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- Fixed SMBIOS Type10 Onboard Video Device status reporting
- Fixed Key Help & Pop-up message strings to reflect current language in Setup.
- Fixed issue BIOS not able to detect CMOS battery failure.
- Fixed a problem where the system would generate multi bit ECC errors and hang or reset if more than 2GB of memory was installed.
- Fixed issue where sometimes ECC errors were not detected and logged.
- Added date/time information for ECC events.
- Added feature to Enable/Disable Maximum CPUID Value Limit.
- Added PXE support for Vidalia®.
- Fixed EBU fail to reboot but shutdown system if FP Audio attached.
- Dual Heceta6 Support.
- Fixed the key that directly goes to set a new password when user not key in any old password.
- Fixed SOL window of opportunity issues.
- Fixed issue where certain DVD drive was not detected in BIOS SETUP.
- Fixed a problem where PCIx devices behind the PCIx bridges off the ICH7 did not work if a PCI to PCI bridge was connected with a video card behind it.
- Fixed hang with certain hardware configurations when performing specific types of Resets.
- Fixed numerous ASF PET message issues & added Stop ASF WDT.

Known Errata:
- BIOS recovery from CD is temporarily removed.

BIOS Version 0044

About This Release:
- July 11, 2005
- SN94510J.86A.0044.2005.0711.1450
- SATA RAID info: Intel(R) RAID for SATA - v5.0.0.1032
- Initializing Intel(R) Boot Agent FE v4.1.17
- Initializing Intel(R) Boot Agent GE v1.2.28

New Fixes/Features:
- Fixed an issue of no Audio after S3 resume.
- Added support for issuing ATA Security Freeze Lock to IDE devices on resume from S3.

Known Errata:
- BIOS recovery from CD is temporarily removed.

BIOS Version 0043

About This Release:
- July 7, 2005
- SN94510J.86A.0043.2005.0707.1254
- SATA RAID info: Intel(R) RAID for SATA - v5.0.0.1032
- Initializing Intel(R) Boot Agent FE v4.1.17
- Initializing Intel(R) Boot Agent GE v1.2.28

New Fixes/Features:
- Fixed delay at checkpoint 0x5A when certain CD drives are attached to the system as master drives.
- Cleared ICH7 SPI Access Request bit on S3 Resume.
- Fixed the problem where F9 key Load Setup defaults loads existing Setup values instead of BIOS defaults in Configuration mode.

Known Errata:
- BIOS recovery from CD is temporarily removed.

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BIOS Version 0042
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About This Release:
- June 27, 2005
- SN94510J.86A.0042.2005.0627.1644
- SATA RAID info: Intel(R) RAID for SATA - v5.0.0.1032
- Initializing Intel(R) Boot Agent FE v4.1.17
- Initializing Intel(R) Boot Agent GE v1.2.28

New Fixes/Features:
- Fixed Spurious Interrupt Test failure with the Intel RAID Option ROM Integration Test Suite.
- Cleared CR4[10:9] before boot.
- Updated processor microcodes.
- Corrected string listed for CAS latency in the aggressive settings.
- Fixed issue where certain CD-ROM is not detected and not bootable by the BIOS.
- Fixed POST hang with x8 PCI Express SCSI card.
- Fixed several second delay in POST while performing PS/2 port swapping.
- Removed unused ICH7 PATA timing code and 40-80 pin cable code.
- Fixed convert and restore flash process.
- Added S3 support for TPM.
- Modified the TRP, and TRCD values used when a bad or errant SPD value is found in one or more of the DIMMs.
- Fixed a problem where the PEG slot was disabled if the card in the slot was a non-graphics card.
- Fixed TPM enable/disable functionality.
- Fixed the issue - "System hangs with PSL-2.8GHz CPU".
- Fixed issue where some CD-ROM drives are not detected in BIOS SETUP.
- Fixed issue where the NetCell SyncRAID 3100 card was not able to boot.
- Fixed the issue PSC T1 is not running at rated frequency.
- Fixed issue where some drives supporting the Security Feature set were not issued the Security Freeze Lock command during POST.
- Implemented a default Intel inside logo display method in case the target CPU badge doesn't exist in Flash.
- Fixed EIST setup question based on processor capability.
- Fixed issue where some CD-ROMs/DVD-ROMs attached as master with no slave were causing long delays in POST.

Known Errata:
- BIOS recovery from CD is temporarily removed.

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BIOS Version 0037
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About This Release:
- June 1, 2005
- SN94510J.86A.0037.2005.0601.1758
- SATA RAID info: Intel(R) RAID for SATA - v5.0.0.1032
- Initializing Intel(R) Boot Agent FE v4.1.17
- Initializing Intel(R) Boot Agent GE v1.2.28

New Fixes/Features:
- Added Flex Logo & Optional Module support.
- Fixed long delay in POST when some CD-ROMs are attached as an IDE master device.

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- Fixed issue where Windows* was unable to enable DMA on SATA drives attached to the system.
- Added UQI language packages.
- Fixed a problem where PEG video devices that contains bridges does not work as the primary video device.
- Fixed slow POST when certain CD-ROMs are attached to the system.
- Fixed issue with Type 17 SMBIOS information.
- Fixed issue with incorrect SMBIOS PCI/PCIx slot information.
- Added Event Log Prompt support.
- Added display of System in Manufacturing Mode.
- Added support for writing SMBIOS data securely via EFI variables.
- Fixed errors with some memory stress tests when USB keyboard is plugged in the system.
- Fixed a hang in 3D Mark with Nvidia* PEG cards.
- Fixed a problem where the setup option for XD Execute Disable bit did not work correct.
- Added setup option for SW Single Processor Mode.
- Fixed issue where system would reboot when calling TCG INT1A functions.

Known Errata:
- BIOS recovery from CD is temporarily removed.

BIOS Version 0031

About This Release:
- May 19, 2005
- SN94510J.86A.0031.2005.0519.1842
- SATA RAID info: Intel(R) RAID for SATA - v5.0.0.1032
- Initializing Intel(R) Boot Agent FE v4.1.17
- Initializing Intel(R) Boot Agent GE v1.2.28

New Fixes/Features:
- Updated board features table.
- Fixed issue where fifth BIOS drive (84h) is not accessible via INT13h in certain system configurations.

Known Errata:
- BIOS recovery from CD is temporarily removed.

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