



DATE: August 22, 2005
PRODUCT: D945PSN/D945PLM/D945PVS/D945PAW Standard BIOS

Build 0047C

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
- Memory reference code equivalent to MRC 1.00.
- CPU Patches: M1DF3417, MBDF4117, M9DF4305, M9DF4406, M9DF4903.
- Supported firmware hubs:
 - Atmel® - AT49LH00B4
 - SST® - 49LF004B
 - STMicro® - M50FLW040
- SPI parts supported:
 - SST_25LF040A
 - SST_25LF080A

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 Masterview+ CS114A 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 MPC 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.
- 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 Pioneer DVD-120 drive was not detected in BIOS SETUP.
- Fixed a problem where PCIe devices behind the PCIe 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.

Build 0044C

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
- Memory reference code equivalent to MRC 1.00.
- CPU Patches: M1DF3417, MBDF4117, M9DF4305, M9DF4406.
- Supported firmware hubs:
 - Atmel® - AT49LH00B4
 - SST® - 49LF004B
 - STMicro® - M50FLW040
- SPI parts supported:
 - SST_25LF040A
 - SST_25LF080A

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.

Notes to Validation:

Build 0043C

About This Release:

- July 07, 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
- Memory reference code equivalent to MRC 1.00.
- CPU Patches: M1DF3417, MBDF4117, M9DF4305, M9DF4406.
- Supported firmware hubs:
 - Atmel - AT49LH00B4
 - SST - 49LF004B
 - STMicro - M50FLW040
- SPI parts supported:
 - SST_25LF040A
 - SST_25LF080A

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.

Notes to Validation:

Build 0042C

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
- Memory reference code equivalent to MRC 1.00.
- CPU Patches: M1DF3417, MBDF4117, M9DF4305, M9DF4406.
- Supported firmware hubs:
 - Atmel - AT49LH00B4
 - SST - 49LF004B
 - STMicro - M50FLW040
- SPI parts supported:
 - SST_25LF040A
 - SST_25LF080A

New Fixes/Features:

- Added workaround to fix the LAN drop issue
- Fixed Spurious Interrupt Test failure with the Intel RAID Option ROM Integration Test Suite.

- Cleared CR4[10:9] before boot as per BWG recommendation.
- Updated processor microcode's.
- Corrected string listed for CAS latency in the aggressive settings.
- Fixed issue where Sony CDU76E 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.

Build 0037C

About This Release:

- June 01, 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
- Memory reference code equivalent to MRC 1.00.
- CPU Patches: M1DF3414 and MBDF4112, M9DF4304, M9DF4404.
- Supported firmware hubs:
 - Atmel® - AT49LH00B4
 - SST® - 49LF004B
 - STMicro® - M50FLW040
- SPI parts supported:
 - SST_25LF040A
 - SST_25LF080A

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.

- 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/PCIe 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 NVideo® 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.

Notes to Validation:

Build 0031C

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 (Ekron)
- Initializing Intel(R) Boot Agent GE v1.2.28 (Tekoa)
- Memory reference code equivalent to MRC 1.00.
- CPU Patches: M1DF3414 and MBDF4112, M9DF4304, M9DF4404.
- Supported firmware hubs:
 - Atmel - AT49LH00B4
 - SST - 49LF004B
 - STMicro - M50FLW040
- SPI parts supported:
 - SST_25LF040A
 - SST_25LF080A

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.