PRODUCTS: DX58SO (Standard BIOS)

BIOS Version 3301

About This Release:
- January 28, 2009
- SOX5810J.86A.3301.2009.0128.1132
- SATA RAID info:
  Intel(R) RAID for SATA - ICH10: Raid Option ROM 8.7.0.1007
  ICH10R/DO.
- SATA AHCI info:
  Serial ATA AHCI BIOS, Version ICBO src 06-17-2008
- PXE info:
  Intel(R) Boot Agent PXE GE v1.3.24
  Intel(R) Boot Agent PXE Base Code (PXE-2.1 build 086)

New Fixes/Features:
- Enabled Secure Software Manufacturing mode.
- Updated ICH10 Raid Option ROM to Production Version 8.7.0.1007.
- Fixed issue where certain RAID cards did not work.
- Fixed issue where certain Linux* USB thumb drives are not bootable.
- Added ACPI OS support for PCI Express Enhanced Capabilities.
- Added programming of PCI Bridge Subsystem Vendor Capability Identification Register for ICH PCI Express Root Ports.
- Fixed issue where Windows* Vista* SP1 fails to resume from hibernate when hot-plugging eSATA drives into the Marvell* 6121 controller.
- Fixed non-responsive USB when system has a configuration with several large option ROMs loaded.
- Added support for Watchdog timer after post.

Known Errata:
- User should load BIOS Defaults (F9) after performing BIOS update to version 3044 or any previous version.

BIOS Version 3044

About This Release:
- December 19, 2008
- SOX5810J.86A. 3044.2008.1218.1457
- SATA RAID info:
  Intel(R) RAID for SATA - ICH10: Raid Option ROM 8.6.0.1007
  ICH10R/DO.
- SATA AHCI info:
  Serial ATA AHCI BIOS, Version ICBO src 06-17-2008
- PXE info:
  Intel(R) Boot Agent PXE GE v1.3.24
  Intel(R) Boot Agent PXE Base Code (PXE-2.1 build 086)

*Other names and brands may be claimed as the property of others.

New Fixes/Features:
- Fixed issue where user was unable to enter certain RAID Controller card Setup.
- Improved S3 resume time.
- Fixed issue where system hangs if USB mouse/keyboard is interrupted when entering S3.
- Fixed issue where boot order memory corruption occurs when both ICH RAID and Marvell* 6121 RAID are enabled.
- Added support for ignoring EFI El-Torito CD/DVD partition types.
- Fixed issue where PCI BIOS INT1A interface function B101 does not return the correct maximum PCI bus number.
- Added support in boot block to read EFI variables from VPD backup region if the system had reset in the middle of VPD reclaim.
- Fixed POST code 0x5A hang with certain ATAPI drives.
- Fixed issue where EFI boot images are not seen on IDE CD/DVD devices.
- Added help strings in BIOS setup.
- Fixed issue where audio verb table is not restored after S3 resume.
- Fixed F7 hotkey bad response issue.
- Updated the display string after BIOS update.
- Added BIOS workaround for WHQL PCIHCT "Assertion A6327544-4C4C-48CA-96C9-82C70F3DE6AA: FAILED. Bit 0 (Receiver Error Status) in the Correctable Error Status register (offset 10h) in the Advanced Error Reporting Capability table must be clearable.
- Enhanced overclocking capability using Host Clock override.
- Fixed issue where system boots up from G3 when "Wake on LAN from S5" = "Power On" and "After Power Failure" = "Stay Off".
- Fixed issue where "Description" field for SMBIOS Type 10 (On Board Devices Information) structure for On-board LAN is incorrect when On-board LAN is disabled.

BIOS Version 2786

About This Release:
- November 12, 2008
- SOX5810J.86A.2786.2008.1112.1500
- SATA RAID info:
  Intel(R) RAID for SATA - ICH10: Raid Option ROM 8.6.0.1007 ICH10R/DO.
- SATA AHCI info:
  Serial ATA AHCI BIOS, Version ICBO src 06-17-2008
- PXE info:
  Intel(R) Boot Agent PXE GE v1.3.24
  Intel(R) Boot Agent PXE Base Code (PXE-2.1 build 086)

New Fixes/Features:
- Fixed automatic mode for DDR Multiplier setting.
- Added flag to disable Secure Software Manufacturing mode.
- Updated Intel® Matrix Storage Manager option ROM to v8.6.0.1007.
- Fixed issues where memory reference voltage is incorrect at default.
- Fixed issue where memory voltage is at 1.50V in auto mode.
- Fixed a potential system hang issue.
- Fixed a potential VPD corruption issue.
- Added support for DDR3-1866.

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- Fixed issue where language selection and language display are not matched after BIOS recovery.
- Added support for additional XMP timings.
- Updated XMP speed detection.
- Fixed the sort order for the Memory Multiplier option.
- Enabled MRC Dimm Vref training.
- Fixed BIOS setup reset to default values when entering Maintenance mode.
- Added support to load Command Rate from the XMP profile.
- Fixed POST hang 0x5A when certain DVD drive is attached.

BIOS Version 2747

About This Release:
- November 5, 2008
- SOX5810J.86A.2747.2008.1105.0847
- SATA RAID info:
  Intel(R) RAID for SATA - ICH10: Raid Option ROM 8.5.0.1030 ICH10R.
- SATA AHCI info:
  Serial ATA AHCI BIOS, Version ICBO src 06-17-2008
- PXE info:
  Intel(R) Boot Agent PXE GE v1.3.24
  Intel(R) Boot Agent PXE Base Code (PXE-2.1 build 086)

New Fixes/Features:
- Improved C-State residency during bus mastering except in the case of ICH SATA bus mastering.
- Changed BIOS setup string "Pause POST if Chassis Intrusion" to "Chassis Intrusion".
- Fixed issue where XMP profile can be not properly detected.
- Fixed issue where QPI voltage change in Intel® Desktop Control Center (IDCC) does not set Performance Memory Profile to 'Manual'.
- Fixed error in IDCC with display of CPU Voltages in XTU.
- Added control in IDCC for Dynamic CPU Voltage Offset.
- Updated support for changeable QPI data rate on production non-XE CPU.
- Updated the code in IDCC to allow all memory multipliers to be passed to XTU with Non-XE production parts.
- Added support for XMP 1.2 Profiles.
- Fixed issue where certain video card hangs with PCIe ASPM L1 enabled.
- Fixed issue where user was unable to enter Intel SCRU43E SCSI RAID SETUP if another bootable device was in the system.
- Fixed issue where failure happens during Intel® Integrator Toolkit (ITK) token extract operation.
- Fixed issue where invalid combination of "Uncore Multiplier" and "DDR Multiplier" is passed from IDCC.
- Fixed thermal range for IOH thermal sensor in IDCC.
- Fixed issue that could cause false indication that the watchdog timer fired.
- Fixed issue where IED buffer is not cleared.
- Fixed issue where WDT-fired message is shown after changing Host Clock Frequency from 136MHz (and above) to 135MHz (and below).
- Updated BIOS support for On Semiconductor Heceta6P (ADI* ADT7490).
- Updated host clock real-time device creation based on SBPLL programming.
- QPI Voltage changes now require memory mode update.

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- Fixed issue where XMP profile reported invalid value for tWRmin.
- Removed ASSERT_CKE from the ResetFIFOs function to prevent possible tREFI violation on the S3 resume path.
- Disabled "Fast MRC" mode in warm boot when there is change in "QPI / Uncore Voltage".

BIOS Version 2483

About This Release:
- October 14, 2008
- SOX5810J.86A.2483.2008.1014.1606
- SATA RAID info:
  Intel(R) RAID for SATA - ICH10: Raid Option ROM 8.5.0.1030 ICH10R.
- SATA AHCI info:
  Serial ATA AHCI BIOS, Version ICBO src 06-17-2008
- PXE info:
  Intel(R) Boot Agent PXE GE v1.3.24
  Intel(R) Boot Agent PXE Base Code (PXE-2.1 build 086)

New Fixes/Features:
- Performance Status Display: Fixed hang when Setup UQI was not found.
- Updated UQI for Performance Status Display per new token UQI.
- Fixed invalid CMOS checksum error after Express BIOS Update to BIOS version 2394.
- Improved SATA performance under Windows* with C-States enabled.
- Updated QPI RC to revision 0.90RC8.
- Updated MRC to revision 0.90RC9.
- Enabled F7 flash update and latest USB stack support.
- Fixed issue where QPI scrambling is not enabled.
- Added check for Intel® Desktop Control Center (IDCC) to determine if memory mode should be set to automatic.
- Fixed memory voltage default programming when watchdog timer fires.
- Watchdog: Use instaflush as an option for forced reboots.
- Updated processor support.
- Updated information on BIOS Setup Main Page.
- Added Secure Software manufacturing mode support.
- Fixed issue where intermittent memory beep code errors occur when overclocking and WDT is enabled.
- Removed additional reset through instaflush after Host Clock Frequency Override is changed.
- Removed non-productized BIOS setup items.
- Fixed possible hang when changing Host Clock Frequency Override from Automatic to Manual.
- Reduced Watchdog timer timeout constant for MRC.
- Updated BIOS setup items and help strings.
- Updated UQI for Intel® Desktop Control Center (IDCC) per new token UQI.
- For IDCC, fixed QPI Multiplier displayed in auto mode.
- For IDCC, report dynamic CPU voltage offset for non-XE processor.
- For IDCC, fixed Uncore Ratio in Auto Memory Mode.
- Fixed issue where invalid default is shown for certain processors.
- Fixed proposed memory speed in BIOS setup Performance page.

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BIOS Version 2394
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About This Release:
- October 1, 2008
- SOX5810J.86A.2394.2008.1001.0911
- SATA RAID info:
  Intel(R) RAID for SATA - ICH10: Raid Option ROM 8.5.0.1030 ICH10R.
- SATA AHCI info:
  Serial ATA AHCI BIOS, Version ICBO src 06-17-2008
- PXE info:
  Intel(R) Boot Agent PXE GE v1.3.24
  Intel(R) Boot Agent PXE Base Code (PXE-2.1 build 086)

New Fixes/Features:
- Added performance status display to BIOS setup.
- Fixed issue where QPI data rate changes to 6.4GT/s when Watchdog timer fires and power down does not occur before next boot up.
- Disabled "Fast MRC" mode in warm boot when there is any change in memory-related BIOS setup item.
- Fixed issue where POST 0xFF hang after changing host clock and loading defaults.
- Fixed incorrect Dynamic CPU Voltage Offset entry.
- Updated support for providing board specific sensor layout information to OS applications dynamically.
- Fixed issue where Processor Speed would show 0.0 GHz on Main page of BIOS Setup when loading F9 defaults from within Processor Override menu.
- Fixed issue where Core SMI handler is preventing resets for non-hardware hangs.
- Fixed Windows* boot option issue.
- Updated Turbo Mode string to official name "Intel® Turbo Boost Technology".
- Set Memory Scrambling to enable as default.
- Updated sensor usage to VR instead of Memory.
- Fixed issue where Intel® Desktop Control Center (IDCC) would not load after thermal settings from Intel® Integrator Toolkit (ITK) were installed
- Updated QPI RC to revision 0.90RC7.
- Fixed issue where system cannot boot with memory setting from "Automatics" mode in "Manual" mode.
- Fixed issue where watchdog timer does not catch UnCore Multiplier hangs.
- Fixed issue where PCIe Clock is not at 100MHz when set to default.
- Updated processor support.
- Update MRC to revision 0.90RC8.
- Fixed USB recovery failure when SATA DVD-ROM is attached.

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BIOS Version 2127
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About This Release:
- September 14, 2008
- SOX5810J.86A.2127.2008.0914.1638
- SATA RAID info:
  Intel(R) RAID for SATA - ICH10: Raid Option ROM 8.5.0.1030 ICH10R.
- SATA AHCI info:

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          Serial ATA AHCI BIOS, Version ICBO src 06-17-2008
    •   PXE info:
        Intel(R) Boot Agent PXE GE v1.3.24
        Intel(R) Boot Agent PXE Base Code (PXE-2.1 build 086)
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New Fixes/Features:
    •   Initial production BIOS release

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