

## **BIOS Update Release Notes**

## PRODUCTS: DX38BT, DX48BT2 (Standard BIOS)

## BIOS Version 1893

#### About This Release:

- October 09, 2008
- BTX3810J.86A.1893.2008.1009.1712
- SATA RAID info: Intel(R) RAID for SATA - v7.6.0.1011
- SATA AHCI info: Version UPSD src 12-03-2007 for ICH9
- PXE Nahum info: Intel(R) Boot Agent GE v1.3.22
- ME firmware build: None

#### New Fixes/Features:

- Fixed issue preventing processor multiplier update from XTU.
- Fixed issue where system power on fails after AC loss.
- Fixed an issue where the Flag was being set that Watchdog timer had fired.
- Fixed BIOS Setup in the Hardware Monitoring page, the 1.5v rail text was changed to 1.2v.

#### BIOS Version 1814

#### About This Release:

- August 8, 2008
- BTX3810J.86A.1814.2008.0807.2334
- SATA RAID info: Intel(R) RAID for SATA - v7.6.0.1011
- SATA AHCI info: Version UPSD src 12-03-2007 for ICH9
- PXE Nahum info: Intel(R) Boot Agent GE v1.3.22
- ME firmware build: None

#### New Fixes/Features:

- Updated to proper branding symbols and terms.
- LAN PXE boot ROM was upgraded to newer version
- SMBIOS tables now properly reflect the PCI and PCIe slots.
- Fixed issue where watchdog error occurred when switching Reference Voltage option from Automatic to Manual.
- Fixed POST hang if BSEL is changed from default.
- Updated setup options for PCIe Burn-In Mode to reflect the correct frequency programmed to CK505 clock.
- Fixed Intel® Desktop Control Center (IDCC) issue where BIOS settings did not properly restore with watchdog event from OS. Board will return to last known safe state, or BIOS defaults will be loaded.

- Fixed issue where memory timing changes from IDCC did not get applied to memory controller. If the changes made from IDCC require a hard reset instead of warm reset, it will be forced after the warm reset has happened.
- Added clock chip support for ICS9LPRS365 and SLG8SP533.
- Fixed issue where system continuously reboots when XMP Profile is selected or Memory Ref Frequency is changed and certain specific video cards are used.
- Fixed security issue with the (BDA) keyboard buffer.
- Fixed an issue where hardware virtualization is not available after S3 resume.
- Fixed an issue where system won't boot intermittently when optical drive is connected to SATA port 2.
- Fixed an issue where profiles were not always saved while VM was running.
- Added support for duplicate BIOS ID to workaround certain flash corruption issues.
- Fixed a problem where USB devices were not detected during POST.
- Optimized USB Legacy, by removing devices to reduce boot time. This was done by adding non-compliant USB devices to the unsupported list. They will not be used during POST but will still run fine in Windows\*.

#### About This Release:

- July 16, 2008
- BTX3810J.86A.1782.2008.0716.1541
- SATA RAID info: Intel(R) RAID for SATA - v7.6.0.1011
- SATA AHCI info: Version UPSD src 12-03-2007 for ICH9
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.50
- ME firmware build: None

#### New Fixes/Features:

• Updated processor support.

#### BIOS Version 1554

#### About This Release:

- May 01, 2008
- BTX3810J.86A.1554.2008.0501.1628
- SATA RAID info: Intel(R) RAID for SATA - v7.6.0.1011
- SATA AHCI info: Version UPSD src 12-03-2007 for ICH9
  PXE Nahum info:
- Intel(R) Boot Agent GE v1.2.50

## Note: Reference Voltage Override currently is not functional in this Bios release.

#### New Fixes/Features:

• Fixed HW Watchdog Timer not able to reset system during hang.

- Fixed issue where system continues to boot during fail-safe mode.
- Updated MRC Update Static tRD adjust to 0.
- Updated Setup options and help text for audio prompt.
- Updated Setup options and help text for ClE prompt.
- Updated Setup options for half ratio prompt.
- Fixed issue where Intel® Desktop Control Center Memory Page "Restore" button does not restore the default values.
- Added check for BIOS ID during BIOS recovery.
- Update CPU Voltage support for Intel® Desktop Control Center.
- Changed SMBIOS Memory Type from "DDR2" to "Other".
- Fixed issue where all CPUs resume to different multiplier ratio from S3.
- Fixed issue where all underclocked CPUs boot at maximum ratio if EIST is disabled.
- Fixed issue where multiple options changed from Intel® Desktop Control Center did not get saved.
- Fixed Watchdog Timer causing continuous reboot.
- Changed Setup maximum host clock override from 500MHz to 720MHz.
- Added Watchdog Timer options to Setup Performance Page.
- Added Half Ratio support for Half Ratio capable processors.
- Added ability to disable C1E.
- Fixed POST hang if BSEL is changed from default.
- Fixed issue where new BIOS SETUP settings may contain random data when using Flex EFI Variable updates.
- Fixed issue causing Watchdog Timer firing to not be detected.
- Fixed issue preventing the BIOS Setup WDT message after timeout.
- Fixed issue where boot order was not synchronized in Intel® Integrator Assistant when boot order is hidden.
- Fixed issue where the boot order is not synchronized in Intel® Integrator Assistant with F2 setup when boot devices are disabled in Normal mode and re-enabled in Advance mode.
- Added ability for Intel® Integrator Toolkit to choose between black or white badge background and the reporting of max logo resolution support.
- Fixed system hang when user browses to a BIOS setup page that has all text hidden by Intel® Integrator Toolkit.
- Update SPI Flash Descriptor.

#### About This Release:

- March 18, 2008
- BTX3810J.86A.1521.2008.0318.1426
- SATA RAID info: Intel(R) RAID for SATA - v7.6.0.1011
- SATA AHCI info: Version UPSD src 12-03-2007 for ICH9
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.50

#### New Fixes/Features:

- Fixed Audio Codec SSID not being programmed after resume from S3.
- Updated processor support.

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

- Add additional memory timing options in BIOS setup.
- Updated support to select the appropriate voltage based on CPU and FSB speed.
- Updated support for DDR3-1600 memory.

#### About This Release:

- March 04, 2008
- BTX3810J.86A.1513.2008.0304.1726
- SATA RAID info: Intel(R) RAID for SATA - v7.6.0.1011
- SATA AHCI info: Version UPSD src 12-03-2007 for ICH9
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.50
- ME firmware build: None

### New Fixes/Features:

- Updated MRC X38 v1.40 / X48 v1.20.
- Updated CPU VRef default values in automatic mode.
- Updated PCIe card detection in PCIe Slot 1 and 2.
- Fixed issue where optical drive caused hang during POST.

## BIOS Version 1507

### About This Release:

- February 27, 2008
- BTX3810J.86A.1507.2008.0227.2218
- SATA RAID info: Intel(R) RAID for SATA - v7.6.0.1011
- SATA AHCI info: Version UPSD src 12-03-2007 for ICH9
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.50
- ME firmware build: None

#### New Fixes/Features:

- Added option for memory command rate.
- Updated X48 MRC timing table values.
- Updated BIOS Setup to detect the supported XMP profile speed.
- Fixed long boot time due to no media in SATA optical drive when set to AHCI/RAID mode.
- Fixed issue where Aggressive Link Power Management could not be enabled on the ICH SATA AHCI controller.
- Fixed RAID Fail to Resume from Standby (S3).
- Fixed Windows\* Vista 0xC4 BSOD when running Driver Verifier on TPM.SYS.
- Fixed time-out failures with Extended INT 13 Seek Function (INT 13 Function 47).
- Fixed issue where certain SAS HBA card was not booting.
- Fixed issue where certain USB hard drive did not work in USB legacy support.
- Fixed IDCC2 on handling automatic mode for PCIe values.
- Fixed IDCC2 to reset the last known good values upon WDT reset from OS.

• Fixed the title of the BIOS setup page get overlap by certain condition.

#### BIOS Version 1500

#### About This Release:

- February 15, 2008
- BTX3810J.86A.1500.2008.0215.1100
- SATA RAID info: Intel(R) RAID for SATA - v7.6.0.1011
- SATA AHCI info: Version UPSD src 12-03-2007 for ICH9
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.50

#### New Fixes/Features:

- Updated Heceta6P support for PECI processor based on the number of domain.
- Implemented Reference Voltage Override support.
- Fixed BIOS Setup interface to allow pop-up menu to scroll through options.
- Optimized performance of ATAPI recovery routines.
- Allow use of more than one CD device for ATAPI CD-ROM recovery.
- Fixed CPU Speed report in BIOS Setup.
- Renamed Aux Fan to Rear Fan 2 in Hardware Monitoring page.
- Changed Hardware Monitoring page to display fan/temp values
- Added support to select the appropriate voltage based on CPU and FSB speed.
- Updated the graphics for Express BIOS Update.

#### BIOS Version 1478

#### About This Release:

- February 1, 2008
- BTX3810J.86A.1478.2008.0201.1716
- SATA RAID info: Intel(R) RAID for SATA - v7.6.0.1011
- SATA AHCI info: Version UPSD src 12-03-2007 for ICH9
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.50

#### New Fixes/Features:

- Fixed issue where Intel Desktop Control Center failed to start with certain processor.
- Updated processor support.
- Fixed language switching and 'Exit discard Changes' could slow down the responsiveness of BIOS setup page.
- Fixed issue where optical drive and hard drive is not booted in the order according to Boot Order.
- Added ability to underclock production non-XE processor multipliers.
- Fixed issue on getting the Max Ratio of the CPU.
- Fixed issue where L2 cache size will not be displayed in BIOS setup.
- Fixed POST code 5Ah hang with SATA HDDs and PCI Graphics card in Slot 2.

- Added a workaround of option ROM which has an invalid PCI Expansion ROM Header.
- Hid AHCI option ROM text when not running in RAID mode.
- Fixed issue causing Watchdog Timer firing to not be detected.
- Fixed blue screen during Vista\* UEFI installation.
- Fixed issue where graphics cards that don't support 800x600 mode will not display anything on screen during POST.
- Added PCIe Link Width information for all PCIe Slot in Video Configuration Setup page.
- Added support for booting El-Torito HDD emulation Memtest86+ with AHCI Option ROM.
- Fixed hard drive detection after cold reboot in AHCI mode.

#### About This Release:

- December 17, 2007
- BTX3810J.86A.1397.2007.1217.1401
- SATA RAID info:
- Intel(R) RAID for SATA v7.6.0.1011
- SATA AHCI info: Version UPSD src 04-20-2007 for ICH9
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.50

#### New Fixes/Features:

- Enhanced Processor Multiplier Setup Option to only list ratios supported by installed processor.
- Corrected an issue where VGA is not found behind a bridge.
- Updated Chassis Type SMBIOS structure.
- Changed WOL option to default disable.
- Hid iQST option.
- Fixed support for IIA.

#### BIOS Version 1358

#### About This Release:

- December 04, 2007
- BTX3810J.86A.1358.2007.1204.1623
- SATA RAID info: Intel(R) RAID for SATA - v7.6.0.1011
- SATA AHCI info: Version UPSD src 04-20-2007 for ICH9
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.50

#### New Fixes/Features:

- Updated Hardware Watchdog timer support.
- Fixed issue where Hardware Watchdog timer error prompts on system reset after S3 cycle.
- Added memory speed overridden value to Setup Main page.
- Fixed issue where PSID XE CPU cannot be over clocked.
- Updated processor speed overridden value for Half Ratio support processor.
- Fixed issue causing IDCC launch failure.
- Fixed PATA CD BIOS recovery.

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• Enhancement on XMP-1600 performance.

#### BIOS Version 1308

#### About This Release:

- November 12, 2007
- BTX3810J.86A.1308.2007.1112.1659
- SATA RAID info: Intel(R) RAID for SATA - v7.6.0.1011
- SATA AHCI info: Version UPSD src 04-20-2007 for ICH9
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.50

#### New Fixes/Features:

- Fixed issues where some BIOS Setup options are hidden.
- Added updates to BIOS support for Intel® Desktop Control Center.
- Fixed display of cache for multi-core processors.
- Fixed PC28 memory error beeps on warm boot with 1333 CPU / 1333 Memory.
- Fixed issue where XMP settings were causing system instability.
- Fixed issue where overclocking settings were causing HW Watchdog Timer to fire on every boot.
- Added Hardware-based Watchdog Timer implementation.
- Added support for XMP (Extreme Memory Profile).
- Added some boot/S3 resume time optimizations.
- Fixed a bug where IERR got asserted on certain CPUs.

#### BIOS Version 1251

#### About This Release:

- October 16, 2007
- BTX3810J.86A.1251.2007.1016.1510
- SATA RAID info: Intel(R) RAID for SATA - v7.6.0.1011
- SATA AHCI info: Version UPSD src 04-20-2007 for ICH9
  PXE Nahum info:
- Intel(R) Boot Agent GE v1.2.50

#### New Fixes/Features:

- Added BIOS Setup Option "Secondary SATA Controller Mode" to select between IDE and RAID modes
- Fixed issue where IIA or ITK could not set boot order correctly
- Worked around USB Legacy related hangs during POST
- Fixed issue where certain 3-wire fans would not spin
- Added code to suppress Floppy-related options for boards that don't support floppy
- Added support for 400MHz FSB CPU over clocking on clock chip

#### BIOS Version 1157

#### About This Release:

- October 6, 2007
- BTX3810J.86A.1157.2007.1006.1352

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

- SATA RAID info: Intel(R) RAID for SATA - v7.6.0.1011
- SATA AHCI info: Version UPSD src 04-20-2007 for ICH9
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.50

#### New Fixes/Features:

• Initial production BIOS release

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