PRODUCTS: DG965WH, DG965SS, DG965PZ, DG965OT, DG965MS, DG965MQ, DQ963FX, DQ963GS (Standard BIOS)

BIOS Version 1754

About This Release:
- November 17, 2008
- MQ96510J.86A.1754.2008.1117.0002
- VBIOS info:
  Build Number: 1653 PC 14.34 06/08/2008 20:33:38.
- SATA RAID info:
  Intel(R) RAID for SATA – v6.1.0.1002
- SATA AHCI info:
  Version UPSD src 08-24-2007
- PXE Nahum info:
  Intel(R) Boot Agent GE v1.3.24
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Fixed a potential VPD corruption issue.
- Fixed a potential system hang issue due to infinite loop in the variable function.
- Updated PXE UNDI for Intel(R) 82566 Gigabit LAN to version 1.3.24 PV.
- Updated Video BIOS v1653.
- Added supervisor password check for chassis intrusion event.

BIOS Version 1751

About This Release:
- August 11, 2008
- MQ96510J.86A.1751.2008.0811.0002
- VBIOS info:
  Build Number: 1594 PC 14.34 02/14/2008 16:47:00.
- SATA RAID info:
  Intel(R) RAID for SATA – v6.1.0.1002
- SATA AHCI info:
  Version UPSD src 08-24-2007
- PXE Nahum info:
  Intel(R) Boot Agent GE v1.2.50
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Added workaround to fix language option not showing correctly.
- Corrected SMBIOS CPU socket type and designator information.
- Corrected the TCG ACPI table header length according to the TCG ACPI spec 1.0.
- Fixed POST code 0x5A hang with no video devices installed in the system.

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

- Removed disabled wake on USB devices from S3 when system is running on battery.
- Fixed issue where keys pressed in POST are visible after boot in the BIOS Data Area (BDA) keyboard buffer.
- Fixed issue where certain USB hard drive did not work in USB legacy support.
- 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 the upper portion of the EAX and EDX register were getting corrupted during INT9 (keyboard handler) execution on no-SIO systems.
- Fixed incorrect restore of PIC mask register.
- Fixed a problem where USB devices were not detected during POST.
- Added workaround to fix system won't boot intermittently when optical drive is connected to SATA port 2.
- Fixed an issue where an error would occur when running EBU after running iflashwin.
- Fixed Express BIOS Update (EBU) allowing custom BIOS to be loaded over standard BIOS.
- Fixed EBU generate internal error.

BIOS Version 1738

About This Release:
- June 17, 2008
- MQ96510J.86A.1738.2008.0617.0002
- VBIOS info:
  Build Number: 1594 PC 14.34 02/14/2008 16:47:00.
- SATA RAID info:
  Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info:
  Version UPSD src 04-20-2007
- PXE Nahum info:
  Intel(R) Boot Agent GE v1.2.50
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Fixed Windows Vista* S3 Wake up issue with 4GB RAM and above.
- Enabled system to boot with greater than 8GB of memory.
- Fixed issue where hardware virtualization is not available after S3 resume.
- Updated RAID Option ROM.
- Changed BIOS setup string "VT Technology" to "Intel(R) VT" under Security Menu.
- Updated Video BIOS Build Number: 1594 PC 14.34 02/14/2008 16:47:00.
- Fixed incorrect memory size decrease message.
- Added ability for ITK to choose between black or white badge background and the reporting of max logo resolution support.
- Added black and white background badges for 640x480, 800x600 and 1024x768.
- Added check for BIOS ID during BIOS recovery.
- Added support for duplicate BIOS ID.
- Updated VSCC table in flash descriptor based on ICH SPI Flash Programming Guide.

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

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BIOS Version 1729
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About This Release:
- March 26, 2008
- MQ96510J.86A.1729.2008.0326.0002
- VBIOS info:
  Build Number: 1518 PC 14.27 07/06/2007 17:11:20.
- SATA RAID info:
  Intel(R) RAID for SATA - v6.1.1.1001
- SATA AHCI info:
  Version UPSD src 04-20-2007
- PXE Nahum info:
  Intel(R) Boot Agent GE v1.2.50
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Added workaround for STMicro* PVG TPM parts to pass the Microsoft Windows Vista* TCG TPM Integration Test.
- Fixed failing TCG TPM Interface Test with Microsoft Vista Windows Logo Kit (WLK) 1.1.
- Fixed local hard drive is inaccessible during IDER DOS session when SATA is configured as AHCI/RAID.
- Modify media detection code in AHCI OROM to skip attempt to boot from optical device when there is no media in the optical device.
- Fixed RAID Fail to Resume from Standby (S3).
- Fixed issue where El Torito* emulated CD did not boot on TS-H353
- Disabled wake on USB devices from S3 when system is running on battery.
- Binary check in for PTS ID 3549.
- Fix for no HD detection in AHCI mode after G3 power cycle with changes from rev 5.
- Fixed issue where certain drive not detected after a G3 power cycle.
- Added support for booting El-Torito HDD emulation Memtest86+ with AHCI Option ROM.
- Fixed Vista WHQL DTM RESSTOMP failure with I/O ports 0x360 and 0x361.
- Fixed issue where TPM PCR registers were unreadable after S3 resume.
- Fixed Windows 2000* S3 resume issue when certain graphics card installed.
- Added support for code caching for secondary bootblock to speed up S3 resume time.
- Changed ICH record from Device 30 (HLP2P) to Device 31 (LPC).
- Fixed issue where boot order is not synchronized with Intel® Integrator Assistant (IIA) when user uses IIA to hide boot order and enable/disable boot devices in F2.
- Fixed issue where boot order was not being updated when boot devices were enabled/disabled in Advance mode in F2 setup.
- Fixed a potential Stall() loop overflow issue.
- Added conditional statement that checked if boot menu is locked before clearing the boot order variable.
- Updated processor support.

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

BIOS Version 1719

About This Release:
- December 17, 2007
- MQ96510J.86A.1719.2007.1216.0002
- VBIOS info:
  Build Number: 1518 PC 14.27 07/06/2007 17:11:20.
- SATA RAID info:
  Intel(R) RAID for SATA - v6.1.1.1001
- SATA AHCI info:
  Version UPSD src 04-20-2007
- PXE Nahum info:
  Intel(R) Boot Agent GE v1.2.50
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Enabled the non-iSRT BIOS to be updatable on iSRT skus.

BIOS Version 1716

About This Release:
- December 03, 2007
- MQ96510J.86A.1716.2007.1203.0002
- VBIOS info:
  Build Number: 1518 PC 14.27 07/06/2007 17:11:20.
- SATA RAID info:
  Intel(R) RAID for SATA - v6.1.1.1001
- SATA AHCI info:
  Version UPSD src 04-20-2007
- PXE Nahum info:
  Intel(R) Boot Agent GE v1.2.50
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Fixed issue where the PCI-E video card has no display in OQM test.

BIOS Version 1713

About This Release:
- November 26, 2007
- MQ96510J.86A.1713.2007.1125.0002
- VBIOS info:
  Build Number: 1518 PC 14.27 07/06/2007 17:11:20.
- SATA RAID info:
  Intel(R) RAID for SATA - v6.1.1.1001
- SATA AHCI info:
  Version UPSD src 04-20-2007
- PXE Nahum info:
  Intel(R) Boot Agent GE v1.2.50
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Updated processor support.

BIOS Version 1709

About This Release:
- October 11, 2007
- MQ96510J.86A.1709.2007.1010.1926
- VBIOS info:
  Build Number: 1518 PC 14.27 07/06/2007 17:11:20.
- SATA RAID info:
  Intel(R) RAID for SATA - v6.1.1.1001
- SATA AHCI info:
  Version UPSD src 04-20-2007
- PXE Nahum info:
  Intel(R) Boot Agent GE v1.2.50
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Fixed issue where PMM calls would sometimes fail incorrectly.

BIOS Version 1707

About This Release:
- September 20, 2007
- MQ96510J.86A.1707.2007.0919.2024
- VBIOS info:
  Build Number: 1518 PC 14.27 07/06/2007 17:11:20.
- SATA RAID info:
  Intel(R) RAID for SATA - v6.1.1.1001
- SATA AHCI info:
  Version UPSD src 04-20-2007
- PXE Nahum info:
  Intel(R) Boot Agent GE v1.2.50
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Updated Video BIOS Build Number: 1518 PC 14.27 07/06/2007 17:11:20.
- Changed the method of getting ME FW capability through MEBx instead of hardcoded.
- Workaround on DVMT GraphicsDriverMemorySize Option value to fulfill IIA requirement.

BIOS Version 1705

About This Release:
- September 03, 2007
- MQ96510J.86A.1705.2007.0902.1850
- VBIOS info: Build Number: 1471 PC 14.27 03/23/2007 16:50:31.
- SATA RAID info: Intel(R) RAID for SATA - v6.1.1.1001
- SATA AHCI info: Version UPSD src 04-20-2007
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.50
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Fixed issue where IIA or ITK could not set boot order correctly.
- Fixed issue where ITK or IIA could not read boot drives' model strings.

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

- Fixed issue where ITK or IIA could not access Boot Priority List when all the boot devices disabled in the BIOS Setup.
- Fixed issue where ITK/IIA could not set Boot Order if the Boot Menu Type in the BIOS Setup was set to Advance.
- Updated CK505 clock chip driver to make it robust for multiple platforms.
- Fixed issue where system will hang at OS loading screen with processor C4 state enabled.
- Switch SATA PLL to PLL2, only when Burn In mode is supported and enabled.
- Fixed system hang while language is not selected after language list message pop-out.
- Fixed "Validate the Consistency of the TCPA EventLog" failure with Windows* Logo Kit 1.0c TPM BIOS Interface Logo Test.
- Changed displayed SOL copyright to 2007.
- Fixed intermittent POST hang 0x25.
- Fixed issue where certain USB bar code scanners would drop a single character if used under USB Legacy.
- Fixed ME WOL from S5/S3 wake the whole system instead of just ME.
- Fixed issue where system unable boot to connected bootable Hard Disk device, when all devices in Advanced mode are disabled.

BIOS Version 1699

About This Release:
- July 30, 2007
- MQ96510J.86A.1699.2007.0729.2026
- VBIOS info: Build Number: 1471 PC 14.27 03/23/2007 16:50:31.
- SATA RAID info: Intel(R) RAID for SATA - v6.1.1.1001
- SATA AHCI info: Version UPSD src 04-20-2007
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.50
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Added ITK Data Var Type 3 to store VAREQ variable.
- Fixed issue where flashing a large BMP Logo caused inability to reflash and possibly not boot.

BIOS Version 1698

About This Release:
- July 24, 2007
- MQ96510J.86A.1698.2007.0724.0037
- VBIOS info: Build Number: 1471 PC 14.27 03/23/2007 16:50:31.
- SATA RAID info: Intel(R) RAID for SATA - v6.1.1.1001
- SATA AHCI info: Version UPSD src 04-20-2007
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.50
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Changed the HDD pre-delay option's stepping style.
- Fixed issue where language display in BIOS setup is not changed according to BIOS setup variable.
- Synched up CPU module to Baseline 8.6.
- Workaround an intermittent failure seen with EFI_VARIABLE in Windows environment.

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

- Added QST support for new processors.
- Implement dynamic detection method for SRC0_SEL setting.
- Fixed issue where ME_ENABLE bit in CK505 not set before ME init during S3 resume.
- Fixed issue where the change in BIOS language does not take place cleanly for many cases.
- Fixed issue where Language selection and language display mismatch after press Ctrl+Alt+Del.
- Fixed issue where language selection and language display are not matched after user pressed F9/loaded default in BIOS setup.
- Fixed ME page shows junk while press <F9> to load default by added code to ignore <F9> function while on AMT page.
- Added capability to override debug patches even if the patch version is lesser than the current version.
- Moved previously hidden Force On-board LAN Device setup option from Normal mode to Maintenance mode.
- Removed ME debug code that produced ME beep codes during POST.
- Add messages for USB key provisioning.
- Fixed resource allocation issues with PCI cards with multiple P2P bridges.
- Fix for initializing OemDefault variable to proper size.
- Fixed issue where "Single Processor Mode" setup option not working.
- Fixed issue where Quad core CPU not able to run in single processor mode.
- Added support for Windows Vista* Media Center OCUR Host Firmware Support.
- Fixed a problem where the system would sometimes hang when the CMP was disabled.
- Fixed ME "End of DRAM Respond" error when the board is first power up after removed and reinstalled the battery.
- Reduced BIOS init time for S3 resume by enabling SPI prefetching.
- Added serial POST code support.
- Fixed issue where USB keyboards were not usable during option ROMs initialization.
- Fixed the problem where disabling USB legacy support hangs the legacy free system during POST.
- Updated to Video BIOS Build Number: 1471 PC 14.27 03/23/2007 16:50:31
- Fixed issue where system with 4GB memory boot very slow the first time after SPI fresh burned.
- Fixed DMI memory slot location ID doesn't match motherboard markings.
- Updated to RAID option rom: Intel(R) RAID for SATA - v6.1.1.1001
- Updated PXE UNDI rom to Initializing Intel(R) Boot Agent GE v1.2.50.
- Fixed an issue where flashing a large BMP Logo caused inability to reflash and possibly no boot.
- Fixed issue where system not able to install Microsoft Vista* 64-bit O/S with certain processor.
- Updated supported processors.
- Fixed issue where the BIOS was potentially using all processor variable MTRRs.

BIOS Version 1687

About This Release:

- May 10, 2007
- MQ96510J.86A.1687.2007.0510.0258
- VBIOS info: Build Number: 1471 PC 14.27 03/23/2007 16:50:31.
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Version UPSD src 04-20-2007
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.42
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Updated to Video BIOS Build Number: 1471 PC 14.27 03/23/2007 16:50:31.
- Fixed ME "End of DRAM Respond" error when the board is first powered up.
- Implemented dynamic clock control for IGD clock.
- Fixed resource allocation issue with PCI cards with multiple P2P bridges.

BIOS Version 1679

About This Release:
- April 27, 2007
- MQ96510J.86A.1679.2007.0426.2359
- VBIOS info: Build Number: 1436 PC 14.21 02/05/2007 17:31:04.
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Version UPSD src 04-20-2007
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.42
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Fixed issue where some USB 2.0 boot devices become disabled late in POST or at boot.
- Fixed issue where all the information (including ME version) in "Additional System Information" page is lost, after the language is changed.
- Updated processor support.
- Fixed issue where the change in BIOS language does not take place cleanly for many cases.
- Changed the HDD pre-delay option's stepping style.
- Removed Provisioning related command line options from Express BIOS update.

BIOS Version 1676

About This Release:
- April 13, 2007
- MQ96510J.86A.1676.2007.0413.0149
- VBIOS info: Build Number: 1436 PC 14.21 02/05/2007 17:31:04.
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Version UPSD src 09-13-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.42
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Updated processor support.
- Changed the manufacturing SATA Type default to follow customer default.

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

- Fixed issue where incorrect resource being allocated to PCI/PCIe devices when ISA_EN bit enabled in the bridge.
- Fixed issue where system would run slow with 4 GB of RAM and certain PCI Express Graphics cards.
- Removed an 8 second delay from the ACHI option ROM to speed up POST.

BIOS Version 1669

About This Release:
- April 06, 2007
- MQ96510J.86A.1669.2007.0406.0107
- VBIOS info: Build Number: 1436 PC 14.21 02/05/2007 17:31:04.
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Version UPSD src 09-13-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.42
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Fixed Audio Code subsystem ID problem after resuming S3.
- Fixed priority issue in Advanced Boot Mode when Legacy Floppy is installed without a media.
- Change SATA Type default in MFG mode to AHCI if the board capable to support RAID or AHCI.
- Fixed issue where certain processors have boot problem to Microsoft* Windows* Vista.
- Changed the display string in Hardware Monitoring page from "+1.5V" to "MCH Vcc".
- Fixed issue where flashing a large .BMP Logo caused inability to reflash and possibly not boot.
- Fixed issue where certain keyboard does not work with USB Legacy support.
- Fixed WOL from G3 feature not working issue.
- Updated processor support.

BIOS Version 1666

About This Release:
- March 28, 2007
- MQ96510J.86A.1666.2007.0327.2349
- VBIOS info: Build Number: 1436 PC 14.21 02/05/2007 17:31:04.
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Version UPSD src 09-13-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.42
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Fixed issue where Wake On LAN from G3 not working.
- Updated processor support.
- Fixed priority issue in Advance Boot Mode when Legacy Floppy is installed without a media.
- Fixed boot order for SCSI HDD with certain SCSI controllers and a SCSI HDD attached the drive was falling to the bottom of the list of ALL devices even though it was detected as a HDD and added to the HDD list in setup.
- Fixed boot issue with certain processors.

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

- Fixed issue where certain USB bar code scanners would drop a single character if used under USB Legacy.
- Fixed issue where certain keyboard does not work with USB Legacy support.

BIOS Version 1663

About This Release:
- March 20, 2007
- MQ96510J.86A.1663.2007.0319.1957
- VBIOS info: Build Number: 1436 PC 14.21 02/05/2007 17:31:04.
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Version UPSD src 09-13-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.42
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Removed USB2.0 Enable/Disable setup option.
- AHCI option ROM text when not running in RAID mode.
- Added support for generating event log error message and POST display error message if the board AA# has not been programmed on the board.
- Changed the EFI Eventlog type according to Spec 0.24.
- Added VT Enable/Disable Callback causing Global Reset when changing VT state.
- Fixed failures with the TCG ACPI Event Log when running the Vista* DTM TCG TPM BIOS Interface Test.
- Fixed issue where Microsoft Vista* not booting with 4GB memory.
- Fixed issue where system would hang booting Windows* XP with OEM Activation 2.0 data programmed, EIST enabled, and certain processor installed in the system.
- Fixed issue where system hangs when trying to load bootable CD from a USB CD drive.
- Fixed issue where CD-ROM retries were not functioning after the "No bootable device -- insert boot disk and press any key" message.
- Fixed issue where certain USB bar code scanners would drop a single character if used under USB Legacy.
- Updated to Video BIOS Build Number: 1436 PC 14.21 02/05/2007 17:31:04.

BIOS Version 1649

About This Release:
- February 27, 2007
- MQ96510J.86A.1649.2007.0226.1756
- VBIOS info: Build Number: 1402 PC 14.21 11/30/2006 12:21:54.
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Version UPSD src 09-13-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.42
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Added programming of PCI Subsystem Vendor ID and Subsystem ID for the PCIe Graphics bridge.
- Added support for ITK Map File Specification version 1.15

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- Added support for Windows Vista* Media Center OCUR Host Firmware Support.
- Modified ACPI OSFR support so that the Microsoft* Reference Block is now an optional parameter.
- Fixed the issue where some ICH temperature sensor is not updating temperature.
- Added help text for fan control questions.
- Added SMBIOS definition for certain processors.
- Updated SMBIOS Info Type for to compliant with SMBIOS Spec 2.5.
- Fixed failures with the TCG ACPI Event Log when running the Vista* DTM TCG TPM BIOS Interface Test.
- Show OEM Logo splash screen first before showing any option ROM text.
- Fixed display of cache for multi-core processors.
- Updated VBIOS to version 1402.

BIOS Version 1618

About This Release:
- January 17, 2007
- MQ96510J.86A.1618.2007.0117.1535
- VBIOS info: Build Number: 1393 PC 14.21 11/10/2006 17:34:15.
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Version UPSD src 09-13-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.42
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Updated the verb table for Vista* WHQL.

BIOS Version 1614

About This Release:
- January 05, 2007
- MQ96510J.86A.1614.2007.0105.1345
- VBIOS info: Build Number: 1393 PC 14.21 11/10/2006 17:34:15.
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Version UPSD src 09-13-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.42
- ME firmware build: 2.0.5.1124 production signed.

New Fixes/Features:
- Fixed an issue of missing SLP2.0 signature.

BIOS Version 1612

About This Release:
- December 27, 2006
- MQ96510J.86A.1612.2006.1227.1513
- VBIOS info: Build Number: 1393 PC 14.21 11/10/2006 17:34:15.
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Version UPSD src 09-13-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.42
- ME firmware build: 2.0.5.1124 production signed.

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

New Fixes/Features:
- Updated processor support.
- Fixed an issue of enabling only one core for dual core processors.
- Added support for multiple Audio verb tables in single BIOS for Vista* readiness.
- Added blocking and warning message display on boards that do not support certain processors.
- Added support for Winbond* W25X80 8Mb SPI part.
- Fixed the display of negative value on BIOS setup Hardware Monitoring Page with some CPUs.
- Added Fan Control support for certain processors.
- Fixed issue where BIOS Setup defaults would overwrite current user settings when entering Maintenance Mode.
- Fixed the issue where we always send AFSC configuration data each boot.
- Added support for generating event log error message and POST display error message if the board AA# has not been programmed on the board.
- Fixed an issue where auto-recovery from a corrupt image wasn't working.
- Fixed BIOS doing auto-recovery upon non-reboot Iflash update unsuccessful.
- Added support for flash update when using an X64 BIOS build.
- Fixed issue where user lost control of setup browser if the setup page shows only text.
- Disable and hide iQRT setup question on some SKUs.
- Changed VT default to disabled.
- Fixed failures with the TCG ACPI Event Log when running the Vista* DTM TCG TPM BIOS Interface Test.
- Added Force LAN Disable option that is only visible in ITK & Epcsutil.
- Fixed the issue where audio disappears after system standby.
- Adjusted the BIOS setup Hardware Monitoring Page output display location.
- Fixed Iflash hang during EBU and reboot flash update.
- Reverted back to RAID option ROM v6.1.0.1002.

BIOS Version 1577

About This Release:
- November 16, 2006
- MQ96510J.86A.1577.2006.1115.2315
- VBIOS info: Build Number: 1377 PC 14.18 09/25/2006 08:09:45
- SATA RAID info: Intel(R) RAID for SATA - v6.2.0.2002
- SATA AHCI info: Version UPSD src 09-13-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.42
- ME firmware build: 1124 production signed.

New Fixes/Features:
- Added fix to take care of the case where parallel port being disabled at first boot after fresh burned the SPI.

BIOS Version 1545

About This Release:
- November 02, 2006

- MQ96510J.86A.1545.2006.1101.2008
- VBIOS info: Build Number: 1377 PC 14.18 09/25/2006 08:09:45
- SATA RAID info: Intel(R) RAID for SATA - v6.2.0.2002
- SATA AHCI info: Version UPSD src 09-13-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.42
- ME firmware build: 1124 production signed.

New Fixes/Features:
- Updated CMOS Check summing method.
- IRQ fix for USB Interrupts that conflict with other devices.
- Intel(R) RAID for SATA - v6.2.0.2002.
- Fixed issue where operating system would not enable DMA transfers for SATA drives connected to the ICH.
- Fixed EndOfPost Heci message only being sent when USB device was connected.
- Code clean up for easier support of multiple chipsets.
- Fixed a problem where the system would hang in POST at (13h) if the CPU only supported LT but not VT.
- Fixed issue where BitLocker System Check would not pass.
- Changed AMT 2.0 ACPI SPCR table to only be present when a remote AMT SOL request is made.
- Workaround for GPE generated by GETSEC instruction. Once in every ~1500 power cycles, the processor would generate a general protection exception on the GETSEC instruction. The theory is GPE was generated because the machine check status registers had an error when GETSEC was executed. This workaround is to clear the machine check status registers before GETSEC.
- Implemented support for Hardware-based Watchdog Timer.
- Optimized BIOS boot time.
- Fixed issue where attempting to use the One Time Boot Menu appeared to hang POST.
- Fixed issue where POST errors may be displayed during Maintenance Mode boot.
- Changed to always display the latest event's date and time of event log.
- Fixed an issue where auto-recovery from a corrupt image wasn't working.
- Fixed a problem where Setup froze when all menu items were grayed out.
- Fixed F10 boot menu showing two lines of duplicated title.
- Fixed Boot Menu title showing "Boot Boot" due to Setup Browser printing the title twice at different rows.
- Moved the multiple TCO Timer implementations in PEI into a single PPI.
- Added support for ACPI Serial Port Console Redirection (SPCR) table for AMT 2.0 SOL.
- Workaround an issue where system intermittently not able to shutdown to S5 if the LAN cable is connected.
- Fixed issue where a carriage return was required at the end of every DSC file
- Removed port 80h debug codes from the memory detection.
- Fixed a problem where the PCI configuration reads to extended PCI configuration space using INT1A functions did not work as expected.
- Fixed an issue where CPU Only Reset PPI does not work.
- Fixed issue where user lost control of setup browser if the setup page shows only text.

BIOS Version 1458

About This Release:
- October 17, 2006
- MQ96510J.86A.1458.2006.1017.1151
- VBIOS info: Build Number: 1377 PC 14.18 09/25/2006 08:09:45
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Version UPSD src 09-13-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.42
- ME firmware build: 1124 production signed.

New Fixes/Features:
- Hide USB2.0 option in Bios setup menu but show in maintenance mode.
- Fixed an issue where system not able to restart if the LAN is set to D3 mode.
- Skipped LAN initializations during S3 resume.
- Supports OEM Activation 2.0. For details on the OEM Activation Program, send email to oasignh@microsoft.com
- Added IDCC support for Silego CK505.
- Fixed an issue where system not able to shutdown to S5 if the LAN is set to D3 mode.
- Added programming of PCI Subsystem Vendor ID and Subsystem ID for the PCIe Graphics bridge.
- IRQ Fix for USB Interrupts.
- Video BIOS Build Number: 1377 PC 14.18 09/25/2006 08:09:45

BIOS Version 1250

About This Release:
- October 05, 2006
- MQ96510J.86A.1250.2006.1005.1532
- VBIOS info: Build Number: 1371 PC 14.18 08/11/2006 17:22:22
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Version UPSD src 09-13-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.42

New Fixes/Features:
- Added a warning message that selecting AHCI will only work in the Windows Vista OS.
- Added IDCC support for Silego CK505.
- Added Performance Memory Profile support.
- Added S5 Wake from RTC Alarm.
- Added support for Generic CK505 clock.
- BIOS boot time optimization.
- Fix issue where a device behind multiple bridges (2+) will get an invalid IRQ assignment.
- Fixed a missing highlight cursor problem in Setup after pressing F10 and no response.
- Fixed a problem where Legacy Free motherboard hangs after shut down when WOL from S5 option is set to "Stay Off".
- Fixed a problem where Setup F9 key caused unexpected page movement at submenu option.
- Fixed a problem where the system would blue screen (with error code 0x0A) on the resume from S3.

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- Fixed an issue of corrupted splash screen when RAID or AHCI is selected.
- Fixed an issue where S3 resume did not work with dual core processors.
- Fixed an issue where system not able to shutdown to S5 if the LAN is set to D3 mode.
- Fixed an unexpected system shut down problem after AC Loss.
- Fixed issue where certain security software unable to run properly.
- Fixed F10 boot menu showing two lines of duplicated title.
- Fixed Iflash unable to flash update below 1079 ME Build Number.
- Fixed intermittent Post Code E9 failure during power cycling.
- Fixed issue where changing certain Setup Options and using F10 to Save and Exit would not cause a system reset.
- Fixed issue where disk partitions are sometimes not seen during operating system installation.
- Fixed issue where Viiv system in S3 mode does not WOL to Visual off/Rest mode.
- Fixed LAN enable/disable issues by implementing ME global reset if LAN setting changed per ICH8 BIOS spec Rev. 1.0 section 10.3.
- Fixed long flashing time on "/nr" command with Conroe CPU.
- Fixed Setup cosmetic issue where garbage characters are printed outside of string input box.
- New PXE code: Intel(R) Boot Agent GE v1.2.42.
- Removed USB 2.0 Enable/Disable question from setup.
- Unhide "HPET Enable/Disable" BIOS setup option and set default state to "Disable".
- Updating AFSC configuration files.
- Workaround issue where Silego CK505 clock not allow single byte write to Byte 12.

BIOS Version 1176

About This Release:
- September 06, 2006
- MQ96510J.86A.1176.2006.0906.1633
- VBIOS info: Build Number: 1371 PC 14.18 08/11/2006 17:22:22
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Intel(R) AHCI for SATA 05-08-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.40 Beta-5
- ME firmware build: 1125

New Fixes/Features:
- Updated the algorithm for unsupported processor blocking.
- Updated AFSC ME firmware build to 1125 production signed.
- Fix a problem where the SATA eye-diagram was failing.
- Fixed a problem where the system would blue screen (with error code 0x0A) on the resume from S3.

BIOS Version 1162

About This Release:
- September 01, 2006
- MQ96510J.86A.1162.2006.0901.1432
- VBIOS info: Build Number: 1371 PC 14.18 08/11/2006 17:22:22
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002

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- SATA AHCI info: Intel(R) AHCI for SATA 05-08-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.40 Beta-5

New Fixes/Features:
- Added 1394 enable/disable Setup menu.
- Added ability to update ME image through EBU.
- Added automatic efficient re-sizing of firmware volumes for the BIOS build process.
- Added code to make sure clock is not in full reset mode before doing any setting.
- Added CPU blocking mechanism to block CPUs from running in boards with 3-phase VREG.
- Added DDR800 as a reported speed in SMBIOS type187.
- Added hard disk SMART error support.
- Added ME events and messages to allow reporting of critical ME failures during BIOS execution in pre-boot phase.
- Added RCO flash permissions, provisioning detection, and global reset after recovery.
- Added Setup Option "CPU Fan Speed" for certain CPU Hardware Monitoring configurations.
- Added support for 8042 keyboard controller virtualization for systems with no 8042 keyboard controller.
- Added support for PEG x1 video card to work together with Internal Graphics Device (IGD) to support multi-monitors.
- Added support to dynamically set SATA default to RAID on Media Series SKU.
- Added the Hardware Monitoring Page.
- Added Unlock Intel (R) QST subsystem question in Maintenance Mode.
- Added work-around for IDE-R 6 hour open session issue in a host software package.
- Added workaround for Silego CK505 Clock to address issue where certain FSB Overrides would not properly latch.
- Always display the latest event's date and time of event log.
- Video BIOS Build Number: 1348 PC 14.18 06/22/2006 11:01:34
- Changed the code to not reset video mode for every OPROM.
- Changed to use TDIODE instead of using PECI to obtain Tcontrol info.
- Enabled CRID.
- Added support to optionally decode the dash number in the board ID to select a feature mapping.
- Fix to resolve the USB HID keyboard typematic issue.
- Fixed a potential issue that system not loading normal default after manufacturing mode.
- Fixed a problem where Intel brand badge wasn't displayed when certain processor was installed.
- Fixed a problem where PS/2 mouse and keyboard showed up in device manager on Legacy free motherboard.
- Fixed a problem where Setup didn't show any drive information under Drive configuration menu when a user chose AHCI or Raid mode.
- Fixed a problem where the LAN controller did not get initialized correctly if the system lost AC power two or more times without powering on the system in between failures.
- Fixed a problem where the memory speed did not get reported correctly on the main setup page, if the memory speed was over-clocked.

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- Fixed a problem where the setup options for floppy, LPT, number of SATA ports etc did not display correctly on legacy free boards.
- Fixed a problem where the system did not wake up from PING if the network card was inserted in the PEG slot (off the MCH).
- Fixed a problem where the system would boot without video when setup option was set to default video device is PCI and no PCI video card was present.
- Fixed a problem where the system would hang or pause at POST code 47h if the power button was held down for 4sec on the previous boot.
- Fixed a problem where the system would not power down appropriately after a power button press.
- Fixed a problem where USB keyboard didn't work while ICH SATA Raid Option ROM is running.
- Fixed AFSC manufacturing testing issue.
- Fixed an issue where Rev D and newer Pericom clock part is not detected correctly.
- Fixed an issue where system power on automatically after "LAN remote power on from G3 feature" initialization.
- Fixed an issue where the 1394 device was lost after a suspend and resume on the legacy free boards.
- Fixed FDD test failure on certain floppy drives.
- Fixed issue where BIOS did not correctly detect type of LAN during LAN init.
- Fixed issue where certain DVD-120 drive was not detected in BIOS SETUP.
- Fixed issue where Setup incorrectly displayed processor frequency as 3.6GHz instead of 3.06GHz.
- Fixed issue where system not able to shutdown if wake on LAN is set to stay off in BIOS setup.
- Fixed issue where the upper portion of the F000 shadow memory region was being set to Read-Only during POST legacy-free USB initialization.
- Fixed issue where certain USB flash drive was not detected by the BIOS.
- Fixed issue where USB HID keyboard bar code scanners were dropping characters under DOS.
- Fixed issue where USB keyboard was sometimes not functional in BIOS SETUP if attached USB mouse is moved during BIOS SETUP.
- Fixed issue where USB mouse only would not work with certain HDD protection card.
- Fixed ME/HECI event handling.
- Fixed memory leak problem with AFSC.
- Fixed PID/PPS options not present after unprovision.
- Fixed POST delay at POST code 5A when certain CD-ROM drives are attached to the system.
- Fixed setup processor speed info for certain CPUs.
- Fixed several issues for burn-in mode support.
- Fixed slow recovery which take 60-120 seconds.
- Fixed SMBIOS Type0, Type8, Type9 structures.
- Fixed the issue where AFSC always enable all FanTach during each boot.
- Fixed the issue where AFSC configuration is not updated after BIOS update.
- Fixed the issue where Boot Menu will not display correctly after F9 Load Default under certain scenarios.
- Fixed the issue where we always send AFSC configuration data each boot.

- Fixed the issue where we are not reading ME's response on whether it accepted the AFSC configuration data we sent or not.
- Fixed WHQL ACPI Verifier "SEV1 FADT RESET_REG Reserved field can only be 0.
- Flex Language Module Support added.
- Forced screen size reduction for RCO command to enter BIOS Setup.
- Hardware-based Watchdog Timer implementation.
- If the system is in manufacturing mode, do not disable TPM INT1A interface if the BIOS SETUP TPM Enabled question is set to "Disabled".
- Implemented Password variable separated from Setup variable.
- Improved bad SPD detection to allow a wider range of BAD SPD values to work.
- Increased number of selectable TRAS values for the memory override setup page.
- Modified the setup option for memory settings to remove support for aggressive settings.
- Moved SATA controller initialization into its own file to keep the SATA code in one location.
- Recovery with ME: Solved issues where ME would interfere with recovery.
- Removed the Front panel high definition audio setup option for the legacy free boards.
- Skip "The Express BIOS update has completed successfully." dialog box when EBU runs in silent mode.
- Workaround for AFSC subsystem not getting configured issue.
- Workaround issue where PCI slot clock not turned on if system not gone through AC cycling.
- Workaround issue where system hang at POST code 0x13 if system reset is performed during LAN init at PEI stage 1.

BIOS Version 0816

About This Release:
- July 17, 2006
- MQ96510J.86A.0816.2006.0716.2308
- VBIOS info: Build Number: 1345 PC 14.18 06/09/2006 14:23:39
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Intel(R) AHCI for SATA 05-08-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.40 Beta-5

New Fixes/Features:
- Save and Restore the IGD ASL Storage Register (OpRegion/SWSCI usage) During Sleep Stage.
- Fixed a problem where Intel brand badge isn't displayed when certain processor is installed.

BIOS Version 0804

About This Release:
- July 12, 2006
- MQ96510J.86A.0784.2006.0711.2103
- VBIOS info: Build Number: 1345 PC 14.18 06/09/2006 14:23:39
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Intel(R) AHCI for SATA 05-08-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.40 Beta-5

New Fixes/Features:
- Fixed a problem where USB keyboard didn't work while ICH SATA Raid Option ROM is running.
- Fixed ASF WatchDog Timer expiring too early.

BIOS Version 0784

About This Release:
- July 07, 2006
- MQ96510J.86A.0784.2006.0707.1503
- VBIOS info: Build Number: 1345 PC 14.18 06/09/2006 14:23:39
- SATA RAID info: Intel(R) RAID for SATA - v6.1.0.1002
- SATA AHCI info: Intel(R) AHCI for SATA 05-08-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.40 Beta-5
- ME firmware build: 1114 production signed.

Notes:
- After updating the Intel® Desktop Board DP965LT to BIOS version 0784, you will not be able use the iFlash update method to downgrade to a previous BIOS version. You can downgrade to a previous version using the BIOS Recovery method.
- All installed passwords will be cleared when updating to BIOS version 0784. You will need to re-enter passwords if using this function within the BIOS.

New Fixes/Features:
- Fixed a problem where flash updates using reboot method did not work.
- Fixed a problem where the system would not go into S3.
- Updated supported processors.
- Fixed issue where the remote power on from G3 feature not detecting power button event correctly.
- Zero out unused bytes during GetVariable call in PEI to works around code that does not check to see that the variable read was smaller than expected. In particular, help give code reading the setup questions a default value of 0 for new questions on the first boot after a BIOS upgrade.
- Added GMCH OpRegion/SWSCI Implementation to support the new DVMT 4.0 feature on BW GMCH family.
- Fixed a problem where PEG video devices that contain bridges do not work as the primary video device.
- Fixed problem where incorrect size was displayed for large-sized HDD in boot menu.
- Adjusted values for memory timing questions, to maintain EPCSUTIL compatibility.
- Fixed GPIO9 (WOL_ONLY) level set incorrectly.
- Removed BIOS SETUP ACPI Sleep State question.
- Implemented ICH8 family spec update V1.0 SATA Document change.
- Updated to MRC1.3
- Fixed a problem where the setup option for default video device would not show the option for IGD.
- Fixed issue where WOL still working when LAN is disabled in BIOS setup.
- Workaround issue where PCI slot clock not turned on if system not gone through AC cycling.

- Fixed a problem where the system would report an erroneous event log message after a BIOS flash update, when doing a reboot flash update.
- Fixed a problem where the nominal (TCL-TRCD-TRP-TRASMin) values were calculated and displayed wrong.
- Update to Production-Signed AFSC-only firmware version 1114.
- Updated AFSC support.
- Fixed the issue where the ME's response on whether it accepted the AFSC configuration data was not properly read.
- Fixed ME/HECI event handling so that when an event occurs the event messages are only displayed once to the user until after next "Clear Events" action. The event messages are also logged (counted) each time in setup.
- Revamped ME & AMT 2.0 Setup Interface.
- Changed the PLL used for the SATA clock from PLL2 to use SRC_MAIN. If overclcocking mode, it will still be delivered by PLL2.
- Added support for reporting capsule invocation results.
- Added setup question to Enable/Disable Mini Card.
- Added Intel(R) Manageability Engine Information field in BIOS setup.
- Fixed problem where the system could hang with more than 2GB of memory installed, and LAN enabled in setup.
- Syncing Audio Front Panel detection with Release 3.
- Corrected output parameter for AmtBx Protocol.
- Added new MNG fields to ATE.xml.
- Fixed a problem where the system would hang loading the operating system.
- Fixed an intermittent problem where the system would do a global reset when a CTRL+ALT+DEL or other soft reset was issued from an OS.
- Added ICH8 BIOS spec updates v0.79 section 12 "Requirements for Clearing ME_WAKE_STS".
- Allow Power LED to be turned OFF when in Visual Off mode.
- Fixed PS/2 can't wakeup system from S1/S3 issue.
- Added work-around for CMP enable/disable issue, Updated STPGNT programming.
- Fixed issue where certain IDE adapters are not detected by the system BIOS.
- Fixed the issue that when there are 3 partitions in HDD: if the first partition is deleted, BIOS will not be able to recognize the other two partitions, and if the second partition is deleted, BIOS will not be able to recognize the third partition.

BIOS Version 0725

About This Release:
- June 28, 2006
- MQ96510J.86A.0704.2006.0627.2259
- VBIOS info: Build Number: 1329 PC 14.18 05/12/2006 11:09:00
- SATA RAID info: Intel(R) RAID for SATA - 6.0.0.1022
- SATA AHCI info: Intel(R) AHCI for SATA 05-08-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.40 Beta-5
- ME firmware build: 1109

New Fixes/Features:
- Removed the fix for SATA that listed in ICH8 Family Spec Update Rev. 1.0.

- Added Intel(R) Manageability Engine Information field in BIOS setup.
- Fixed a problem where the ISA enable bit was not restored on S3 resume, for the PCI Bridge (bus 0, Device 30, Function 0). Also fixed a problem where the SMBUS register did not restored.
- Workaround for memory failures at POST code 46h.
- Workaround for detecting PCI express cards.
- Workaround for PATA chip that failed WHQL test.
- Update and Bug Fix in ME/AMT Setup Page.
- Added workaround for WHQL PCI Compliance Test PME# issue with PATA controller.
- Fixed a problem where only 4 of 6 SATA ports show up under Drive Configuration in BIOS.
- Fixed a problem where the LAN has a yellow bang after the LAN has been re-enabled in BIOS setup.
- Updated to Production-signed AFSC-only firmware version 1109.
- Fixed a problem where the system would hang on S3 or S4 resume with POST code of 30h or 40h.
- Updated to MRC 1.1.
- Added support for SLP_S4# stretching.
- Fixed problem where the system could hang with more than 2GB of memory installed, and LAN enabled in setup.
- Added setup question to Enable/Disable Mini Card
- Show F10 Boot Menu option on splash screen.
- Changed the over-clocking style for CK505 clock.
- Fixed the issues with uCode loading.
- Added work-around for CMP enable/disable issue, Updated STPGNT programming.
- Updated AFSC support.
- Fixed a problem where the CSM driver was printing out a 00h POST code during mid POST.
- Fixed issue where EFI boot floppy would not boot from USB floppy drives.
- Fixed issue where USB HID keyboard bar code scanners were dropping characters under DOS.
- Fixed issue where certain USB flash drive was not detected by the BIOS.
- Fixed issue where multiple SCSI cards were not detected with PEG card installed.
- Fixed the issue where CPU badge would not be displayed if location was partially off the screen.
- Fixed issue where some IDE adapters are not detected by the system BIOS.

BIOS Version 0500

About This Release:
- June 09, 2006
- MQ96510J.86A.0500.2006.0609.1423
- VBIOS info: Build Number: 1329 PC 14.18 05/12/2006 11:09:00
- SATA RAID info: Intel(R) RAID for SATA – 6.0.0.1022
- SATA AHCI info: Intel(R) AHCI for SATA 03-10-2006
- PXE Nahum info: Intel(R) Boot Agent GE v1.2.40 Beta-4

New Fixes/Features:
- Initial release

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