PRODUCTS: DG43NB, DP43TF (Standard BIOS)

BIOS Version 0107

About This Release:
- January 12, 2011
- NBG4310H.86A.0107.2011.0112.1625
- ME Firmware Revision: 1129 SKU4
- Integrated Graphics Option ROM Revision: 1800
- MEBx Version:5.0.5.0004
- PXE LAN Option ROM Revision: Intel(R) Boot Agent GE v1.3.27

New Fixes/Features:
- Updated processor support

BIOS Version 0106

About This Release:
- May 12, 2010
- NBG4310H.86A.0106.2010.0512.1522
- ME Firmware Revision: 1129 SKU4
- Integrated Graphics Option ROM Revision: 1800
- MEBx Version:5.0.5.0004
- PXE LAN Option ROM Revision: Intel(R) Boot Agent GE v1.3.27

New Fixes/Features:

- After installing the INI file generated from Intel Integrator Toolkit, warning messages are displayed for the settings 007b, 007c, and 007f when extracting tokens in PE.
- Fixed compatibility issue with certain USB wireless keyboards.
- Clear CMOS RAM bank index 0x01,0x03,0x05,0x06,0x0d (bit0-bit6) to prevent possible failure of auto wake-up after executing iflash2.exe tool.

BIOS Version 0105

About This Release:
- March 31, 2010
- NBG4310H.86A.0105.2010.0331.1134
- ME Firmware Revision: 1129 SKU4
- Integrated Graphics Option ROM Revision: 1800
- MEBx Version:5.0.5.0004
- PXE LAN Option ROM Revision: Intel(R) Boot Agent GE v1.3.27

New Fixes/Features:
- Fixed issue where BIOS Setup is inconsistent on memory.
- Fixed issue with certain storage controller card.

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BIOS Version 0104

About This Release:
- January 22, 2010
- NBG4310H.86A.0104.2010.0122.1624
- ME Firmware Revision: 1129 SKU4
- Integrated Graphics Option ROM Revision: 1800
- MEBx Version:5.0.5.0004
- PXE LAN Option ROM Revision: Intel(R) Boot Agent GE v1.3.27

New Fixes/Features:
- Fixed issue where updating DMI data causes reset loop.
- Fixed issue where 64-bit operating system runs extremely slow with 4 GB memory installed.
- Fixed S3 hang issue with POST code 13.
- Changed Intel ME firmware binary power package default.
- Implemented Security Phase 2
- Changed HECI driver for PCIE base 0xF0000000 to fix low memory issue.
- Removed certain graphics card limit which was causing yellow bang.

BIOS Version 0099

About This Release:
- November 13, 2009
- NBG4310H.86A.0099.2009.1113.1151
- ME Firmware Revision: 1129 SKU4
- Integrated Graphics Option ROM Revision: 1800
- MEBx Version:5.0.5.0004
- PXE LAN Option ROM Revision: Intel(R) Boot Agent GE v1.3.27

New Fixes/Features:
- Added retry when reading DMI data.
- Fixed add-in PCI VGA card issue.
- Fixed issue where cannot upgrade/downgrade BIOS by force recovery method with disc.
- Fixed Intel Desktop Utilities issues.

BIOS Version 0098

About This Release:
- September 28, 2009
- NBG4310H.86A.0098.2009.0928.1806
- ME Firmware Revision: 1129 SKU4
- Integrated Graphics Option ROM Revision: 1800
- MEBx Version:5.0.5.0004
- PXE LAN Option ROM Revision: Intel(R) Boot Agent GE v1.3.27

New Fixes/Features:
- Changed MASTER_INTERRUPT_BASE to 78 for certain PCI-E VGA cards.
- Fixed issue where hardware monitor does not auto detect fan changes.

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- Fixed issue where 32-bit operating system shows less than 3175MB when 4GB memory is installed.

Known Errata:
You cannot use the BIOS Recovery mode to downgrade the BIOS to a version earlier than 0097. You can use iFlash2.exe to downgrade to BIOS version 0096 or earlier.

BIOS Version 0096

About This Release:
- September 03, 2009
- NBG4310H.86A.0096.2009.0903.1845
- ME Firmware Revision: 1129 SKU4
- Integrated Graphics Option ROM Revision: 1800
- MEBx Version:5.0.5.0004
- PXE LAN Option ROM Revision: Intel(R) Boot Agent GE v1.3.27

New Fixes/Features:

- Fixed issue where some processors cause boot hang with POST code 01.
- Fixed issue with iflash2 /s command.
- Changed FW default power package to 4.
- Fixed issue where iFlash2 hangs when Intel® ME is disabled with DDR2 800 DIMMs installed.
- Fixed issue where system hangs with POST code error 98.
- Changed Intel® ME firmware power package default setting to S0.
- Fixed BIOS downgrade version number compare rule.

BIOS Version 0090

About This Release:
- July 28, 2009
- NBG4310H.86A.0090.2009.0728.1547
- ME Firmware Revision: 1129 SKU4
- Integrated Graphics Option ROM Revision: 1800
- MEBx Version:5.0.5.0004
- PXE LAN Option ROM Revision: Intel(R) Boot Agent GE v1.3.27

New Fixes/Features:
- Implemented updates to improve security.
- Fixed issue with checking POST hotkey before input of user password.
- Fix issue where USB drive can't find .BIO file in main firmware fault tolerance.
- Fixed issue where GHOST process stops plugging/unplugging a USB drive.
- Changed keyboard detection waiting time.
- Changed recovery filename compare rule.

BIOS Version 0089

About This Release:
- July 16, 2009

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- NBG4310H.86A.0089.2009.0716.1419
- ME Firmware Revision: 1129 SKU4
- Integrated Graphics Option ROM Revision: 1800
- MEBx Version:5.0.5.0004
- PXE LAN Option ROM Revision: Intel(R) Boot Agent GE v1.3.27

New Fixes/Features:
- Changed Fan Detect UQI token.
- Updated PXE ROM.

BIOS Version 0086

About This Release:
- June 18, 2009
- NBG4310H.86A.0086.2009.0618.1749
- ME Firmware Revision: 1129 SKU4
- Integrated Graphics Option ROM Revision: 1800
- MEBx Version:5.0.5.0004
- PXE LAN Option ROM Revision: Intel(R) Boot Agent GE v1.3.27

New Fixes/Features:
- Updated iQST module to fix issue where hardware monitor AUX FAN does not show.
- Updated Video BIOS to 1800.
- Updated PXE ROM version
- Fixed issue where hard drive pre-delay did not work properly.
- Changed QST payload.
- Fixed issue where E7600 processor frequency displayed wrong in BIOS.
- Updated F7 BIOS flash update tool.
- Fixed issue with fan ramping.

BIOS Version 0082

About This BIOS:
- May 7, 2009
- NBG4310H.86A.0082.2009.0507.1413
- GBE firmware bin version: ich10r_82567v_a2
- PXE Option Rom file: BA1322L2.LOM
- ME Version: 1129 SKU4
- MEBx Version:5.0.5.0004
- Vbios:1760

New Fixes/Features:
- Fixed issue with main firmware fault tolerance.
- Added F7 prompt related UQI token.
- Added full QST implementation.
- Fixed issue where system with E5200 processor fails to pass WHQL SMBIOS HCT.
- Fixed issue with slow game performance when using E5200 processor.
- Set the PCI Express Capabilities Register (XCAP) Slot Implemented register to 0.
- Fixed issue with Intel® Integrator Toolkit boot order.

- Updated ME firmware to 5.0.2.1129
- Fixed issue with SMBIOS string.
- Fixed issue where PS2 mouse does not work under DOS.
- Fixed issue with C-STATE_CONFIG_LOCK bit set timing.
- Fixed issue where system won't boot to operating system with Q9300 processor.
- Updated Video BIOS to 1760.
- Fixed issue with yellow bang in Device Manager* for PS/2 mouse.

Known Errata:

ME firmware can not be down-reved using iFlash utility. User must perform a BIOS Recovery to down-rev the ME firmware.

BIOS Version 0077

About This BIOS:
- March 16, 2009
- NBG4310H.86A.0077.2009.0316.1546
- GBE firmware bin version: ich10r_82567v_a2
- PXE Option Rom file: BA1322L2.LOM
- ME Version: 1096 SKU4
- MEBx Version:5.0.5.0004
- Vbios:1704

New Fixes/Features:
- Fixed an issue where the OemDefault variable used by the ITKFE tool was not properly deleted after updating the BIOS using ITK.
- Fixed an issue with the Management Engine Setup menu.
- Fixed an issue where the system forced a reboot when trying to enable the Management Engine.
- Fixed an issue where the on-board audio device could malfunction.
- Fixed an issue where a USB flash driver would disappear when an EFI hard drive and another hard drive are connected to the system.

Known Errata:

ME firmware can not be down-reved using iFlash utility. User must perform a BIOS Recovery to down-rev the ME firmware.

BIOS Version 0075

About This BIOS:
- February 05, 2009
- NBG4310H.86A.0075.2009.0205.1755
- GBE firmware bin version: ich10r_82567v_a2
- PXE Option Rom file: BA1322L2.LOM
- ME Version: 1096 SKU4
- MEBx Version:5.0.5.0004
- Vbios:1704

New Fixes/Features:
- Removed VT-d option from BIOS setup menu.

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- Fixed issue where the system would fail to boot from CD if two CD ROM drives installed under certain circumstances.
- Enabled C4 support with PECI.

Known Errata:
- ME firmware can not be down-reved using iFlash utility. User must perform a BIOS Recovery to down-rev the ME firmware.

BIOS Version 0074

About This BIOS:
- January 09, 2009
- NBG4310H.86A.0074.2009.0109.1614
- GBE firmware bin version: ich10r_82567v_a2
- PXE Option Rom file: BA1322L2.LOM
- ME Version: 1096 SKU4
- MEBx Version:5.0.5.0004
- Vbios:1704

New Fixes/Features:

- Fixed issue where incorrect ICH10 temperature reading is displayed.
- Fixed issue where hard drive pre-delay does not work.
- Fixed issue where system will not boot to other bootable devices when two CD/DVD drives are connected with no media present.
- Fixed WHQL S3 resume issue.
- Fixed issue where operating system fails to load when using a PCI recovery card.
- Fixed issue with the Automatic Fan Detection function in Setup.
- Fixed Setup item lock/hide issues.
- Removed FanDetectErrorMessage variable.
- Fixed issue where changes to settings in Set Sensor Threshold page will revert to default value after system reboot.
- Fixed issues where QST unlock and fan detection do not work properly.
- Updated BIOS to allow for headless operation.
- Updated to use iflash2.exe as the BIOS update tool in this BIOS package.
- Fixed issue where BIOS does not have chassis type pre-programmed.
- Updated Video BIOS to ver.1704.
- Fixed issue where system does not boot with certain HD graphics cards.
- Fixed issue where Intel® Desktop Utilities shows incorrect values for memory.
- Fixed issue where menu switches to French when pressing F9.
- Fixed issue where no PECI information is displayed for Celeron 4xx processors.
- Updated NB BIOS Spec Update rev:1.04.

BIOS Version 0069

About This BIOS:
- November 17, 2008

- NBG4310H.86A.0069.2008.1117.2016
- GBE firmware bin version: ich10r_82567v_a2
- PXE Option Rom file: BA1322L2.LOM
- ME Version: 1096 SKU4
- MEBx Version:5.0.5.0004
- Vbios:1702

New Fixes/Features:
- Updated Flash part module
- Added Intel@ ME Setup Prompt to BIOS Setup Menu > Advanced > Boot Configuration.
- Fixed the garbled screen issue when Intel ME is disabled.
- Added a workaround for hardware monitor page when QST technology disabled.
- Fixed issue where disabling Intel ME causes a boot delay.
- Fixed issue where Intel ME Setup prompt disappears when changing Intel ME settings.
- Updated UQI strings.
- Added a solution for iFlash update with ME Disabled.
- Fixed issue where S4 takes a long time.
- Changed CPU temperature string to "Processor Thermal Margin".
- Removed "PROCHOT -" string in hardware monitor page.
- Given CPU Brand String, return CPU Family Value for SMBIOS Type 4
- Upgraded Intel ME firmware to version 5.0.1.1096, MEBx to version 5.0.5.0004
- Fixed the BIOS POST delay issue when the QST disabled.
- Upgraded the Video BIOS to version 1702.
- Changed the PAVP setting to be Lite and hidden.
- Enabled C3/C4 support.
- Fixed the "Floppy Drive" string to "Removable Drive".
- Fixed issue where the OEM ID patch causes Windows Vista* installation to fail.
- Removed PS/2 Swap function.
- Fixed issue where system hangs when keyboard controller faults.
- Fixed Chassis Intrusion issue
- Fixed issue where the F12 key is not controlled by access level (No Access, Limited and View Only).
- Fixed issue where external PCI video option not presented.
- Fixed issue where running Express BIOS Update a second time will present a warning message.
- Fixed system hang issue when changing to a JPG splash screen (1024x768).
- Fixed issue where DirectX information reports the wrong board.
- Fixed Away mode issue

BIOS Version 0064

About This BIOS:
- September 30, 2008
- NBG4310H.86A.0064.2008.0930.1623
- GBE firmware bin version: ich10r_82567v_a2
- PXE Option Rom file: BA1322L2.LOM
- ME Version: 1087 SKU4
- MEBx Version:5.0.5.0003

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- Vbios:1676

New Fixes/Features:

- Fixed issue with PS/2 keyboard when a system password is installed.
- Fixed issue in BIOS Setup with PEG negotiated width.
- Fixed issue with CMOS battery event logging.
- Fixed issue with access level.
- Fixed issue with marking events as read.
- Fixed issue with boot to UEFI Windows.
- Fixed the Setup options of the primary video adapter.
- Fixed issue with locking/hiding Event Logging option in Intel® Integrator Toolkit and Intel® Integrator Assistant.
- Fixed issue where ITK server does not correctly report BIOS flashing result when flashing process fails.
- Fixed issue where system hangs with some processors.
- Support the VGA card with duo GPU
- Fixed issue where recovery function between BIOS versions may fail.
- Added M25PX32 VSCC table from ITC tool.

BIOS Version 0060

About This BIOS:
- September 12, 2008
- NBG4310H.86A.0060.2008.0912.1124
- GBE firmware bin version: ich10r_82567v_a2
- PXE Option Rom file: BA1322L2.LOM
- ME Version: 1087 SKU4
- MEBx Version:5.0.5.0003
- Vbios:1667

New Fixes/Features:
- Fixed DTM PS2 keyboard/mouse resource allocated not suitable in Windows when they are not connected.
- Fixed issue to display the correct CPU ratio on CPU Q9650.
- Fixed issue where the recovery function does not work.
- Fixed RTC issue where a change to the system date/time may cause the system hang.
- Removed some POST codes to prevent bios setup becoming a white screen.
- Fixed issue where connecting the PS2 keyboard and mouse at the same time, the complex key CTRL-P will not work.
- Fixed the system hang at 0x92.
- Fixed issue where PS2 mouse and keyboard can not function in Windows Vista*.
- Fixed issue where PS2 mouse and USB keyboard on system caused S4 resume to hang with code 9B or BA.
- Fixed Intel® Integrator Toolkit issue: BootCallbackRoutine()
- Fixed S3 bounce issue.
- Cleared Intel® ME wake up status before entering sleep states.
- Updated the latest NVRAM driver.
- Fixed unexpectedly OEMID in XSDT being modified to cause SLP2.0 activation failure.

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- Synced AMI library to v4.6.3.1.
- Fixed PCIE scan algorithm to solve some VGA devices that cannot be detected when behind on-device bridge.
- Adjusted the size of FV_BB & FV_MAIN.
- Updated VBIOS to v1676.
- Fixed issue where system cannot enter PXE if a SCSI card is plugged into PCI slot.
- Removed GetVariable in timer event function, which might cause NVRAM operation miss.
- Fixed issue with the buffer used to get Intel® ME string.
- Fixed yellow bang with PS2 keyboard/mouse if there is no PS2 keyboard/mouse plugged in.

- Fixed minor NVRAM issue.
- Forbid NVRAM compact at runtime.
- Reserved 4K bytes for NVRAM compact.
- Fixed system hang at "Power Saver" option when EIST is disabled.
- Reserved SMBus IO address and forbid PCI driver to modify it.
- Double confirmed if clkgen's value has been filled in.
- Added boundary condition for clkgen programming loop.
- Cleaned up unused entries in resource map.
- Fixed system hangs at entering S5.
- Skipped sending ASF message if system resumes from S3.
- Modified JMicron* PEI driver and FFS link to solve PATA recovery issue.
- Fixed issue where installing EFI OS takes too long.
- Added a patch for automatic UEFI boot without pressing F10.
- Added a special SLP_SMI handler for S5 for Intel® Integrator Toolkit.
- Introduced NvRam checksum mechanism.
- Disabled IRQ during NvRam writing process.
- Added break while-loop in NVRAM compact if flash erasing/writing fails over 10 times.
- Fixed 8 GB performance issue.
- Restored NVRAM address to normal NVRAM on DXE.
- Adjusted checksum sample range.
- Refined USB emulation function to make default boot to SATA0 when BIOS first boot.
- Removed MFGMODE ICT DATA and add 0x290000 backup data.
- Restored SPI registers on S3 resume.
- Set value to NvRam area for sata0 boot.
- Implemented complete NVRAM solution.
- Set SMBIOS type16 max memory capacity = 8GB.
- Forbid JMicron register IDE recovery ppi.
- Removed NVRAM backup - only do restore after NVRAM crashed.
- Adjusted IFLASH shutdown wakeup time.
- Removed NVRAM Checksum recovery.
- Added NVRAM auto recovery function.
- Fixed NVRAM crash issue:
    - Backup normal one to backup on first boot.
    - Automatically switch NVRAM to backup if normal one is broken.
    - Recover NVRAM while entering DXE phase.

- Updated Intel® ME bin for default Intel® ME setting.
- Updated JMicron IDE Controller driver to fix PXE issue.
- Adjusted checksum sample range to avoid calculating MfgMode variable.
- Restored CSM binary and SMM workaround for A20TEST.
- Added NvRam backup solution.
- Added CMOS index reservation while entering SMM mode.
- Disabled UHCI root hub 8ms SMI polling to avoid flash being crashed.
- Refined SIO PEI code to save more space.
- Enabled KBC burst and disable Gate#20 switch in SIO.
- Disabled CheckLoadDefault module.
- Patched DMI data shift 0xf issue.
- Removed DxeStartupX64.ffs from FV_MAIN to save about 19XKB space.
- Set Chassis Intrusion Lock to default disabled.

- Updated processor support.
- Removed NvRam checksum error message, and skip delay.
- Disabled USB SMI while processing flash write to improve NvRam quality.
- Updated Descriptor_Region.bin by USI.
- Updated PXE rom.
- Disabled VpdBackup module.
- Replaced Flash.
- Set Local Firmware update to Enable.Set MEManuf Test Counter to 0.Set ME FW offset 400 to 01.
- Reprogrammed CPU MTRR if 8 GB DIMM populated.
- Updated CSM binary to rev.47.

BIOS Version 0040

About This BIOS:
- July 07, 2008
- NBG4310H.86A.0040.2008.0707.1545
- GBE firmware bin version: ich10r_82567v_a2
- PXE Option Rom file: BA1310L2.LOM
- ME Version: 1087 SKU4
- MEBx Version:5.0.5.0003
- Vbios:1637

New Fixes/Features:
- Initial production BIOS release

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