



## BIOS Update Release Notes

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### PRODUCTS: DZ77BH-55K (Standard BIOS)

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**BIOS Version 0100 - BHZ7710H.86A.0100.2013.0517.0942**

#### About This Release:

- Date: May 17, 2013
- ME Firmware: ME8\_1.5M\_8.1.20.1336
- Integrated Graphics Option ROM: 2143 PC 14.34
- 3rd Generation UEFI driver: 3.0.7.1006
- 2nd Generation UEFI driver: 2.0.30.1012
- Visual BIOS: 1.2.3
- SATA RAID Option ROM: 11.6.0.1702
- SATA RAID UEFI Driver: 11.6.0.1702
- LAN Option ROM: v1403 PXE 2.1 Build 090
- LAN UEFI Driver: 5.0.12

#### New Fixes/Features:

- Updated UEFI SATA driver to version 11.6.0.1702.
- Fixed issue where system with RAID mode and secure boot enabled causes system halt at POST.
- Fixed blue screen error when installing Windows 8\*.
- Fixed issue where Intel® Integrator Toolkit stops working on Windows 8 Enterprise 32-Bit.

**BIOS Version 0099 - BHZ7710H.86A.0099.2013.0311.1142**

#### About This Release:

- Date: March 11, 2013
- ME Firmware: ME8\_1.5M\_8.1.20.1336
- Integrated Graphics Option ROM: 2143
- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1403 PXE 2.1 Build 090

#### New Fixes/Features:

- Implemented global PK key.
- Fixed issue where sensor threshold's proposed value is mismatched with active value in BIOS after changes are made in Intel® Desktop Utilities.
- Fixed issue where drive icon for Marvell\* controller is missing in Windows\*.
- Updated processor support.

**BIOS Version 0098 - BHZ7710H.86A.0098.2013.0206.1447**

#### About This Release:

- Date: February 6, 2013
- ME Firmware: ME8\_1.5M\_8.1.20.1336
- Integrated Graphics Option ROM: 2143

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

- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1403 PXE 2.1 Build 090

**New Fixes/Features:**

- Updated processor support.
- Fixed issue where drive icon for Marvell\* controller is missing in Windows\*.
- Fixed issue where after enabling "Force Secure Boot defaults" three keys disappear and Secure Boot Mode is still "Custom".

**BIOS Version 0097 - BHZ7710H.86A.0097.2012.1228.1346**

**About This Release:**

- Date: December 28, 2012
- ME Firmware: ME8\_1.5M\_8.1.20.1336
- Integrated Graphics Option ROM: 2143
- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1403 PXE 2.1 Build 090

**New Fixes/Features:**

- Fixed issue with secondary USB 3.0 controller.

**BIOS Version 0096 - BHZ7710H.86A.0096.2012.1219.0921**

**About This Release:**

- Date: December 19, 2012
- ME Firmware: ME8\_1.5M\_8.1.20.1336
- Integrated Graphics Option ROM: 2143
- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1403 PXE 2.1 Build 090

**New Fixes/Features:**

- Updated Visual BIOS to version 1.2.3
- Fixed issue with Secure Boot when non-compliant Legacy video card is installed.
- Fixed RAID issues:
  - Prompt 'Create Volume Fail' error occurs when entering BIOS setup when Secure Boot is enabled and SATA Mode is set to RAID.
  - The BIOS Setup options for UEFI RAID driver/OPROM do not work correctly: only RAID Volume information shows if volumes were previously created but cannot create, delete, or manage it.
- Updated processor support.
- Fixed issue where memory voltage is too low.
- Updated Intel® ME 8 firmware to version 8.1.20.1336.
- Fixed memory voltage issue when sliding the Overclock Assistant to 1600MHz or higher.

**BIOS Version 0094 - BHZ7710H.86A.0094.2012.1101.1115**

**About This Release:**

- Date: November 1, 2012
- ME Firmware: ME8\_1.5M\_8.1.2.1318
- Integrated Graphics Option ROM: 2143

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- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1403 PXE 2.1 Build 090

**New Fixes/Features:**

- Updated Visual BIOS to version 1.2.2.
- Updated Lucid\* key.
- Removed 'Generate New Platform Key' Setup option.
- Improved S3 resume time.

**BIOS Version 0093 - BHZ7710H.86A.0093.2012.1026.1151**

**About This Release:**

- Date: October 26, 2012
- ME Firmware: ME8\_1.5M\_8.1.2.1318
- Integrated Graphics Option ROM: 2143
- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1403 PXE 2.1 Build 090

**New Fixes/Features:**

- Speeded up S3 resume time.
- Fixed issue where system hangs during POST when a PCIe x8 video card is installed.
- Updated Intel® ME 8 firmware to version 8.1.2.1318.
- Updated processor support..
- Updated RAID Option ROM to version 11.6.0.1702.
- Updated Intel Visual BIOS to version 1.2.1.
- Updated VBIOS to version 2143.
- Updated PXE Option ROM to version 1403.
- Fixed issue where TV tuner card is not recognized.
- Fixed LAN packet drop issue.
- Fixed issue where SATA Port 4 is disabled if the eSATA port option is disabled.

**BIOS Version 0091 - BHZ7710H.86A.0091.2012.0929.0713**

**About This Release:**

- Date: September 29, 2012
- ME Firmware: ME8\_1.5M\_8.0.13.1502
- Integrated Graphics Option ROM: 2132
- SATA RAID Option ROM: v11.1.0.1413
- LAN Option ROM: v1381 PXE 2.1 Build 090

**New Fixes/Features:**

- Fixed issues related to WHCK\*.
- Added secure boot solution.

**BIOS Version 0085 - BHZ7710H.86A.0085.2012.0809.1641**

**About This Release:**

- Date: August 9, 2012
- ME Firmware: ME8\_1.5M\_8.0.13.1502
- Integrated Graphics Option ROM: 2132
- SATA RAID Option ROM: v11.1.0.1413
- LAN Option ROM: v1381 PXE 2.1 Build 090

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

**New Fixes/Features:**

- Fixed Wake on PS/2 keyboard from S5 issue.
- Modified SMBIOS System Slot structures.
- Fixed Advanced boot order insert/remove USB key priority issue.
- Modified PCIe ASPM support.
- Fixed issue where BIOS update fails if High Precision Event Timers is disabled.

<b>BIOS Version 0083 - BHZ7710H.86A.0083.2012.0726.1415</b>
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**About This Release:**

- Date: July 26, 2012
- ME Firmware: ME8\_1.5M\_8.0.13.1502
- Memory Reference Code: Based on SA-RC\_1.60
- Integrated Graphics Option ROM: 2132
- SATA RAID Option ROM: v11.1.0.1413
- LAN Option ROM: v1381 PXE 2.1 Build 090

**New Fixes/Features:**

- Modified processor family setup item.
- Changed UEFI Boot setup item default to disabled.
- Added High Precision Event Timers setup item.
- Changed USB wakeup capacity from S4 to S3.
- Fixed issue where system hangs at POST code 92h when setting UEFI Boot option to Enabled.
- Fixed issue where S3 resume time is larger than 2000ms.
- Fixed issue where Intel® Desktop Utilities does not run.
- Updated Intel® ME firmware to version 8.0.13.1502.
- Modified Outlet (Aux Header) Fan Speed to Auxiliary (Aux Header) Fan Speed.
- Fixed issue where system reboots when exiting Setup in Back-to-BIOS mode, but it should show Back-to-BIOS exit message and halt.
- Fixed issue where the active value of voltage overrides is different from the proposed value on the Performance Menu.
- Fixed issue where User Password does not grant access to "Set User Password" question when User Access Level is Limited in BIOS.
- Fixed issue where auxiliary fan stopped alert does not get triggered in Intel® Desktop Utilities.
- Fixed issue where System Agent Voltage Offset option is displayed abnormally.
- Fixed issue when using certain processor and memory combinations, the proposed Memory Speed (MHz) shows 0 after setting Performance Memory Profile to 'Profile 1: XMP-2400'.
- Fixed Back-to-BIOS and Maintenance Mode variables.
- Fixed issue where there is no display at POST when setting IGD Primary video port / Secondary video port to HDMI / DP or DP / HDMI.
- Fixed issue where the Boot menu is missing in setup.
- Updated password feature to allow the use of special characters.
- Fixed issue where IGD Minimum Memory item should have 512MB and 1GB options.
- Fixed issue where no boot drives appear in the Boot Order list after changing to another SATA hard drive.

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- Created UEFI Boot Options if hard drive already has a UEFI operating system installed.
- Fixed issue with detected PCIe x8 devices.
- Changed IGD DVMT Memory option to IGD Minimum Memory.
- Removed ECP device from BIOS setup.
- Fixed issue where all PCI registers do not show in PCI/PCIe Add-In Slots menu (Text Setup) when plugging in PCIe\* x1 card to Slot 1.
- Fixed issue where BIOS can't enter maintenance mode.
- Fixed issue with boot order when USB boot is disabled.
- Updated processor support.
- Fixed issue where RAID function fails on 6GB SATA ports.
- Added default boot priority for Advanced boot order (CD > Removable > HDD > PXE).
- Fixed issue where error appears in Device Manager\* when UEFI boot is enabled.
- Fixed issue with hard drive speed on Marvell\* controller.
- Improved hot key detection during POST.
- Fixed issue where Host Clock Frequency setup option is lost after BIOS update.
- Added Keyboard Ready Beep question in Boot Display menu.
- Fixed issue where there are two Secondary SATA Mode questions at Advanced Setup - Devices & Peripherals - SATA Drives - Secondary SATA Controller Configuration.
- Fixed issue where SMBIOS SKU Number and Asset Tag values show as "No String".
- Fixed issue where there is not Detected RAID Volume information for RAID mode at Advanced Setup - Devices & Peripherals - SATA Drives.
- Updated PS/2 function.
- Updated VBIOS to version 2132.
- Updated RAID Option ROM to version 11.1.0.1413.
- Updated LAN PXE Option ROM to version 1.3.81.
- Fixed Video priority function.
- Fixed issue where Wake on LAN from S4/S5 item does not grey out if Deep S4/S5 is enabled.
- Fixed issue where Hibernation Timer item does not grey out if Intel Rapid Start Technology is enabled.
- Fixed issue where Wake on PS/2 Keyboard from S5 item does not grey out if Deep S4/S5 is enabled.
- Fixed issue where Processor Power Efficiency Policy item does not get hidden if Enhanced Intel SpeedStep Technology is disabled.
- Fixed issue where no Graphics Voltage Offset (mV) item appears on the Graphics page.
- Fixed issue where no System Agent Voltage Offset (V) item for Memory settings appears in Advanced Setup.
- Fixed setup item tCWL question in Visual BIOS.
- Fixed setup item PS/2 Port question in Visual BIOS.
- Fixed issue where Host Clock Frequency (MHz) item is blocked if DIMM reference Voltage Training is set to Manual.
- Fixed setup item Memory DQ Ref Voltage Hidden if DIMM Reference Voltage Training is not set to Manual.

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**About This Release:**

- Date: April 16, 2012
- ME Firmware: ME8\_1.5M\_8.0.3.1427
- Integrated Graphics Option ROM: 2130
- SATA RAID Option ROM: v11.0.0.1124
- LAN Option ROM: v1376 PXE 2.1 Build 090

**New Fixes/Features:**

- Fixed issue where eSATA can be hot-plugged in the operating system even when eSATA Port Hot Plug Capability is disabled in BIOS.
- Fixed keyboard availability during POST when USB Optimization is enabled.
- Fixed USB 3.0 detection issue.
- Added Intel® Graphics Performance Analyzers setup item.
- Added Graphics Voltage Offset setup item.
- Fixed issue related to USB charge.
- Modified Memory Multiplier: Speed setup item.
- Updated PS/2 mouse detection function.
- Added Keyboard Ready Beep setup item.
- Updated Visual BIOS; changes include:
  - Added Cancel button to Classic Mode dialog.
  - Fixed missing GFX Voltage Offset question.
  - Added missing Memory DQ Ref Voltage question to Advanced > Performance > Memory.
  - Fixed the ordering of the audio questions in Other Devices.
  - Fixed missing Overridden Host Clock question on Main Page.
  - SMBIOS support for the re-ordering of the protocol to be UEFI 2.3.1 compliant.
  - Primary Temperature Input question UQI matches other questions
  - Rear Header minimum and maximum duty cycle questions connected
- Fixed issue with incorrect XMP-2400 profile for certain processors.
- Fixed issue where frequency if not displayed correctly with 2400 Mhz processor.
- Updated processor support.
- Fixed issue where Detected Video Device Priority detects two PCI VGA devices when attaching one VGA card and one non-VGA card.
- Modified BIOS to allow special characters on password strings.
- Modified Intel® Smart Connect Technology function.
- Fixed issues with Intel® Integrator Toolkit:
  - Options should be 'Enabled' or 'Disabled', instead of 'On' or 'Off'.
  - Boot count support is not working properly.
  - Performance settings are populated in the Settings pane under 'Performance' node
  - Incorrect flash update message is displayed when booting to windows after Express BIOS Update/online mode BIOS update
- Fixed issue where Setup menu displays abnormally when Video Optimization is enabled.
- Fixed issues related to Intel® Integrator Toolkit (ITK).

- Fixed issue where Recovery function causes system hang at CP 0x12.
- Fixed issue where "Fan Control & Real-Time Monitoring" and "User Access Level" still can be changed when the "User Access Level" is in "Limited" state.
- Updated Intel® ME firmware to version 8.0.3.1427.
- Fixed issue where CIR always enables after S3 resume.
- Fixed issue where PCIe Slot 1 does not appear in Primary Video Adapter list.
- Fixed issue where system fan, rear fan and aux fan run at full speed and system & CPU temperature show at a too high level in Fan Speed tool.
- Added Native ACPI OS PCIe support.
- Added Smart Connect support.
- Fixed issue related to PS/2 mouse wake up from S3.
- Fixed issue where USB is not detected and system hangs at POST code 12.

**BIOS Version 0057 - BHZ7710H.86A.0057.2012.0208.1904**

**About This Release:**

- Date: February 4, 2012
- ME Firmware: ME8\_1.5M\_8.0.0.1351
- Integrated Graphics Option ROM: 2130
- SATA RAID Option ROM: v11.0.0.1124
- LAN Option ROM: v1376 PXE 2.1 Build 090

**New Fixes/Features:**

- Initial production BIOS release

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