BIOS Update Release Notes

PRODUCTS: DH77KC, DH77DF (Standard BIOS)

BIOS Version 0112 - KCH7710H.86A.0112.2018.1025

About This Release:
- Date: October 25, 2018
- ME Firmware: 8.1.20.1336
- Integrated Graphics Option ROM: Build 2143 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1381 PXE 2.1 Build 091
- Ivy Bridge EFI driver (GOP): 3.0.14.1015
- Sandy Bridge EFI driver (GOP): 2.0.35.1018
- Visual BIOS: 1.2.14

New Fixes/Features:
- Updated CPU Microcode (Security Advisory-00115).

BIOS Version 0111 - KCH7710H.86A.0111.2018.0329

About This Release:
- Date: March 29, 2018
- ME Firmware: 8.1.20.1336
- Integrated Graphics Option ROM: Build 2143 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1381 PXE 2.1 Build 091
- Ivy Bridge EFI driver (GOP): 3.0.14.1015
- Sandy Bridge EFI driver (GOP): 2.0.35.1018
- Visual BIOS: 1.2.14

New Fixes/Features:
- Updated CPU Microcode (Security Advisory-00088.)

BIOS Version - KCH7710H.86A.0110.2013.0513.1018

About This Release:
- Date: May 13, 2013
- ME Firmware: 8.1.20.1336
- Integrated Graphics Option ROM: Build 2143 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1381 PXE 2.1 Build 091
- 3rd Generation EFI driver: 3.0.14.1015
- 2nd Generation EFI driver: 2.0.35.1018
- Visual BIOS: 1.2.14

New Fixes/Features:
- Fixed issue where enabling Video Optimizations disables Intel® Rapid Start Technology.

*Other names and brands may be claimed as the property of others.
- Updated Visual BIOS to version 1.2.14.
- Fixed issue where options to enable and disable USB Legacy are opposite between Intel® Integrator Toolkit (ITK) and BIOS setup.
- Fixed issue where the boot order of USB hard drives connected to USB3.0 ports cannot be changed in ITK.
- Fixed issue where ITK stops working on Windows 8 Enterprise 32-Bit.

 BIOS Version 0108 - KCH7710H.86A.0108.2013.0305.1638

About This Release:
- Date: March 5, 2013
- ME Firmware: 8.1.20.1336
- Integrated Graphics Option ROM: Build 2143 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1381 PXE 2.1 Build 091
- 3rd Generation EFI driver: 3.0.14.1015
- 2nd Generation EFI driver: 2.0.35.1018
- Visual BIOS: 1.2.3

New Fixes/Features:
- Fixed issue with poor performance of PCI bus.
- Fixed issue where default memory speed displays incorrectly (1066MHz instead of 1333MHz).
- Fixed issue with memory Channel A Slot B display in Intel® Desktop Utilities (IDU).
- Fixed issue with secure boot.
- Fixed issue where sensor threshold’s proposed value is mismatched with active value in BIOS after changes are made in IDU.
- Added Install PK key setup item.

 BIOS Version 0107 - KCH7710H.86A.0107.2013.0123.1905

About This Release:
- Date: January 23, 2013
- ME Firmware: 8.1.20.1336
- Integrated Graphics Option ROM: Build 2143 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1381 PXE 2.1 Build 091
- 3rd Generation EFI driver: 3.0.14.1015
- 2nd Generation EFI driver: 2.0.35.1018
- Visual BIOS: 1.2.3

New Fixes/Features:
- Fixed issue where certain bootable hard drive is displayed as "Unknown" in F10 mode.
- Added Intel® Smart Connect Technology Setup item.

 BIOS Version 0106 - KCH7710H.86A.0106.2012.1227.1251

About This Release:
- Date: December 27, 2012
- ME Firmware: 8.1.20.1336

*Other names and brands may be claimed as the property of others.
- Integrated Graphics Option ROM: Build 2143 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1381 PXE 2.1 Build 091
- 3rd Generation EFI driver: 3.0.14.1015
- 2nd Generation EFI driver: 2.0.35.1018
- Visual BIOS: 1.2.3

New Fixes/Features:
- Fixed issue with certain TV tuner card.

**BIOS Version 0105 - KCH7710H.86A.0105.2012.1213.1135**

**About This Release:**
- Date: December 13, 2012
- ME Firmware: 8.1.20.1336
- Integrated Graphics Option ROM: Build 2143 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1381 PXE 2.1 Build 091
- 3rd Generation EFI driver: 3.0.14.1015
- 2nd Generation EFI driver: 2.0.35.1018
- Visual BIOS: 1.2.3

New Fixes/Features:
- Fixed issue with BIOS recovery.
- Fixed issue with Secure Boot when non-compliant Legacy video card is installed.
- Fixed issue where TV tuner card is not recognized.
- Updated Intel® ME 8 firmware to version 8.1.20.1336.
- Updated support for DDR3 1066Mhz memory.
- Fixed issue where Supervisor Password prompt appears even when chassis intrusion is set to log only.

**BIOS Version 0104 - KCH7710H.86A.0104.2012.1123.1027**

**About This Release:**
- Date: November 23, 2012
- ME Firmware: 8.1.2.1318
- Integrated Graphics Option ROM: Build 2143 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1381 PXE 2.1 Build 091
- 3rd Generation EFI driver: 3.0.14.1015
- 2nd Generation EFI driver: 2.0.35.1018
- Visual BIOS: 1.2.3

New Fixes/Features:
- Updated Visual BIOS to version 1.2.3.
- Updated processor support.
- Fixed issue where system hangs on boot after BIOS update if UEFI Boot is enabled.
- Fixed issue where the Password Prompt is not required when Chassis Intrusion is set to Log Only, if just the Supervisor Password is installed.
- Fixed issue with legacy video card when Secure Boot is enabled.

*Other names and brands may be claimed as the property of others.*
- Fixed issue where BIOS recovery fails if using a BIOS image altered with Intel® Integrator Toolkit.

**BIOS Version 0103 - KCH7710H.86A.0103.2012.1029.1732**

**About This Release:**
- Date: October 29, 2012
- ME Firmware: 8.1.2.1318
- Integrated Graphics Option ROM: Build 2143 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1381 PXE 2.1 Build 091
- 3rd Generation EFI driver: 3.0.14.1015
- 2nd Generation EFI driver: 2.0.35.1018
- Visual BIOS: 1.2.2

**New Fixes/Features:**
- Updated Visual BIOS to version 1.2.2.
- Fixed issue with Wake on LAN PXE Boot.
- Fixed Intel® Integrator Toolkit test failure.
- Fixed issue where PCH temperature value is not correct.
- Fixed issue where system does not boot to the operating system when UEFI Boot is enabled.
- Fixed LAN packet drop issue.
- Updated Lucid* key.
- Fixed issue where certain keyboards and mice are not detected during boot.
- Removed platform key generation option in Setup.

**BIOS Version 0102 - KCH7710H.86A.0102.2012.1008.1611**

**About This Release:**
- Date: October 8, 2012
- ME Firmware: 8.1.2.1318
- Integrated Graphics Option ROM: Build 2143 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN Option ROM: v1381 PXE 2.1 Build 091
- 3rd Generation EFI driver: 3.0.14.1015
- 2nd Generation EFI driver: 2.0.35.1018
- Visual BIOS: 1.2.1

**Note:**
Any memory modules installed are incorrectly displayed as DDR3 1066 MHz frequency in Visual BIOS. Memory frequencies are correctly displayed in BIOS Classic mode.

**New Fixes/Features:**
- Updated Visual BIOS to version 1.2.1.
- Updated VBIOS to version 2143.
- Updated RAID Option ROM to version 11.6.0.1702.
- Updated Intel® ME 8 firmware to 8.1.2.1318.
- Updated processor support.
- Fixed issue with LAN packet drop.
- Fixed issue where PCIe x1 TV tuner card does not work.

*Other names and brands may be claimed as the property of others.*
• Fixed issue where fan speeds for Chassis Inlet and Outlet are swapped in Intel® Desktop Utilities.
• Fixed issue where system does not boot PXE Boot image when Wake-on-LAN from S4/S5 is set to PXE BOOT.
• Fixed issue where onboard device information is wrong under SMBIOS.

**BIOS Version 0100 - KCH7710H.86A.0100.2012.0906.1136**

**About This Release:**
- Date: September 6, 2012
- ME Firmware: 8.0.13.1502
- Integrated Graphics Option ROM: Build 2124 PC 14.34
- SATA RAID Option ROM: v11.0.0.1204
- LAN Option ROM: v13B1 PXE 2.1 Build 091

**Note:**
When using KC0100.BIO with the Intel® Integrator Toolkit (ITK) version 5.0.0, these errors may occur:
- **Error: Unsupported Logo.**
- **The opened BIOS does not have this support.**
  
If you need to use ITK version 5.0.0 to customize the BIOS for Intel® Desktop Board DH77KC or DH77DF, do not update to BIOS version 0100. This problem was fixed in ITK version 5.0.1 and later.

**New Fixes/Features:**
- Fixed issue where boot device is not found if changing hard drive’s SATA port.
- Fixed issue with flash update status indicators.
- Fixed power button recovery: Video initialized before Recovery starts.
- Fixed issue with Express BIOS Update in Windows XP*.
- Fixed issue with processor C-States.
- Fixed issue with booting USB devices first.
- Fixed issue with F7 update when USB key is created by Microsoft Windows* DVD download tool.
- Fixed issue with XMP memory voltage.
- Fixed issue where PCIe x4 network adapters are not recognized.
- Updated SMBIOS entry location for legacy SMBIOS tools.
- Uninstall ACPI BGRT table if legacy boot.
- Added code to handle UEFI PXE boot options.
- Fixed issue where there is insufficient space to build .BIO files.
- Improved Back-to-BIOS mode.
- Added code to update Runtime service table CRC32 value to pass WHCK test.
- Updated BIOS to display security violation message when secure boot fails.
- Updated BIOS to let UEFI boot options reference BootOrder variable.
- Updated USB hard drive boot order option tag priority.
- Removed code to create Windows* boot manager boot options; now boot option will display as UEFI: HDD Name to avoid duplicates.
- Added SLP1.0 support when SMBIOS Type1/offset4 is updated by Intel® Integrator Toolkit.

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• Updated Intel® ME 8 firmware to version 8.0.13.1502.
• Fixed issue where system can be waked up from S3 after un-checking “Allow this device to wake the computer” in Device Manager for PS/2 keyboard or mouse.


About This Release:
• Date: June 8, 2012
• ME Firmware: 8.0.10.1464
• Integrated Graphics Option ROM: Build 2124 PC 14.34
• SATA RAID Option ROM: v11.0.0.1204
• LAN Option ROM: v1381 PXE 2.1 Build 091

New Fixes/Features:
• Updated password feature to allow special key characters.
• Created UEFI Boot Options if hard drive already has UEFI operating system installed.
• Set certain USB ports to always enabled:
  o Ports 7 and 13 for DH77DH
  o Ports 7 and 10 for DH77KC
• Fixed issue where you cannot continuously type special characters with the Shift key in setup.
• Fixed issue with Consumer Infrared (CIR) and WHQL.
• Added default boot priority for Advanced boot order.
• Fixed issue with error in Device Manager* when UEFI boot is enabled.
• Updated to prevent setup loading to default values when removing CMOS battery.
• Updated to allow keyboard input when system is processing legacy option ROM.
• Fixed issues with fan speed control variables.
• Fixed issue where operating system installation fails with UEFI.
• Updated for handling UEFI OS boot option under RAID mode with no input device connected.
• Changed Intel® Graphics Performance Analyzers default to disabled.
• Updated processor support.
• Updated Intel® ME firmware to version 8.0.10.1464.
• Fixed issue with NTFS device support recovery.
• Fixed issue where system does not wake from S3 after pressing right key of PS/2 mouse.
• Fixed issue where system still can wake from S4 via PS/2 mouse.
• No detect lose function for USB 3.0 ports.
• Added Setup item Intel® Graphics Performance Analyzers.
• Fixed issue where maximum Non-turbo ratio does not work on the Performance page.
• Updated to keep SATA Mode settings when SATA mode was set to RAID, after a flash update.
• Fixes for Intel® Integrator Toolkit (ITK):
  o Ordered list BIOS settings through ITK UI are not reflected in BIOS setup
  o EBU error message is displayed when booting to windows after customizing system BIOS (after performing the Install BIOS operation)

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Customized logo is displayed in the BIOS splash screen even though the "Update image when installing BIOS" checkbox (Apply field '0') was unselected.
- Performance settings are populated in the Settings pane under 'Performance' node.
- Unable to modify any SMBIOS field values which were already installed/displayed in BIOS setup page.
- Fix for GUI will not populate settings pane in first boot after flash ROM image file.
- Fix for EBU/ITK customizations will not process on Windows x64 with more than 4GB memory installed.
- Fixed issue where PS/2 port option is lost from onboard device with system password installed.
- Fixed issue where Setup menu displays abnormally with Video Optimization enabled.
- Fixed CIR LED issue.
- Fixed issue where F7 Update cannot load .BIO file with NTFS USB device.
- Fixed issue where a PCI graphics card attached to slot of PCI-3 is not listed under detected video device priority.
- Fixed issue where serial port disable function is lost.

**BIOS Version 0069 - KCH7710H.86A.0069.2012.0224.1825**

**About This Release:**
- Date: February 24, 2012
- ME Firmware: 8.0.2.1410
- Integrated Graphics Option ROM: Build 2124 PC 14.34
- SATA RAID Option ROM: v11.0.0.1204
- LAN Option ROM: v1381 PXE 2.1 Build 091

**New Fixes/Features:**
- Initial production BIOS release

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