BIOS Update Release Notes

PRODUCTS: DQ77MK, DQ77CP (Standard BIOS)

BIOS Version 0074 - MKQ7710H.86A.0074.2018.1025

About This Release:
- Date: October 25, 2018
- ME Firmware: 8.1.71.3608
- Memory Reference Code: Based on 1.7.0.00
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
- LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
- MEBx Code: Based on Version 8.0.0.0066
- Visual BIOS version 1.2.14
- UEFI revision: 2.3.1

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

BIOS Version 0073 - MKQ7710H.86A.0073.2018.0329

About This Release:
- Date: March 29, 2018
- ME Firmware: 8.1.71.3608
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
- LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
- MEBx Code: Based on Version 8.0.0.0066
- Visual BIOS version 1.2.14
- UEFI revision: 2.3.1

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

BIOS Version 0072 - MKQ7710H.86A.0072.2017.0519.1443

About This Release:
- Date: May 19, 2017
- ROM Image 8MB Checksum: 0x5F64D43D
- ROM Image 4MB Checksum: 0x271AA1E0
- ME Firmware: 8.1.71.3608
- Memory Reference Code: Based on 1.7.0.00
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
- LAN 82574 Option ROM: v1381 PXE 2.1 Build 091

*Other names and brands may be claimed as the property of others.
• MEBx Code: Based on Version 8.0.0.0066
• Visual BIOS version 1.2.14
• UEFI revision: 2.3.1

**New Fixes/Features:**
• Updated Intel® ME firmware to version 8.1.71.3608.

**BIOS Version 0071 - MKQ7710H.86A.0071.2015.0728.1443**

**About This Release:**
• Date: June 26, 2015
• ROM Image 8MB Checksum: 0x5DEAC6DC
• ROM Image 4MB Checksum: 0x2719FB88
• ME Firmware: 8.1.20.1336
• Memory Reference Code: Based on 1.7.0.00
• Integrated Graphics Option ROM: Build 2137 PC 14.34
• SATA RAID Option ROM: v11.6.0.1702
• LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
• LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
• MEBx Code: Based on Version 8.0.0.0066
• Visual BIOS version 1.2.14
• UEFI revision: 2.3.1

**New Fixes/Features:**
• Implemented security enhancement solution.

**BIOS Version 0070 - MKQ7710H.86A.0070.2015.0626.1554**

**About This Release:**
• Date: June 26, 2015
• ME Firmware: 8.1.20.1336
• Integrated Graphics Option ROM: Build 2137 PC 14.34
• SATA RAID Option ROM: v11.6.0.1702
• LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
• LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
• MEBx Code: Based on Version 8.0.0.0066
• Visual BIOS version 1.2.14
• UEFI revision: 2.3.1

**New Fixes/Features:**
• Fixed issue where USB is not available after loading Windows 7*.

**BIOS Version 0069 - MKQ7710H.86A.0069.2015.0401.2109**

**About This Release:**
• Date: April 1, 2015
• ME Firmware: 8.1.20.1336
• Integrated Graphics Option ROM: Build 2137 PC 14.34
• SATA RAID Option ROM: v11.6.0.1702
• LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
• LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
• MEBx Code: Based on Version 8.0.0.0066
• Visual BIOS version 1.2.14

*Other names and brands may be claimed as the property of others.
- UEFI revision: 2.3.1

**New Fixes/Features:**
- Fixed issue with clearing TPM passwords.

### BIOS Version 0068 - MKQ7710H.86A.0068.2014.1201.1532

**About This Release:**
- Date: December 1, 2014
- ME Firmware: 8.1.20.1336
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
- LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
- MEBx Code: Based on Version 8.0.0.0066
- Visual BIOS version 1.2.14
- UEFI revision: 2.3.1

**New Fixes/Features:**
- Fixed issue where an "Unsuccessful boot" error message appears after AC power loss.

### BIOS Version 0067 - MKQ7710H.86A.0067.2014.0703.1149

**About This Release:**
- Date: July 3, 2014
- ME Firmware: 8.1.20.1336
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
- LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
- MEBx Code: Based on Version 8.0.0.0066
- Visual BIOS version 1.2.14
- UEFI revision: 2.3.1

**New Fixes/Features:**
- Added feature to disable watchdog timer if an incorrect password has been entered three times.
- Added feature to disable watchdog timer when pressing Power Button to shutdown.

### BIOS Version 0066 - MKQ7710H.86A.0066.2014.0523.1409

**About This Release:**
- Date: May 23, 2014
- ME Firmware: 8.1.20.1336
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
- LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
- MEBx Code: Based on Version 8.0.0.0066
- Visual BIOS version 1.2.14
- UEFI revision: 2.3.1

*Other names and brands may be claimed as the property of others.*
New Fixes/Features:
- Enhanced the protection of certain UEFI variables as described in Intel Security Advisory INTEL-SA-00038.

**BIOS Version 0065 - MKQ7710H.86A.0065.2014.0318.1044**

**About This Release:**
- Date: March 18, 2014
- ME Firmware: 8.1.20.1336
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
- LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
- MEBx Code: Based on Version 8.0.0.0066
- Visual BIOS version 1.2.14
- UEFI revision: 2.3.1

New Fixes/Features:
- Added the function which changed recurrence setting for BIOS RTC wake up.
- Added ME firmware update delay time of 50 ms.

**BIOS Version 0064 - MKQ7710H.86A.0064.2013.1003.1058**

**About This Release:**
- Date: October 3, 2013
- ME Firmware: 8.1.20.1336
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
- LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
- MEBx Code: Based on Version 8.0.0.0066
- Visual BIOS version 1.2.14

New Fixes/Features:
- Fixed issue where booting to a drive from within Visual BIOS does not work.

**BIOS Version 0062 - MKQ7710H.86A.0062.2013.0902.1328**

**About This Release:**
- Date: September 2, 2013
- ME Firmware: 8.1.20.1336
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
- LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
- MEBx Code: Based on Version 8.0.0.0066
- Visual BIOS version 1.2.14

New Fixes/Features:
- Fixed issue where BIOS password prompt is not displayed when two monitors are connected with DVI and VGA.

*Other names and brands may be claimed as the property of others.
**About This Release:**

- **Date:** August 20, 2013
- **ME Firmware:** 8.1.20.1336
- **Integrated Graphics Option ROM:** Build 2137 PC 14.34
- **SATA RAID Option ROM:** v11.6.0.1702
- **LAN 82579 Option ROM:** v1381 PXE 2.1 Build 091
- **LAN 82574 Option ROM:** v1381 PXE 2.1 Build 091
- **MEBx Code:** Based on Version 8.0.0.0066
- **Visual BIOS version:** 1.2.14

**New Fixes/Features:**

- Fixed issue where RAID card on PCIe x4 slot is not detected if used with a discrete PCIe x16 graphics card.
- Fixed issue where two LAN devices have the same SMBIOS Device Type Instance values.
- Fixed issue some USB ports do not work at boot if certain PC-over-IP card is installed in PCIe x1 or x4 slot.
- Fixed issue where Under-Voltage Threshold and Over-Voltage Threshold memory voltage values are mismatched between Visual BIOS and classic mode.

**About This Release:**

- **Date:** June 17, 2013
- **ME Firmware:** 8.1.20.1336
- **Integrated Graphics Option ROM:** Build 2137 PC 14.34
- **SATA RAID Option ROM:** v11.6.0.1702
- **LAN 82579 Option ROM:** v1381 PXE 2.1 Build 091
- **LAN 82574 Option ROM:** v1381 PXE 2.1 Build 091
- **MEBx Code:** Based on Version 8.0.0.0066
- **Visual BIOS version:** 1.2.14

**New Fixes/Features:**

- Fixed issue where USB ports that are disabled in BIOS still appear in the operating system.

**About This Release:**

- **Date:** April 30, 2013
- **ME Firmware:** 8.1.20.1336
- **Integrated Graphics Option ROM:** Build 2137 PC 14.34
- **SATA RAID Option ROM:** v11.6.0.1702
- **LAN 82579 Option ROM:** v1381 PXE 2.1 Build 091
- **LAN 82574 Option ROM:** v1381 PXE 2.1 Build 091
- **MEBx Code:** Based on Version 8.0.0.0066
- **Visual BIOS version:** 1.2.14

**New Fixes/Features:**

- Fixed issue with flickering display when connected to a KVM.
- Fixed issue where Wake-on-LAN does not work after power loss.

*Other names and brands may be claimed as the property of others.*
• Fixed issue where the Ctrl-P prompt continues to appear even after disabling in BIOS.
• Added Visual BIOS support.

About This Release:
• Date: February 26, 2013
• ME Firmware: 8.1.20.1336
• Integrated Graphics Option ROM: Build 2137 PC 14.34
• SATA RAID Option ROM: v11.6.0.1702
• LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
• LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
• MEBx Code: Based on Version 8.0.0.0066

New Fixes/Features:
• Implemented install “Intel PK key” feature.
• Fixed issue where sensor threshold’s proposed value is mismatched with active value in BIOS after changes are made in Intel® Desktop Utilities.

About This Release:
• Date: February 5, 2013
• ME Firmware: 8.1.20.1336
• Integrated Graphics Option ROM: Build 2137 PC 14.34
• SATA RAID Option ROM: v11.6.0.1702
• LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
• LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
• MEBx Code: Based on Version 8.0.0.0066

New Fixes/Features:
• Fixed issue with TPM default setting.
• Updated processor support.
• Fixed issue where after enabling "Force Secure Boot defaults" three keys disappear and Secure Boot Mode is still "Custom".
• Fixed issue where certain bootable hard drive is displayed as “Unknown” in F10 mode.

About This Release:
• Date: January 11, 2013
• ME Firmware: 8.1.20.1336
• Integrated Graphics Option ROM: Build 2137 PC 14.34
• SATA RAID Option ROM: v11.6.0.1702
• LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
• LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
• MEBx Code: Based on Version 8.0.0.0066

New Fixes/Features:
• Updated Intel® ME 8 firmware to version 8.1.20.1336.

*Other names and brands may be claimed as the property of others.
- Fixed issue with POST logo resolution when using certain legacy video cards.
- 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.
- Fixed issue with Secure Boot with non-compliant legacy video card installed.

**BIOS Version 0054 - MKQ7710H.86A.0054.2012.1120.1444**

**About This Release:**
- Date: November 20, 2012
- ME Firmware: 8.1.2.1318
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
- LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
- MEBx Code: Based on Version 8.0.0.0066

**New Fixes/Features:**
- Fixed issue where User password will be generated again if pressing F9 to load BIOS default values.
- 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 where BIOS recovery fails if using a BIOS image altered with Intel® Integrator Toolkit.
- Fixed issue with USB 3.0 device.
- Updated processor support.

**BIOS Version 0053 - MKQ7710H.86A.0053.2012.1030.1532**

**About This Release:**
- Date: October 30, 2012
- ME Firmware: 8.1.2.1318
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- SATA RAID Option ROM: v11.6.0.1702
- LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
- LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
- MEBx Code: Based on Version 8.0.0.0066
- 3rd Generation EFI driver: 3.0.1018
- 2nd Generation EFI driver: 2.0.1020

**New Fixes/Features:**
- Added Trusted Platform Module Presence support in Setup.
- Fixed issue with IDE-R.

**BIOS Version 0052 - MKQ7710H.86A.0052.2012.1019.1745**

**About This Release:**

*Other names and brands may be claimed as the property of others.*
• Date: October 19, 2012
• ME Firmware: 8.1.2.1318
• Integrated Graphics Option ROM: Build 2137 PC 14.34
• SATA RAID Option ROM: v11.6.0.1702
• LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
• LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
• MEBx Code: Based on Version 8.0.0.0066

New Fixes/Features:
• Fixed issues with WHQL*, TPM 1.2 UEFI Preboot Interface Test and TCG Physical presence Interface 1.2 Test.
• Fixed issue where certain keyboards and mice are not detected during boot.
• Updated Intel® ME 8 firmware to version 8.1.2.1318.
• Updated MEBx to version 8.0.0.0066.
• Updated RAID Option ROM to version 11.6.0.1702.
• Updated vBIOS to version 2137 PC 14.34.
• Updated processor support
• Fixed issue with LAN packet drop.
• Fixed issue where TV tuner cards are not recognized.
• Fixed issue with setup display when using SOL.
• Fixed issue where some setup items do not show in map file for Intel® Integrator Toolkit.

BIOS Version 0050 - MKQ7710H.86A.0050.2012.0830.1022

About This Release:
• Date: August 30, 2012
• ME Firmware: 8.0.13.1502
• Integrated Graphics Option ROM: Build 2132 PC 14.34
• SATA RAID Option ROM: v11.2.0.1527
• LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
• LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
• MEBx Code: Based on Version 8.0.0.0063

Note:
When using MK0050.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 DQ77MK or DQ77CP, do not update to BIOS version 0050. This problem will be fixed in ITK version 5.0.1 and later.

New Fixes/Features:
• Fixed issue where "Press 2" prompt is displayed when updating BIOS with a custom BIOS from Intel® Integrator Toolkit.
• Fixed issue where the error message "CMOS Checksum error" displays when drive is encrypted.
• Fixed issue with UEFI Linux* installation.
• Added setup item "Memory Reference Multiplier".

BIOS Version 0049 - MKQ7710H.86A.0049.2012.0724.1241

About This Release:

*Other names and brands may be claimed as the property of others.
- Date: July 24, 2012
- ME Firmware: 8.0.13.1502
- Integrated Graphics Option ROM: Build 2132 PC 14.34
- SATA RAID Option ROM: v11.2.0.1527
- LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
- LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
- MEBx Code: Based on Version 8.0.0.0063

**New Fixes/Features:**
- Fixed issue with Fast Boot.
- Fixed issue where SMBIOS values cannot be overwritten.
- Fixed issue where BIOS cannot perform IDE-R.
- Fixed issue where fan responsiveness value cannot be set in BIOS.
- Fixed issue with Windows XP SLP 1.0 Activation*.
- Added the visible way to enter MEBx.
- Fixed issue where SATA mode changes to IDE mode after BIOS Recovery.

---

**BIOS Version 0048 - MKQ7710H.86A.0048.2012.0704.1457**

**About This Release:**
- Date: July 4, 2012
- ME Firmware: 8.0.13.1502
- Integrated Graphics Option ROM: Build 2132 PC 14.34
- SATA RAID Option ROM: v11.2.0.1527
- LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
- LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
- MEBx Code: Based on Version 8.0.0.0063

**New Fixes/Features:**
- Fixed issue where board exceeds VR temperatures under stress.
- Fixed issue where USB drives are not removed from boot order list when USB BOOT is disabled.
- Fixed issue where the memory multiplier does not match the speed under memory overrides on the Performance page.
- Fixed issue with add-on PCI LAN card.
- Updated Intel® ME firmware to version 8.0.13.1502.
- Update SATA RAID Option ROM to version 11.2.0.1527.
- Fixed issue with Primary Video Adapter function.
- Fixed issue where iFlash and BIOS recovery fails.
- Fixed issue with front panel USB ports.
- Fixed issue where Intel® Graphics Performance Analyzers is missing from the Video page in BIOS setup.
- Fixed issue where IGD Minimum Memory is missing from BIOS Setup.
- Fixed issue where monitor will not display on IGD when setting IGD as the first option under Detected Video Device Priority.
- Fixed issue where monitor always outputs to VGA port whatever setting of IGD primary or IGD secondary video port.
- Updated UEFI Boot Options if hard drive already has UEFI operating system installed.
- Fixed issue where the eSATA port shows as an external port in Rapid Storage Technology software.
- Fixed issue with Hard Disk Pre-Delay.

*Other names and brands may be claimed as the property of others.*
• Fixed issue where the Supervisor password is still listed and in a locked state with full access level.
• Fixed reboot issue with USB keyboards.
• Updated processor support.
• Fixed issue where L2 cache is incorrect.
• Fixed issue where HDMI/DisplayPort Audio should be removed from Onboard Devices page.
• Fixed issue where Hide All does not work under Expansion Card Text.
• Fixed issue where PS/2 mouse can wake up unit from S4.
• Fixed issue where PS/2 keyboard does not work during POST and setup after setting PS/2 Port to Disabled.
• Updated password feature to allow special characters.

BIOS Version 0039 - MKQ7710H.86A.0039.2012.0504.1937

About This Release:
• Date: May 4, 2012
• ME Firmware: 8.0.10.1464
• Integrated Graphics Option ROM: Build 2132 PC 14.34
• SATA RAID Option ROM: v11.0.0.1339
• LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
• LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
• MEBx Code: Based on Version 8.0.0.0063

New Fixes/Features:
• Updated Intel® ME firmware to version 8.0.10.1464.
• Updated MEBx to version 8.0.0.0063.
• Updated processor support.
• Fixed issue with USB charging.
• Fixed issue where LAN/Secondary LAN options are lost from onboard device page in BIOS Setup after setting supervisor or user password.
• Updated the S.M.A.R.T. item default value.
• Fixed issue where Detected Video Device Priority still lists IGD Video device after setting Integrated Graphics Device to Enable if Primary.
• Updated vBIOS to version Build 2132 PC 14.34.

BIOS Version 0034 - MKQ7710H.86A.0034.2012.0320.2026

About This Release:
• Date: March 20, 2012
• ME Firmware: 8.0.3.1427
• Integrated Graphics Option ROM: Build 2132 PC 14.34
• SATA RAID Option ROM: v11.0.0.1339
• LAN 82579 Option ROM: v1381 PXE 2.1 Build 091
• LAN 82574 Option ROM: v1381 PXE 2.1 Build 091
• MEBx Code: Based on Version 8.0.0.0061

New Fixes/Features:
• Initial production BIOS release

*Other names and brands may be claimed as the property of others.
Information in this document is provided in connection with Intel Products and for the purpose of supporting Intel developed server/desktop boards and systems.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Intel's Terms and Conditions of Sale for such products, Intel assumes no liability whatsoever, and Intel disclaims any express or implied warranty, relating to sale and/or use of Intel products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright or other intellectual property right. Intel Corporation may have patents or pending patent applications, trademarks, copyrights, or other intellectual property rights that relate to the presented subject matter. The furnishing of documents and other materials and information does not provide any license, express or implied, by estoppel or otherwise, to any such patents, trademarks, copyrights, or other intellectual property rights. Intel products are not intended for use in medical, life saving, or life sustaining applications. Intel may make changes to specifications and product descriptions at any time, without notice.

Intel is a trademark of Intel Corporation in the US and other countries.
Copyright (c) 2015 Intel Corporation.

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