## BIOS Update Release Notes

**PRODUCTS:** NUC8i7BEH, NUC8i5BEH, NUC8i5BEK, NUC8i3BEH, NUC8i3BEK, NUC8i7BEHGA, NUC8i7BEKQA, NUC8i5BEHFA, NUC8i5BEKPA, NUC8i3BEHFA (Standard BIOS)

**ECFL357.86A.0073.2019.0618.1409 Production BIOS**

**About This Release:**
- Date: June 18, 2019
- ROM Image Checksum: 0xF0F3
- ME Firmware: 12.0.32.1421
- EC Firmware: v3.20
- Memory Reference Code: Based on 7.0.44.23
- Integrated Graphics:
  - Option ROM: v1017
  - UEFI Driver: v9.0.1084
- SATA RAID Option ROM: 16.8.0.1000
- AHCI Code: Based on AHCI_17
- LAN Option ROM: PXE V0.1.1.3
- Visual BIOS: 2.2.23
- Supported Flash Devices:
  - WinBond W25Q128JVSIQ 16MB (3.3V)
  - Macronix MX25L12873FM2I-10G 16MB (3.3V)
  - GigaDevice GD25B127DSIGR 16MB (3.3V)
- Microcode Updates included in .ROM & .BIO Files:
  - MC0806EA_0000009D_000000B4.pdb

**New Fixes/Features:**
- Fixed issue: Keeping monitor off when WOL from S3.
- Fixed issue: Thunderbolt Hot-plugging doesn't work when you use Legacy in the BIOS.
- Fixed issue: Blue USB 3.0 port have 5V every time when system AC power turn on/turn off.
- Updated Microcode to version MC0806EA_0000009D_000000B4.pdb.
- Remove the option “SW Control” on “RGB LED” and “Button LED” items.

**BIOS Version 0071 - ECFL357.86A.0071.2019.0510.1505**

**About This Release:**
- Date: May 10, 2019
- ME Firmware: 12.0.32.1421
- EC Firmware: v3.20
- PMC Firmware: 300.1.20.1023
- Framework Reference Code: Based on 7.0.44.23
- Memory Reference Code: Based on 7.0.44.23

*Other names and brands may be claimed as the property of others.*
• Integrated Graphics:
  o Option ROM: v1017
  o UEFI Driver: v9.0.1084
• SATA RAID Option ROM: 16.8.0.1000
• AHCI Code: Based on AHCI_17
• LAN Option ROM: PXE V0.1.1.3
• Visual BIOS: 2.2.23

New Fixes/Features:
• Fixed the issue that caused the SSD password to stop working after updating to BIOS 0064 or 0066.
• Fixed the issue where the fan settings wouldn’t change when changing the “Fan Control Mode” to/from Balanced to Cool.
• Fixed the issue where wireless is disabled in the BIOS but still appears in Windows device manager.
• Changed RING LED to RGB LED in the BIOS to match the motherboard silkscreen and Technical Product Specification.
• Fixed the issue with the password prompt when BitLocker is enabled.
• Updated the BIOS code for security fixes.
• Updated Intel ME firmware to version 12.0.23.1311.
• Fixed issue when keyboard/mouse is connected to Type-C port.
• Removed option for 2048MB on IGD Aperture Size setting.
• Fixed issue where HDD password feature doesn’t show in the setup menu with NVME PCIe drive.
• Updated S3 Indicator blinking behavior.
• Updated Graphics Option ROM to version 1017.
• Updated Graphics UEFI driver to version 9.0.1084.
• Updated RAID Option ROM to version 16.8.0.1000.

BIOS Version 0051 - BECFL357.86A.0051.2018.1015.1513

About This Release:
• Date: October 15, 2018
• ME Firmware: 12.0.10.1128
• EC Firmware: v3.20
• PMC Firmware: 300.1.20.1019
• Framework Reference Code: Based on 7.0.37.50
• Integrated Graphics:
  o Option ROM: v1014
  o UEFI Driver: v9.0.1080
• LAN Option ROM: PXE v0.1.1.3
• Visual Bios: 2.2.23

New Fixes/Features:
• Fixed issue where the startup sound causes error in Device Manager.
• Updated Intel® ME firmware to version 1128.
• Updated PMC firmware to version 1019.
• Updated EC firmware to version 3.20 to fix LED behavior issue.
• Updated processor support.
• Fixed issue where remove storage password causes drive to disappear from boot manager.
• Updated watchdog event to be triggered by recovery.

*Other names and brands may be claimed as the property of others.
BIOS Version 0048 - BECFL357.86A.0048.2018.0919.2013

About This Release:
- Date: September 19, 2018
- ME Firmware: 12.0.5.1117
- EC Firmware: v3.18
- PMC Firmware:v300.1.20.1015
- Framework Reference Code: Based on 7.0.37.50
- Integrated Graphics:
  - Option ROM: v1014
  - UEFI Driver: v9.0.1080
- LAN Option ROM: PXE v0.1.1.3
- Visual Bios: 2.2.23

New Fixes/Features:
- Updated EC Firmware to version 3.18.
- Updated BIOS item Wake from Sleep State via CIR.
- Fixed issue where power LED had abnormal behavior when system enters S4 states in modern standby mode.
- Fixed issue where system can’t enter Modern Standby if NVME device is installed.

BIOS Version 0041 - BECFL357.86A.0041.2018.0719.1931

About This Release:
- Date: July 19, 2018
- ME Firmware: 12.0.5.1117
- EC Firmware: v3.14
- PMC Firmware:v300.1.20.1015
- Framework Reference Code: Based on 7.0.37.50
- Integrated Graphics:
  - Option ROM: v1014
  - UEFI Driver: v9.0.1080
- LAN Option ROM: PXE V0.1.1.3
- Visual Bios: 2.2.23

New Fixes/Features:
- Initial production BIOS release

LEGAL INFORMATION

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.

*Other names and brands may be claimed as the property of others.
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) 2018 Intel Corporation.

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