

## **BIOS Update Release Notes**

# PRODUCTS: NUC8i7BEH, NUC8i5BEH, NUC8i5BEK, NUC8i3BEH, NUC8i3BEK, NUC8i7BEHGA, NUC8i7BEKQA, NUC8i5BEHFA, NUC8i5BEKPA, NUC8i3BEHFA

BIOS Version 0079 - BECFL357.86A.0079.2020.0424.1838

#### About This Release:

• Date: April 24, 2020

ROM Image Checksum: 0x2B0BME Firmware: 12.0.47.1524

• EC Firmware: v3.20

• Memory Reference Code: Based on 7.0.51.41

• Integrated Graphics:

• Option ROM: v1026

• UEFI Driver: v9.0.1098

• SATA RAID Option ROM: 17.8.0.1065

• 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 MC0806EA\_000000CA.pdb

#### New Fixes/Features:

- Fixed issue with SMM arbitrary code execution due to insufficient buffer validation.
- Fixed sleep mode issue by lock MFG mode.
- Fixed issue with USB2 port.
- Fixed issue where Crucial SSD would hang at the Intel NUC logo splash screen.
- Removed "RAM Disk Configuration" setup question.

## BIOS Version 0078 - BECFL357.86A.0078.2020.0309.1538

#### About This Release:

• Date: March 09, 2020

ROM Image Checksum: 0x3767ME Firmware: 12.0.47.1524

• EC Firmware: v3.20

• Memory Reference Code: Based on 7.0.51.41

• Integrated Graphics:

• Option ROM: v1026

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- UEFI Driver: v9.0.1098
- SATA RAID Option ROM: 17.8.0.1065
- 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 MC0806EA\_000000C6.pdb

#### New Fixes/Features:

- Updated the RAID Driver version to 17.8.0.1065
- Fixed issue with BIOS stress tests.
- Fixed issue where NUC logo freezes when connecting TBT monitor and HDMI monitor at the same time.
- Fixed issue regarding USB connector naming for BE products.
- Fixed issue regarding failure to PXE boot.
- Fixed issue regarding checking performance monitor and fan control mode.
- Updated BIOS code for security fixes.

## BIOS Version 0077 - BECFL357.86A.0077.2019.1127.1452

## About This Release:

- Date: Nov 27, 2019
- ROM Image Checksum: 0x6B9AME Firmware: 12.0.47.1524
- EC Firmware: v3.20
- Memory Reference Code: Based on 7.0.51.41
- Integrated Graphics:
  - Option ROM: v1026
  - UEFI Driver: v9.0.1098
- 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 MC0806EA\_000000C6.pdb

## New Fixes/Features:

• Updated ME to 12.0.47.1524.

- Fixed issue where "Chassis value type changed during flash by BIO" for Microsoft request
- Fixed issue with auto detect Thunderbolt device.
- Fixed issue with basic standard speed performance.
- Fixed issue where "SMBIOS Field update BIOS" for Microsoft request.
- Fixed issue with Thunderbolt controller.
- Fixed issue finding Bluetooth device.
- Fixed issue waking up Bluetooth in Legacy mode.
- Due to ME Firmware update cannot downgrade to BIOS 0075 or previous

## BIOS Version 0075 - BECFL357.86A.0075.2019.1023.1448

#### About This Release:

- Date: Oct 23, 2019
- ROM Image Checksum: 0xB961
- ME Firmware: 12.0.32.1421
- EC Firmware: v3.20
- Memory Reference Code: Based on 7.0.44.23
- 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
- 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 MC0806EA\_000000C6.pdb

#### New Fixes/Features:

- Fixed issue where changes to "Native ACPI OS PCIe Support" setting in BIOS doesn't stay.
- Implemented security fixes.
- Updated processor microcode to MC0806EA 000000C6.pdb

## BIOS Version 0074 - BECFL357.86A.0074.2019.0916.1548

#### About This Release:

- Date: September 16, 2019
- ROM Image Checksum: 0x4B57
- 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

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- 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 File: MC0806EA 0000009D 000000B4.pdb
- Additional Microcode Updates included only in .BIO File:

#### New Fixes/Features:

- Fixed issue where Watchdog feature is triggered during stress testing.
- Updated BIOS code for BIOS recovery with USB flash drive.
- Updated Chassis type default to 0x23.
- Updated BIOS code for security fixes.

## BIOS Version 0073 - BECFL357.86A.0073.2019.0618.1409

#### 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:
  - 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
- Supported Flash Devices:

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 WinBond W25Q128JVSIQ 16MB (3.3V)

 Macronix MX25L12873FM2I-10G 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 - BECFL357.86A.0071.2019.0510.1505

#### About This Release:

- Date: May 10, 2019
- ME Firmware: 12.0.32.1421
- EC Firmware: v3.20

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- PMC Firmware:300.1.20.1023
- Framework Reference Code: Based on 7.0.44.23
- Memory Reference Code: Based on 7.0.44.23
- 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.
- Update 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.

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- Fixed issue where remove storage password causes drive to disappear from boot manager.
- Updated watchdog event to be triggered by recovery.

## 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:
  - 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:

- 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:
- 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:

• Initial production BIOS release

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