



BIOS Update Release Notes

**PRODUCTS: NUC7i3BNK, NUC7i3BNH, NUC7i5BNK, NUC7i5BNH,
NUC7i7BNH**

BIOS Version 0083 - BNKBL357.86A.0083.2020.0714.1344

About This Release:

- Date: July 14, 2020
- ROM Image Checksum: (Checksum) 0x4E66DA9C
- ME Firmware: 11.8.77.3664
- EC Firmware: 08.15
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:
 - Option ROM: Build 1059 PC 14.34
 - UEFI Driver: 9.0.1084
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

- Supported Flash Devices:
 - WinBond W25Q128JVSIQ 16MB

- Microcode Updates included in .ROM & .BIO Files:
 - MC0806E9_000000CA.pdb

New Fixes/Features:

- Update ME version to 11.8.77.3664
- Updated BIOS code for security fixes.
- Fixed issue with Linux watchdog timer where system did not restart.

Known Errata:

- Due to the Intel® ME firmware update in BIOS version 0083, you can't downgrade to version 0082 or earlier.

BIOS Version 0082 - BNKBL357.86A.0082.2020.0505.1614

About This Release:

- Date: May 05, 2020
- ROM Image Checksum: (Checksum) 0x4E665D75
- ME Firmware: 11.8.70.3626
- EC Firmware: 08.15
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:
 - Option ROM: Build 1059 PC 14.34
 - UEFI Driver: 9.0.1084
- SATA RAID Option ROM: 15.7.0.3054

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

- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23
- Supported Flash Devices:

WinBond	W25Q128JVSIQ	16MB
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- Microcode Updates included in .ROM & .BIO Files:

MC0806E9_000000CA.pdb

New Fixes/Features:

- Fixed issues with Machine Check Errors / Reboot while running game engine.
- Fixed abnormal behavior in Lock Manufacturing mode.
- Updated BIOS code for security fixes.

BIOS Version 0081 - BNKBL357.86A.0081.2020.0114.1542

About This Release:

- Date: Jan 14, 2020
- ROM Image Checksum: 0x8D9D
- ME Firmware: 11.8.70.3626
- EC Firmware: 08.15
- Memory Reference Code: Based on 3.6.4
- Integrated Graphics:
 - Option ROM: Build 1059 PC 14.34
 - UEFI Driver: 9.0.1084
- SATA RAID Option ROM: 16.8.0.1000
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23
- Supported Flash Devices:

WinBond	W25Q64FVSSIQ	64Mb SOP8 (3.3V)
MACRONIX	MX25L6473FM2I-08G	64Mb SOP8 (3.3V)
- Microcode Updates included in .ROM & .BIO Files:

MC0806E9_000000B4.mcb

New Fixes/Features:

- Fixed issue where "Hybrid BIOS USB recovery" failed.
- Fixed issue where "Chassis value type changed during flash by .BIO file" for Microsoft request.
- Fixed issue where "SMBIOS Field update BIOS" for Microsoft request.
- Fixed PXE boot issue message not displayed in UEFI.
- Set default Family Name to "BN" for Microsoft request.
- Updated BIOS code for security fixes.
- Updated ME Firmware to 11.8.70.3626.

Known Errata:

- Due to the Intel® ME firmware update in BIOS version 0081, you can't downgrade to version 0080 or earlier.

BIOS Version 0080 - BNKBL357.86A.0080.2019.0725.1139

About This Release:

- Date: July 25, 2019
- ROM Image Checksum: 0x5A14
- ME Firmware: 11.8.60.3561
- EC Firmware: 08.15
- Memory Reference Code: Based on 3.6.4
- Integrated Graphics
 - Option ROM: Build 1059 PC 14.34
 - UEFI Driver: 9.0.1084
- SATA RAID Option ROM: 16.8.0.1000
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23
- Supported Flash Devices:
 - WinBond W25Q64FVSSIQ 64Mb SOP8 (3.3V)
 - MACRONIX MX25L6473FM2I-08G64Mb SOP8 (3.3V)
- Microcode Updates included in .ROM File:
 - MC0806E9_000000B4.mcb
- Additional Microcode Updates included only in .BIO File:
 - MC0806E9_000000B4.mcb

New Fixes/Features:

- Fixed issue where BIOS password isn't recognized.
- Updated BIOS code for security fixes.

BIOS Version 0079 - BNKBL357.86A.0079.2019.0516.1758

About This Release:

- Date: May 16, 2019
- ROM Image Checksum: 0x477A
- ME Firmware: 11.8.60.3561
- EC Firmware: 08.15
- Memory Reference Code: Based on 3.6.4
- Integrated Graphics
 - Option ROM: Build 1059 PC 14.34
 - UEFI Driver: 9.0.1084
- SATA RAID Option ROM: 16.8.0.1000
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- Updated processor microcode.
- Fixed the issue where the BIOS was inaccessible using the USB Type C port.

BIOS Version 0078 - BNKBL357.86A.0078.2019.0425.1314

About This Release:

- Date: April 25, 2019
- ROM Image Checksum: 0x0B8A
- ME Firmware: 11.8.60.3561

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

- EC Firmware: 08.15
- Memory Reference Code: Based on 3.6.4
- Integrated Graphics
 - Option ROM: Build 1059 PC 14.34
 - UEFI Driver: 9.0.1084
- SATA RAID Option ROM: 16.8.0.1000
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- Added ENERGY Star e-logo support.
- Implemented security fix.

BIOS Version 0076 - BNKBL357.86A.0076.2019.0219.1646

About This Release:

- Date: February 19, 2019
- ME Firmware: 11.8.60.3561
- EC Firmware: 08.15
- Memory Reference Code: Based on 3.6.4
- Integrated Graphics:
 - Option ROM: Build 1059 PC 14.34
 - UEFI Driver: 9.0.1084
- SATA RAID Option ROM: 16.8.0.1000
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- Fixed issue where Thunderbolt Software always asks to approve device when Thunderbolt Security in BIOS is set to Legacy Mode.
- Updated BIOS code for security fixes.
- Updated VBIOS to Build 1059 PC 14.34.
- Updated GOP to version 9.0.1084.
- Updated Intel ME firmware to version 11.8.60.3561.
- Updated RST to version 16.8.0.1000.

Known Errata:

- Due to the Intel® ME firmware update in BIOS version 0076, you can't downgrade to version 0072 or earlier.

BIOS Version 0072 - BNKBL357.86A.0072.2018.1222.1129

About This Release:

- Date: December 22, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 3.2.0
- Integrated Graphics:
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13

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

- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- Fixed issue where disk encryption on Samsung eDrive doesn't work.
- Fixed issue where BIOS update via F7 fails
- Fixed issue where SGX tool shows "SGX has not yet been enabled per CPUID".

BIOS Version 0071 - BNKBL357.86A.0071.2018.1102.1400

About This Release:

- Date: November 2, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 3.2.0
- Integrated Graphics
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- Modified BIOS code for BIOS update failure while "Flashing FV data image".
- Fixed issue where S.M.A.R.T. function fails when using hard disk to boot.

BIOS Version 0070 - BNKBL357.86A.0070. 2018.1019.1503

About This Release:

- Date: October 18, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 3.2.0
- Integrated Graphics
 - o Option ROM: Build 1000 PC 10.46
 - o UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- BIOS code improvements.
- Fixed the issue where you couldn't update the BIOS via the power button menu option F7.
- Fixed the issue where Intel® Integrator Toolkit would not save custom settings.
- Added the option to select 1024 MB in the "IGD Aperture Size" setting and fixed the issue where the computer wouldn't shut down when it was set to 1024 MB.

BIOS Version 0069 - BNKBL357.86A.0068.2018.0920.1250

About This Release:

- Date: September 20, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- Fixed issue where consumer infrared fails when disabled, then re-enabled in BIOS.
- Fixed issue where system can't enter sleep mode after attaching a USB Type-C device.
- Fixed issue where C-states aren't working correctly when using UEFI boot.

BIOS Version 0068 - BNKBL357.86A.0068.2018.0824.1125

About This Release:

- Date: August 24, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- Fixed issue where system wakes when it's not supposed to.

BIOS Version 0067 - BNKBL357.86A.0067.2018.0814.1500

About This Release:

- Date: August 14, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)

- Visual BIOS: 2.2.23

New Fixes/Features:

- Set Consumer Infrared default to disabled for Windows RS4 support.
- Removed Intel® Ready Mode Technology items in BIOS setup for Intel security fix.

BIOS Version 0066 - BNKBL357.86A.0066.2018.0724.1832

About This Release:

- Date: July 24, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- Updated CPU Microcode (Security Advisory-00115)
- Fixed issue where BIOS customization for digital microphone and HDMI CEC doesn't work when using Intel® Integrator Toolkit.
- Removed Ready Mode related code/BIOS items for Intel security fix.

BIOS Version 0065 - BNKBL357.86A.0065.2018.0606.1639

About This Release:

- Date: June 06, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- Updated the EC Firmware.
- Fixed CEC not working correctly.

BIOS Version 0064 - BNKBL357.86A.0064.2018.0529.1711

About This Release:

- Date: May 28, 2018
- ME Firmware: 11.8.50.3425

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

- EC Firmware: 08.12
- Integrated Graphics:
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- Added security enhancements.
- Fixed issue with "F8 to Activate Windows Recovery Mode" prompt.

BIOS Version 0063 - BNKBL357.86A.0063.2018.0413.1542

About This Release:

- Date: April 13, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.12
- MEBx Revision: NA
- Integrated Graphics
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- SATA non-RAID Option ROM: NA
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- Added a setup option "Audio DSP" which enables/disables voice control. The default is set to enabled.
- Removed the 1024 MB and larger options in the "IGD Aperture Size" setup item.

BIOS Version 0062 - BNKBL357.86A.0062.2018.0222.1644

About This Release:

- Date: February 22, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.12
- Memory Reference Code: Based on 2.8.1
- Integrated Graphics:
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM(Legacy): 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- Updated CPU Microcode (Security Advisory-00088)

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

BIOS Version 0060 - BNKBL357.86A.0060.2017.1214.2013

About This Release:

- Date: December 14, 2017
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.12
- Memory Reference Code: Based on 2.8.1
- Integrated Graphics
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM(Legacy): 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- Security Enhancements.
- Fixed the issue that would cause a yellow bang for "USCI USB Connector Manager" in device manager if the Intel® Optane™ Memory was removed.
- Fixed the "no boot device found" issue when Intel® Optane™ Memory is enabled in the BIOS and a SATA device is being used.
- Updated the EC version to v8.12
- Updated the RC to version 2.8.1.
- Added the BIOS option "PCIe ASPM Support" and the default state is enabled. This is only an option on devices with board AA#:xxxx-304 and greater.
 - You can use the command: `Get-WmiObject Win32_Baseboard` Version to get the AA number.

BIOS Version 0057 - BNKBL357.86A.0057.2017.1122.1550

About This Release:

- Date: November 22, 2017
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.09
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

New Fixes/Features:

- Updated Management Engine Firmware to version: 11.8.50.3425 (Security Advisory-00086).
- Due to a security enhancement, it will not be possible to go to any BIOS earlier than BIOS 0054.
- Fixed Intel® Integrator Toolkit (Intel® ITK) issue that would cause a splash screen to not work correctly.

BIOS Version 0054 - BNKBL357.86A.0054.2017.1025.1822

About This Release:

- Date: October 25, 2017
- ME Firmware: 11.6.27.3264
- EC Firmware: 08.09
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
- Option ROM: Build 1000 PC 10.46
- UEFI Driver: 9.0.1066
- SATA RAID Option ROM: (Revision) : 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN
- Option ROM: v0.1.10 PXE-2.1 (build 092)
- UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

New Fixes/Features:

- Fixed the Smart Sound Technology yellow bang issue.
- Fixed the issue where ITK Custom BIOSs weren't working on BIOS 0051 and 0052.

BIOS Version 0052 - BNKBL357.86A.0052.2017.0918.1346

About This Release:

- Date: September 18, 2017
- ME Firmware: 11.6.27.3264
- EC Firmware: 08.09
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: (Revision) : 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN:
 - Option ROM: v0.1.10 PXE-2.1 (build 092)
 - UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

New Fixes/Features:

- Updated EC to version 08.09
- Changed the maximum size of BIOS setup item, "IGD Minimum Memory" to 64 MB.
- Changed the maximum size of BIOS setup item, "IGD Aperture Size" to 1024 MB

BIOS Version 0051 - BNKBL357.86A.0051.2017.0901.1328

About This Release:

- Date: September 01, 2017
- ME Firmware: 11.6.27.3264
- EC Firmware: 8.05

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

- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: (Revision) : 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN:
 - Option ROM: v0.1.10 PXE-2.1 (build 092)
 - UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

New Fixes/Features:

- Added "wake on voice" (WOV) BIOS setting for hands free personal assistant support.
- Fixed an issue where "wake on USB from S5 was failing.
- Updated the help text for "Allow UEFI 3rd party driver loaded".
- Updated processor support.

BIOS Version 0050 - BNKBL357.86A.0050.2017.0816.2002

About This Release:

- Date: August 16, 2017
- ME Firmware: 11.6.27.3264
- EC Firmware: 8.05
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:
 - o Option ROM: Build 1000 PC 10.46
 - o UEFI Driver: 9.0.1066
- SATA RAID Option ROM: (Revision) : 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN:
 - o Option ROM: v0.1.10 PXE-2.1 (build 092)
 - o UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

New Fixes/Features:

- Security enhancements.
- Added the setup option "Allow UEFI Third Party Driver loaded" and set the default state to disabled.
- Due to a security enhancement, it will not be possible to go to any BIOS earlier than BIOS 0050.

BIOS Version 0049 - BNKBL357.86A.0049.2017.0724.1541

About This Release:

- Date: July 24, 2017
- ME Firmware: 11.6.27.3264
- EC Firmware: 8.05
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
 - o Option ROM: Build 1000 PC 10.46

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

- UEFI Driver: 9.0.1066
- SATA RAID Option ROM: (Revision) : 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN
 - Option ROM: v0.1.10 PXE-2.1 (build 092)
 - UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

New Fixes/Features:

- Updated Intel® Rapid Storage Technology (Intel RST®) driver to version 15.7.0.1014

BIOS Version 0048 - BNKBL357.86A.0048.2017.0704.1415

About This Release:

- Date: July 04, 2017
- ME Firmware: 11.6.27.3264
- EC Firmware: (Revision) : 8.05
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: (Revision) : 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN
 - Option ROM: v0.1.10 PXE-2.1 (build 092)
 - UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

New Fixes/Features:

- Updated GOP Driver to version 9.0.1066.
- Updated processor support.
- Updated the EC to version 8.5. The fixes include:
 - The fan would not run when Wake from LAN was used.
- Modified the Fast Boot and Intel® Optane™ Memory setup item behavior.
- Moved the placement of the Intel® Optane™ Memory warning from top left corner to the middle of the screen.

BIOS Version 0047 - BNKBL357.86A.0047.2017.0518.1824

About This Release:

- Date: May 18, 2017
- ME Firmware: 11.6.27.3264
- EC Firmware: (Revision) : 8.02
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1056
- SATA RAID Option ROM: (Revision) : 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN

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

- Option ROM: v0.1.10 PXE-2.1 (build 092)
- UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

New Fixes/Features:

- Micro Code update to fix Hyper-Threading issue
- Update FW_VERSION_GUID for Windows update
- Update EC to v8.2 to fix the LED effect when changing the always on mode to low brightness slow fade mode.
- Update ME to v11.6.27.3264

BIOS Version 0046 - BNKBL357.86A.0046.2017.0503.1744

About This Release:

- Date: May 03, 2017
- ME Firmware: 11.6.20.1221
- EC Firmware: (Revision) : 8.01
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1056
- SATA RAID Option ROM: (Revision) : 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN
 - Option ROM: v0.1.10 PXE-2.1 (build 092)
 - UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

New Fixes/Features:

- Updated EC FW to v8.01 to fix LED ring bugs when setting the colors to red, green or white.
- Added EC initialized BIOS recovery capability.
- Added feature "EC Requirement update for LED."
- Thermal management improvement.
- Corrected CEC help strings.
- Fixed issue where 'Install Intel Platform Key' in BIOS was greyed out when Secure Boot was enabled.

BIOS Version 0045 - BNKBL357.86A.0045.2017.0417.1728

About This Release:

- Date: April 17, 2017
- ME Firmware: 11.6.20.1221
- EC Firmware: (Revision) : 7.10
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1056
- SATA RAID Option ROM: (Revision) : 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN
 - Option ROM: v0.1.10 PXE-2.1 (build 092)

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

- o UEFI Driver: 0.0.15
- Visual Bios: 2.2.23
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New Fixes/Features:

- Updated EC to version 7.10
- Added a warning message when the SATA mode is changed.
- Fixed an issue where the mouse would lag in BIOS.
- Fixed an issue where the system wouldn't reboot after BIOS update.

BIOS Version 0042 - BNKBL357.86A.0042.2017.0303.1854

About This Release:

- Date: March 03, 2017
- ME Firmware: 11.6.20.1221
- EC Firmware: (Revision) : 7.02
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
 - o Option ROM: Build 1000 PC 10.46
 - o UEFI Driver: 9.0.1056
- SATA RAID Option ROM: (Revision) : 15.2.0.2740
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN
 - o Option ROM: v0.1.10 PXE-2.1 (build 092)
 - o UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

New Fixes/Features:

- Updated EC to v7.2
- Fixed issue where USB Type-C ACPI Validation would fail.
- Changed maximum fan speed to 85% in Balanced/Quiet mode and to 100% in Cooling/fixed mode.
- Fixed an issue that would cause the system to halt with error 0x96 during a reboot.
- Updated Kaby Lake motherboard label to: 5.12_VEB_1ATQ0028.
- Updated RC to v1.7.
- Updated TXE to 11.6.20.1221.
- Updated EC to v6.42.
- Fixed an issue where the PCIe/NVMe m.2 drive would disappear.
- Fixed an issue where memory with an incorrect Trfc parameter in the SPD would cause the screen to flicker.
- Fixed cooling page so that 'Fixed Duty cycle option' in under fix mode.
- Changed, GPIO_SKL_LP_GPP_B17, to high.
- Added an error message when trying to flash the BIOS to BN0036 and earlier.
- Added support for FAN PWM smoothing change.
- Fixed a boot block fault tolerance failure.

BIOS Version 0036 - BNKBL357.86A.0036.2017.0105.1112

NOTE: Due to an ME update, there is no way to downgrade the BIOS after updating to BIOS 0036.

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

About This Release:

- Date: January 05, 2016
- ME Firmware: 11.6.10.1196
- EC Firmware: (Revision) : 6.11
- Framework Reference Code: Based on 1.3.0.0
- Integrated Graphics
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1056
- SATA RAID Option ROM: (Revision) : 15.2.0.2740
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN
 - Option ROM: v0.1.10 PXE-2.1 (build 092)
 - UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

New Fixes/Features:

- Updated the CPU microcode
- Updated the embedded controller to version 6.11.
- Fixed a fan issue where the minimum temperature value would restore to default on reboot.
- Fixed an issue where system couldn't enter into the Legacy RAID configuration menu.
- Fixed an issue where items that couldn't be modified via Intel® Integrator Toolkit would be shown.
- Added an error message if trying to flash to BIOS BN0026 or earlier.
- Fixed a real time clock wake up issue.
- Fixed an issue where the microphone array device always kept a high volume.
- Fixed an issue where a CIR remote wouldn't wake up the NUC when in S5.
- Updated a Cooling page setting by adding a fan curve balance mode for the i5 and i7 NUCs.
- Fixed issue where the F7 BIOS menu a M.2 partition would show as an unknown device.
- Fixed an issue where clearing the TPM from the secure jump menu would load the BIOS default setting.
- Fixed a Realtek* controller (PCIE) SSID issue.
- Fixed an issue where the micro SD card reader lost its SSID after resuming from S3.
- Updated the Graphics Output Protocol (GOP) to version 1056.
- Updated the "Secondary Fan Off Temperature" default setting on the Cooling page.
- Fixed an issue where the SATA controller and onboard LAN controller would cause an IRQ conflict.
- Fixed an issue where a BIOS text item would be incorrectly displayed.
- Fixed an issue where the system would hang during shutdown when a USB Type-C device was attached.
- Fixed an issue where the F5 hot key for the Windows* recovery environment didn't work.

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

About This Release:

- Date: December 06, 2016
- ME Firmware: 11.6.0.1136
- Framework Reference Code: Based on 1.3.0.0
- Integrated Graphics
 - Option ROM: Build 1000 PC 10.46
 - UEFI Driver: 9.0.1053
- LAN
- Visual Bios: 2.2.23
- EC FW rev : 5.7
- RST driver: 15.2.0.2740

New Fixes/Features:

- Initial production BIOS release

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