



BIOS Update Release Notes

PRODUCTS: NUC6i7KYK

BIOS Version 0067 - KYSKLi70.86A.0067.2020.0325.1553

About This Release:

- Date: March 25, 2020
- ROM Image Checksum: 0x2541
- ME Firmware: 11.8.70.3626
- Memory Reference Code: Based on 1.9.0
- Integrated Graphics:
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: Based on AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23
- Supported Flash Devices:

MACRONIX	MX25L6473FM2I-10G	8MB (3.3V)
WINBOND	W25Q64FVSSIQ	8MB (3.3V)
- Microcode Updates included in .ROM & .BIO Files:
M36506E3_000000D4.mcb

New Fixes/Features:

- Updated BIOS code for security fixes
- Fixed issue where "Chassis value type default" for Microsoft request.
- Fixed issue where " Set default Family Name to 'KY' " for Microsoft MDA requirements.
- Fixed PXE boot issue where message for network service boot was not displayed in UEFI.

Known Errata:

- Due to the Intel® ME firmware update in BIOS version 0067, you can't downgrade to version 0066 or earlier.

BIOS Version 0066 - KYSKLi70.86A.0066.2019.1205.1748

About This Release:

- Date: Dec 05, 2019
- ROM Image Checksum: 0x4DD6
- ME Firmware: 11.8.65.3590
- Memory Reference Code: Based on 1.9.0
- Integrated Graphics:
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047

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

- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: Based on AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23
- Supported Flash Devices:

MACRONIX	MX25L6473FM2I-10G	8MB (3.3V)
WINBOND	W25Q64FVSSIQ	8MB (3.3V)
- Microcode Updates included in .ROM & .BIO Files:

M36506E3_000000D4.mcb

New Fixes/Features:

- Updated UQI and UNI for build tool.
- Changed DB key.
- Added Sign flash driver.
- Changed EdramTestMode default to "SW Mode eDRAM On".
- Fixed in BIOS ITK customer issue.

BIOS Version 0064 - KYSKLi70.86A. 0064.2019.0924.1032
--

About This Release:

- Date: September 24, 2019
- ROM Image Checksum: 0x292F
- ME Firmware: 11.8.65.3590
- Memory Reference Code: Based on 1.9.0
- MEBx Revision: NA
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: Based on AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23
- Supported Flash Devices:

MACRONIX	MX25L6473FM2I-10G	8MB (3.3V)
WINBOND	W25Q64FVSSIQ	8MB (3.3V)
- Microcode Updates included in .ROM File:

M36506E3_000000CC.mcb

- Additional Microcode Updates included only in .BIO File:

M36506E3_000000CC.mcb

New Fixes/Features:

- Updated BIOS code for security fixes.
- Updated BIOS code for BIOS recovery with USB flash drive.

BIOS Version 0063 - KYSKLi70.86A.0063.2019.0614.2301

About This Release:

- Date: June 14, 2019
- ROM Image Checksum: 0x17F4
- ME Firmware: 11.8.65.3590
- Memory Reference Code: Based on 1.9.0

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

- Integrated Graphics:
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: Based on AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23
- Supported Flash Devices:

MACRONIX	MX25L6473FM2I-10G	8MB (3.3V)
WINBOND	W25Q64FVSSIQ	8MB (3.3V)
- Microcode Updates included in .ROM & .BIO Files:

M36506E3_000000CC.mcb

New Fixes/Features:

- Updated CPU microcode for security fix.

BIOS Version 0062 - KYSKLi70.86A.0062.2019.0507.1702

About This Release:

- Date: May 7, 2019
- ME Firmware: 11.8.65.3590
- Memory Reference Code: Based on 1.9.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: Based on AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23

New Fixes/Features:

- Updated Intel ME firmware to version 11.8.65.3590.
- Modified BIOS code for security fixes.

Known Errata:

- Due to the Intel® ME firmware update in BIOS version 0062, you can't downgrade to version 0061 or earlier.

BIOS Version 0061 - KYSKLi70.86A.0061.2019.0222.1748

About This Release:

- Date: February 22, 2019
- ME Firmware: 11.8.50.3434
- Memory Reference Code: Based on 1.9.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: Based on AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23

New Fixes/Features:

- Updated BIOS code for security fixes.

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

BIOS Version 0060 KYSKLi70.86A.0060.2019.0122.1440

About This Release:

- Date: January 22, 2019
- ME Firmware: 11.8.50.3434
- Memory Reference Code: Based on 1.9.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: Based on AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23

New Fixes/Features:

- Fixed issue where disk encryption on Samsung eDrive doesn't work.

BIOS Version 0059 - KYSKLi70.86A.0059.2018.1122.1431

About This Release:

- Date: November 22, 2018
- ME Firmware: 11.8.50.3434
- Memory Reference Code: Based on 1.9.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: Based on AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23

New Fixes/Features:

- Fixed issue where Thunderbolt secure level setting in BIOS setup is not reflected to the setting under the operating system.

BIOS Version 0058 - KYSKLi70.86A.0058.2018.0911.1509

About This Release:

- Date: September 12, 2018
- ME Firmware: 11.8.50.3434
- Memory Reference Code: Based on 1.9.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23

New Fixes/Features:

- BIOS functionality enhancements.

BIOS Version 0057 - KYSKLi70.86A.0057.2018.0903.1535

About This Release:

- Date: September 3, 2018
- ME Firmware: 11.8.50.3434
- Memory Reference Code: Based on 1.9.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23

New Fixes/Features:

- Fixed jumper recovery failure.
- Updated CPU Microcode (Security Advisory-00115).
- Removed Intel® Ready Mode Technology items for Intel security fix.

BIOS Version 0055 - KYSKLi70.86A.0055.2018.0516.1629

About This Release:

- Date: May 16, 2018
- ME Firmware: 11.8.50.3434
- Memory Reference Code: Based on 1.9.0
- Integrated Graphics:
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23

New Fixes/Features:

- Security enhancements

BIOS Version 0054 - KYSKLi70.86A.0054.2018.0427.1338

About This Release:

- Date: April 27, 2018
- ME Firmware: 11.8.50.3434
- Memory Reference Code: Based on 1.9.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23

New Fixes/Features:

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

- BIOS functionality enhancements.

BIOS Update 0053 - KYSKLi70.86A.0053.2018.0312.1143
--

About This Release:

- Date: March 12, 2018
- ME Firmware: 11.8.50.3434
- Memory Reference Code: Based on 1.9.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23

New Fixes/Features:

- Updated Management Engine Firmware to version: 11.8.50.3434 (Security Advisory-00086).
- Due to a security enhancement, the BIOS cannot be downgraded to any version older than version 0053.

BIOS Version 0051 - KYSKLi70.86A.0051.2018.0110.1800

About This Release:

- Date: January 10, 2018
- ME Firmware: 11.0.11.1005
- Memory Reference Code: Based on 1.9.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23

New Fixes/Features:

- Updated CPU Microcode (Security Advisory-00088).

BIOS Version 0050 - KYSKLi70.86A.0050.2017.0831.1924

About This Release:

- Date: August 31, 2017
- ME Firmware: 11.0.11.1005
- Memory Reference Code: Based on 1.9.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual Bios: 2.2.23

New Fixes/Features:

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

- Security enhancements.
- Added setup option "Allow UEFI 3rd Party Driver loaded".
- The BIOS cannot be downgraded to version 0049 or earlier due to security enhancements.

BIOS Version 0049 - KYSKLi70.86A.0049.2017.0703.1652

About This Release:

- Date: July 3, 2017
- ME Firmware: 11.0.11.1005
- Memory Reference Code: Based on 1.9.0
- Integrated Graphics
- Option ROM: Build 1040 PC 14.34
- UEFI Driver: 9.0.1047
- SATA RAID Option ROM: 14.8.0.2377
- AHCI Code: AHCI_10
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual Bios: 2.2.23

New Fixes/Features:

- Fixed incorrect help text for:
 - Thunderbolt USB Boot
 - Thunderbolt Boot
- Fixed issue where that caused the Intel® NUC Kit NUC6i7KYK not to work with the, "Intel® Board ID tool for Intel® NUC and Intel® Compute Stick".

BIOS Version 0048 - KYSKLi70.86A.0048.2017.0524.1741

About This Release:

- Date: May 24, 2017
- ME Firmware: 11.0.11.1005
- Memory Reference Code: Based on 1.9.0.0
- Integrated Graphics
- Option ROM: Build 1040 PC 14.34
- UEFI Driver: 9.0.1047
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual BIOS: 2.2.23

New Fixes/Features:

- Micro Code update to fix Hyper-Threading issue.
- Downgraded Intel Visual BIOS from "2.2.25" to "2.2.23" due to graphical errors with the on-screen Keyboard.
- Removed "4096 MB" option in Setup page (Devices\video\IGD Aperture size)
- Fixed the Recovery function where the ME couldn't be flashed.

BIOS Version 0046 - KYSKLi70.86A.0046.2017.0407.1426

About This Release:

- Date: April 7, 2017
- ME Firmware: 11.0.10.1005
- Framework BIOS Reference Code: Based on 1.9.0

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

- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- LAN Option ROM: v0104.PXE 2.1 Build 092
- Visual Bios: 2.2.20

New Fixes/Features:

- Fixed issue where No boot when using 2 PCIe m.2 drives.
- Changed the IGD Minimum Memory to 512 MB.
- Fixed issue where PXE boot wouldn't work with IGD Minimum Memory set to 1 GB and IGD Aperture Size set to 1024 MB.
- Update dbx module.

BIOS Version 0045 - KYSKLi70.86A.0045.2017.0314.1601

About This Release:

- Date: March 14, 2017
- ME Firmware: 11.0.10.1005
- Framework BIOS Reference Code: Based on 1.9.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- LAN
 - Option ROM: v0104.PXE 2.1 Build 092
- Visual Bios: 2.2.20

New Fixes/Features:

- Modified BIOS for DCI solution.
- Fixed PTT failure.
- Updated USB RT#2 solution.
- Added support for Thunderbolt™ graphic device POST display.
- Fixed update descriptor in BIOS recovery.
- Added 2048MB in IGD minimal memory option (Thunderbolt™ must be disabled to see 1024 MB or 2048MB option).

BIOS Version 0042 - KYSKLi70.86A.0042.2016.0929.1933

About This Release:

- Date: September 29, 2016
- ME Firmware: 11.0.10.1005
- Framework BIOS Reference Code: Based on 1.9.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- LAN
 - Option ROM: v0104.PXE 2.1 Build 092
- Visual Bios: 2.2.20

New Fixes/Features:

- Updated processor support.
- Force DevSleep (Device Sleep) to disable
- Security Enhancements

BIOS Version 0041 - KYSKLi70.86A.0041.2016.0817.1130

About This Release:

- Date: August 17, 2016
- ME Firmware: 11.0.10.1005
- Framework BIOS Reference Code: Based on 1.9.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- LAN
 - Option ROM: v0104.PXE 2.1 Build 092
- Visual Bios: 2.2.20

New Fixes/Features:

- Fixed the issue where PL1/PL2 would cause an issue resuming from sleep (S3).
- Fixed the issue where the system would hang if Wireless and Bluetooth were disabled and fast boot was enabled.
- Fixed Security issues.
- Fixed Intel® Integrator tool kit (ITK) security issues.
- Fixed the HLK validation issue, USB Type-C ACPI.
- Updated the BootScriptHide2 module for ACPI Security.
- Modified the SA voltage.
- Fixed the issue where Enabling Intel® Turbo Boost Technology would not enable Enhanced Intel SpeedStep® Technology.
- Updated CRB to CRB033.
- Fixed the issue where the keyboard and mouse wouldn't work in visual BIOS, when Fast Boot is enabled using the Operating System UEFI Firmware Setting.
- Fixed the issue that a reboot would show a warning message when Secure boot and Fast Boot were enabled at the same time.
- Removed the Core Max OC ratio Setup item.
- Set NFC default to disabled in MFG mode and hid the NFC Setup.
- Fixed the issue where booting to Thunderbolt™ Storage on Linux would fail.
- Updated BootScriptHide2 module for ACPI Security.

BIOS Version 0037 - KYSKLi70.86A.0037.2016.0603.1032

About This Release:

- Date: June 03, 2016
- ME Firmware: 11.0.10.1005
- Framework BIOS Reference Code: Based on 1.9.0.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- LAN
 - Option ROM: v0104.PXE 2.1 Build 092
- Visual Bios: 2.2.20

New Fixes/Features:

- Disabled USB compliance mode.
- Modified the setup items; Power Limit 1 & Power Limit 2
 - Power Limit 1= 35w Max = 50w
 - Power Limit 2= 40w Max = 60w

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

- Fixed an issue where Thunderbolt™ wouldn't see all the connected devices, when daisy chained.
- Fixed a Thunderbolt boot issue where enabling an external graphics card would cause a yellow bang.

BIOS Version 0035 - KYSKLi70.86A.0035.2016.0520.0932

About This Release:

- Date: May 20, 2016
- ME Firmware: 11.0.10.1005
- Framework BIOS Reference Code: Based on 1.9.0.0
- Integrated Graphics
 - Option ROM: Build 1040 PC 14.34
 - UEFI Driver: 9.0.1047
- LAN
 - Option ROM: v0104.PXE 2.1 Build 092
- Visual Bios: 2.2.20

New Fixes/Features:

- Updated ME to 11.0.11.1005.
- Updated GOP to 1047 and VBIOS to 1040.
- Fixed an issue where the second device in a Thunderbolt™ daisy chain wouldn't be recognized.
- Set Thunderbolt™ USB boot and Thunderbolt Boot defaults to disable.
- Fixed an S3/ S4 issue that would cause FurMark* to stop running.
- Fixed an issue where the Razer Core's I/O port lost function after waking from S3/S4.
- Removed the change that when "RST PCIe Storage Remapping" was selected, the BIOS would turn off "legacy boot" and enable "UEFI boot".
- Modified the behavior of legacy boot, so that when legacy boot is enabled the "RST PCIe Storage Remapping" is enabled to support installing Windows 7 via UEFI.
 - When "RST PCIe Storage Remapping" is enabled, it will load UEFI RAID.
 - When "RST PCIe Storage Remapping" is disabled, it will load legacy RAID.

BIOS Version 0034 - KYSKLi70.86A.0034.2016.0503.1334

About This Release:

- Date: May 3, 2016
- ME Firmware: 11.0.10.1002
- Framework BIOS Reference Code: Based on 1.9.0.0
- Integrated Graphics
 - Option ROM: Build 1037 PC 14.34
 - UEFI Driver: 9.0.1045
- LAN
 - Option ROM: v0104.PXE 2.1 Build 092
- Visual Bios: 2.2.20

New Fixes/Features:

- Updated CPU Microcode.

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

- Modified Windows Capsule Update platform GUID.
- Fixed watch dog timer issue on first power on.
- Added a fan curve for CPU cool mode.
- Added post-processing for "Max Performance Enable" Setup item.
- When the "Max Performance Enable" power mode is turned on, the FAN controller mode will automatically switch to cool mode.
- Removed the "Fanless" option.
- Modified RST PCIe Storage Remapping Setup behavior.
- When one of the "RST PCIe Storage Remapping" buttons is checked, it will automatically turn off "legacy boot" and enable "UEFI boot".
- Changed voltage adjustment bars:
 - Limited GT slice/unsliced OC ratio range to 28.
 - Limited the maximum Core voltage override/Core extra Turbo and Ring voltage Override/Extra Turbo to 1.5v.
 - Limited the maximum slice Domain/Extra Turbo and Unslice domain/Extra Turbo to 1.5v.
- Fixed Visual BIOS not show the information about the SAMSUNG V950 SSD.
- Modified memory data system slot, and onboard device for SMBIOS.
- Fixed an issue where the system didn't show the model of the SSD and SD Card in the F7 boot menu.
- Fixed an issue where some cooling options didn't show in Integrator Toolkit.
- Fixed an issue where the option "IGD Primary Video Port" and "IGD Secondary Video Port" are incorrect.
- Fixed an issue where "Thunderbolt" was still shown under "IGD Primary Video Port" and "IGD Secondary Video Port" when the Thunderbolt controller was disabled.
- Fixed an issue where the SD card could read, but not write after resuming from S3.

BIOS Version 0033 - KYSKLi70.86A.0033.2016.0408.1727

About This Release:

- Date: April 8, 2016
- ME Firmware: 11.0.10.1002
- Framework BIOS Reference Code: Based on 1.9.0.0
- Integrated Graphics
 - Option ROM: Build 1037 PC 14.34
 - UEFI Driver: 9.0.1045
- LAN
 - Option ROM: v0104.PXE 2.1 Build 092
- Visual Bios: 2.2.20

New Fixes/Features:

- Initial production BIOS release

LEGAL INFORMATION

*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, lifesaving, 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.