



BIOS Update Release Notes

PRODUCTS: NUC6i7KYK

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
- 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.

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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.

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:

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- 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:

- 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

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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:

- 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

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- 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
- 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
- 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.

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- 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.
- 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

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

- 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

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