PRODUCTS: NUC5CPYH, NUC5PPYH, NUC5PGYH (Standard BIOS)

BIOS Version 0077 - PYBSWCEL.86A.0077.2019.0606.1631

About This Release:
- Date: June 6, 2019
- ROM Image Checksum: 0xD4C1
- TXE Firmware: 02.00.05.3117 PV
- Framework BIOS Reference Code: Based on 1.2.1
- Integrated Graphics:
      Option ROM: Build 1014 PC 14.34
      UEFI Driver: 8.0.1033
- LAN Option ROM: Realtek
- Visual Bios: 2.2.20
- Supported Flash Devices:
      WinBond   W25Q64FWSSIG   8MB (1.8V)
      MACRONIX   MX25U6435FM2I   8MB (1.8V)
- Microcode Updates included in .ROM & .BIO Files:
            M01406C3_368.TXT
            M01406C4_411.TXT

New Fixes/Features:
- Updated CPU microcode for security fix.
- Modified the chassis enclosure type to 0x23.

BIOS Version 0076 - PYBSWCEL.86A.0076.2019.0321.1658

About This Release:
- Date: March 21, 2019
- TXE Firmware: 02.00.05.3117 PV
- Framework BIOS Reference Code: Based on 1.2.1
- Integrated Graphics
      Option ROM: Build 1014 PC 14.34
      UEFI Driver: 8.0.1033
- Visual Bios: 2.2.20

New Fixes/Features:
- Updated BIOS code for security fixes.

BIOS Version 0075 - PYBSWCEL.86A.0075.2018.0917.1423

About This Release:
- Date: September 17, 2018
- TXE Firmware: 02.00.05.3117 PV
- Framework BIOS Reference Code: Based on 1.2.1
- Integrated Graphics
      Option ROM: Build 1014 PC 14.34
      UEFI Driver: 8.0.1033

- Visual Bios: 2.2.20

New Fixes/Features:
- Fixed issue where there is no display during PXE boot with Fedora 14.

BIOS Version 0074 – PYBSWCEL.86A.0074.2018.0709.1332

About This Release:
- Date: July 9, 2018
- TXE Firmware: 02.00.05.3117 PV
- Framework BIOS Reference Code: Based on 1.2.1
- Integrated Graphics:
    Option ROM: Build 1007 PC 14.34
    UEFI Driver: 8.0.1033
- Visual Bios: 2.2.20

New Fixes/Features:
- Disabled and removed Intel® Ready Mode Technology related items from BIOS setup for Intel Security fix.

BIOS Version 0073 – PYBSWCEL.86A.0073.2018.0614.1654

About This Release:
- Date: June 14, 2018
- TXE Firmware: 02.00.05.3117 PV
- Framework BIOS Reference Code: Based on 1.2.1
- Integrated Graphics
    o Option ROM: Build 1007 PC 14.34
    o UEFI Driver: 8.0.1033
- Visual Bios: 2.2.20

New Fixes/Features:
- Improved compatibility and stability with SSDs
- Security enhancements

BIOS Version 0069 – PYBSWCEL.86A.0069.2018.0314.1745

About This Release:
- Date: March 14, 2018
- TXE Firmware: 02.00.05.3117 PV
- Framework BIOS Reference Code: Based on 1.2.1
- Integrated Graphics:
    Option ROM: Build 1007 PC 14.34
    UEFI Driver: 8.0.1033
- Visual Bios: 2.2.20

New Fixes/Features:
- Updated CPU Microcode (Security Advisory-00088)
- Fixed issue Where Samsung EVO SSD is not seen after updating to interim BIOS version 0066 or 0068.
- Fixed issue with Security Jumper menu item.
- Updated BIOS for CPU D-stepping support.
- Fixed the issue where the system wouldn't boot with some 8GB memory modules.

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

- Enabled BIOS write protect.
- Added the setup option "Allow UEFI Third Party Driver loaded" and set the default state to disabled.

BIOS Version 0064 - PYBSWCEL.86A.0064.2017.0815.1055

About This Release:
- Date: August 15, 2017
- TXE Firmware: 02.00.02.2092 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
    - Option ROM: Build 1007 PC 14.34
    - UEFI Driver: 8.0.1033
- Visual Bios: 2.2.20

New Fixes/Features:
- Changed the defaults of setup item "Intel Dynamic Power Technology" to custom and setup item "OS ACPI C2 Report" to disabled.

BIOS Version 0063 - PYBSWCEL.86A.0063.2017.0807.1503

About This Release:
- Date: August 7, 2017
- TXE Firmware: 02.00.02.2092 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
    - Option ROM: Build 1007 PC 14.34
    - UEFI Driver: 8.0.1033
- Visual Bios: 2.2.20

New Fixes/Features:
- Fixed the issue where the wrong BIOS ID string was getting written into the Windows* registry.

BIOS Version 0062 - PYBSWCEL.86A.0062.2017.0308.1328

About This Release:
- Date: March 8, 2017
- TXE Firmware: 02.00.02.2092 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
    - Option ROM: Build 1007 PC 14.34
    - UEFI Driver: 8.0.1033
- Visual Bios: 2.2.20

New Fixes/Features:
- Fixed the BIOS power button recovery.

BIOS Version 0061 - PYBSWCEL.86A.0061.2017.0110.1407

About This Release:
- Date: January 10, 2017
- TXE Firmware: 02.00.02.2092 PV
- Framework BIOS Reference Code: Based on 1.1.0

- Integrated Graphics
    - o Option ROM: Build 1007 PC 14.34
    - o UEFI Driver: 8.0.1033
- Visual Bios: 2.2.20

New Fixes/Features:
- Security enhancements.

BIOS Version 0060 - PYBSWCEL.86A.0060.2016.1228.1604

About This Release:
- Date: December 28, 2016
- TXE Firmware: 02.00.02.2092 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
    - o Option ROM: Build 1007 PC 14.34
    - o UEFI Driver: 8.0.1033
- Visual Bios: 2.2.20

New Fixes/Features:
- Security Enhancements
- Fixed TPM2.0 error

BIOS Version 0058 - PYBSWCEL.86A.0058.2016.1102.1842

About This Release:
- Date: November 02, 2016
- TXE Firmware: 02.00.02.2092 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
    - o Option ROM: Build 1007 PC 14.34
    - o UEFI Driver: 8.0.1033
- Visual Bios: 2.2.20

New Fixes/Features:
- Security Enhancements

BIOS Version - PYBSWCEL.86A.0057.2016.1012.1134

About This Release:
- Date: October 12, 2016
- TXE Firmware: 02.00.02.2092 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
    - o Option ROM: Build 1007 PC 14.34
    - o UEFI Driver: 8.0.1033
- Visual Bios: 2.2.20

New Fixes/Features:
- Fixed TPM2.0 error.

BIOS Version 0056 - PYBSWCEL.86A.0056.2016.0901.1751

About This Release:
- Date: September 01, 2016

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

- TXE Firmware: 02.00.02.2092 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
  - Option ROM: Build 1007 PC 14.34
  - UEFI Driver: 8.0.1033
- Visual Bios: 2.2.20

New Fixes/Features:
- Added patch code for SA50011
- Updated the NVMe module to NVMe_04.
- Added patch code for EBDA.
- Added patch code for ITK.
- Updated BootScriptHide to 02.
- Updated TCG to TCG_10

BIOS Version 0055 - PYBSWCEL.86A.0055.2016.0812.1130

About This Release:
- Date: August 12, 2016
- TXE Firmware: 02.00.02.2092 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
  - Option ROM: Build 1007 PC 14.34
  - UEFI Driver: 8.0.1033
- Visual Bios: 2.2.20

New Fixes/Features:
- Fixed the issue where some memory would cause the NUC not to boot.

BIOS Version 0054 - PYBSWCEL.86A.0054.2016.0503.1546

About This Release:
- Date: May 03, 2016
- TXE Firmware: 02.00.02.2092 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
  - Option ROM: Build 1007 PC 14.34
  - UEFI Driver: 8.0.1033
- Visual Bios: 2.2.20

New Fixes/Features:
- Hid "NFC" setup item.
- Improved BIOS update function by disabling keyboard and power button during the flash/recovery process.
- Removed WlanDynamicSolution setup item but kept WiFi WRDD.
- Updated Intel Visual BIOS to 2.2.20.
- Hotfix to remove download driver and automatic BIOS update feature.

BIOS Version 0053 - PYBSWCEL.86A.0053.2016.0401.1154

About This Release:
- Date: April 1, 2016

- TXE Firmware: 02.00.02.2092 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
    - Option ROM: Build 1007 PC 14.34
    - UEFI Driver: 8.0.1033
- Visual Bios: 2.2.19

New Fixes/Features:
- Added support to allow the use of alternative wireless cards.
- Updated CPU microcode.
- Improved power button menu and F4 recovery by:
    - Removing the G3 power button recovery
    - Adding BIOS ID information prompt
    - Allowing the user to cancel the recovery by selecting [ESC] within 20 seconds of starting the process
    - Added information about the progress of the recovery process.
- Fixed an issue where the **Wi-Fi Dynamic Regulatory Solution** would default to disabled when the BIOS is updated from 0044 to 0047, 0048, or 0049
- Changed the operating system shutdown temperature limit to 115°C
- Fixed an issue where **After Power Failure** would default to **Stay Off**
- Fixed an issue where NULL is used as a user password.
- Fixed a SMBIOS system slot information issue

BIOS Version 0050 - PYBSWCEL.86A.0050.2016.0223.1234

About This Release:
- Date: February 23, 2016
- TXE Firmware: 02.00.02.2092 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
    - Option ROM: Build 1007 PC 14.34
    - UEFI Driver: 8.0.1033
- Visual Bios: 2.2.19

New Fixes/Features:
- Changed the limit for shutdown to 115 degrees.

BIOS Version 0048 - PYBSWCEL.86A.0048.2015.1210.1424

About This Release:
- Date: December 10, 2015
- TXE Firmware: 02.00.02.2092 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
    - Option ROM: Build 1007 PC 14.34
    - UEFI Driver: 8.0.1033
- Visual Bios: 2.2.19

New Fixes/Features:
- Changed the SMBIOS Type 41 Information.
- Updated Ethernet device to show "Realtek ALC283" as "Onboard LAN".
- Improved SD card compatibility in Linux OS.

BIOS Version 0047 - PYBSWCEL.86A.0047.2015.1123.0950

About This Release:
- Date: November 23, 2015
- TXE Firmware: 2.0.0.2092 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
    - Option ROM: Build 1007 PC 14.34
    - UEFI Driver: 8.0.1033
- Visual Bios: 2.2.19

New Fixes/Features:
- Updated TXE to version 2092
- Added MFGDMI tool support for UEFI BIOS.
- Improved SD card compatibility with Linux OS's.
- Added the "Wi-Fi Dynamic Regulatory Solution" setup item for Indonesia WIFI lock frequency.

BIOS Version 0044 - PYBSWCEL.86A.0044.2015.0925.1143

About This Release:
- Date: September, 25, 2015
- TXE Firmware: 2.0.0.2084 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
    - Option ROM: Build 1007 PC 14.34
    - UEFI Driver: 8.0.1033
- Visual Bios: 2.2.19

New Fixes/Features:
- Updated processor support.
- Updated TXE to version 2084.
- Fixed issue that the settings change cannot be saved as BIOS file in ITK.
- Changed the "OS selection" dropdown box, replacing the "Windows 8.x" option with "Windows 8.x/Windows 10".
- Fixed issue where computer won't power on if a flash disk is connected to a USB port.
- Fixed issue where the CIR wasn't working when the NUC awoke from sleep.

BIOS Version 0043 - PYBSWCEL.86A.0043.2015.0904.1904

About This Release:
- Date: September 4, 2015
- TXE Firmware: 2.0.0.2077 PV
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
    - Option ROM: Build 1007 PC 14.34
    - UEFI Driver: 8.0.1033
- Visual Bios: 2.2.16

New Fixes/Features:
- Fixed issue with WHCK WindowsToGo Boot Test.

- Fixed issue where SD host adapter incorrectly shows in Windows 7 Device Manager.
- Fixed issue where a customized .BIO file cannot be saved in Intel® Integrator Toolkit.
- Fixed issue with SMBIOS type10 onboard devices.
- Fixed issue where a thermal trip event appears twice in the event log.
- Fixed issue where system hangs at POST code B4.
- Changed the default value for Platform Trust Technology.

BIOS Version 0040 - PYBSWCEL.86A.0040.2015.0814.1353

About This Release:
- Date: August 14, 2015
- TXE Firmware: 2.0.0.2077 Beta
- Framework BIOS Reference Code: Based on 1.1.0
- Integrated Graphics
  - Option ROM: Build 1007 PC 14.34
  - UEFI Driver: 8.0.1033
- Visual Bios: 2.2.16

New Fixes/Features:
- Updated TXE firmware to version 2077.
- Updated processor support.
- Fixed issue where system hangs during PXE boot.
- Fixed issue where USB mouse does not work.
- Changed the prompt for F8 recovery to show Windows 8.1/10.
- Fixed SD card compatibility issue.
- Fixed issue with USB device icon.
- Fixed issue with USB charging in S5.
- Fixed issue with RTC wakeup in S3/S4.
- Fixed issue where Express BIOS Update fails if Legacy Mode is disabled in BIOS.
- Added support for Intel® NUC Kit NUC5PGYH.
- Updated VBIOS to version 1007 and GOP to version 8.0.1033.
- Fixed issue where power LED does not blink when memory is not installed or during flash update.
- Fixed issue where CPU fan state is incorrect when the system is in Ready Mode.
- Fixed issue where SD bootable device name is incorrect.
- Fixed issue where L2 Cache value is incorrect in BIOS.
- Fixed issue where screen blinks with keyboard input in DOS.

Known Errata:
- Event log shows CMOS Checksum Error if BIOS is downgraded to previous version (due to BIOS reference code update).

BIOS Version 0031 - PYBSWCEL.86A.0031.2015.0601.1712

About This Release:
- Date: June 1, 2015
- TXE Firmware: 2.0.0.2060 Beta
- Framework BIOS Reference Code: Based on 1.0.1
- Integrated Graphics
  - Option ROM: Build 1005 PC 14.34

   o UEFI Driver: 8.0.1028
- Visual Bios: 2.2.16

New Fixes/Features:
- Fixed issue where Express BIOS Update
- Fixed USB 2.0 port wake from S5 issue.
- Updated Intel® Integrator Toolkit:
  - Added OS ACPI C2 Report setting
  - Added IGD Secondary video port setting
- Added BIOS option on the Devices and Peripherals > SATA page to enable or disable HDD Activity LED.
- Fixed issue where L2 cache shows as 2M.
- Disabled Serial IO driver for Windows 7.
- Fixed CPU fan issue with Intel Ready Mode Technology.

BIOS Version 0027 – PYBSWCEL.86A.0027.2015.0507.1758

About This Release:
- Date: May 7, 2015
- TXE Firmware: 2.0.0.2060 Beta
- Framework BIOS Reference Code: Based on 1.0.1
- Integrated Graphics
  - Option ROM: Build 1005 PC 14.34
  - UEFI Driver: 8.0.1028
- Visual Bios: 2.2.16

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.