



# PRODUCTS: NUC8i7INH, NUC8i5INH

BIOS Version 0043 - INWHL357.0043.2021.0817.1957

#### About This Release:

- Date: August 17, 2021
- ROM Image Checksum: 0xAF 536E63
- ME Firmware: 12.0.81.1753
- EC Firmware: 18.00
- Memory Reference Code: Based on 7.0.5E.40
- Integrated Graphics: AMD Radeon RX540x
- Intel RST Pre-OS:
  - UEFI Driver: 17.2.5.4046
  - Legacy Option ROM: 17.2.5.4046
- AHCI Code: Based on AHCI 19
- Wired LAN Adapter:
  - Option ROM: 0.1.13Gbe NVM: v0.5
- Visual BIOS: Intel AptioV
- Supported Flash Devices:

WinBond W25Q128JVSIQ 16MB

Microcode Updates included in .BIN & .CAP Files:

MD0806EB 000000EA.pdb M94806EC 000000EA.pdb M2240671 0000001E.mcb

# New Fixes/Features:

- Updated ME Firmware updated to 12.0.81.1753
- Fixed issue with ME FW IMAGE VERSION token that caused ME firmware not to be updated during BIOS flashing.
- Fixed EC firmware spelling error.

BIOS Version 0041 - INWHL357.0041.2021.0428.1543

#### About This Release:

- Date: April 28, 2021
- ROM Image Checksum: 0xAF 4823EE
- ME Firmware: 12.0.72.1757
- EC Firmware: 18.00
- Memory Reference Code: Based on 7.0.5E.40
- Intel RST Pre-OS:
  - UEFI Driver: 17.2.5.4046
  - Legacy Option ROM: 17.2.5.4046
- AHCI Code: Based on AHCI 19
- Wired LAN Adapter:
  - Option ROM: 0.1.13
  - Gbe NVM: v0.5
- Visual BIOS: Intel AptioV
- Supported Flash Devices:

WinBond W25Q128JVSIQ 16MB

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

Microcode Updates included in .BIN & .CAP Files:
MD0806EB\_000000EA.pdb
M94806EC\_000000EA.pdb
M2240671\_0000001E.mcb

## New Fixes/Features:

- Updated NTFS DXE driver when parsing NTFS file system partition.
- Updated CPU Microcode MD0806EB\_000000EA.pdb and M94806EC 000000EA.pdb
- Fixed OFBD module SMI handler vulnerabilities.
- Added protection code for unauthorized write at controllable address in SMRAM.
- Fixed issue to achieve arbitrary write in SMRAM save state region.

BIOS Version 0040 - INWHL357.0040.2021.0225.1025

## About This Release:

• Date: February 25, 2021

• ROM Image Checksum: 0xAF 55477A

• ME Firmware: 12.0.72.1757

• EC Firmware: 18.00

• Memory Reference Code: Based on 7.0.5E.40

• Intel RST Pre-OS:

• UEFI Driver: 17.2.5.4046

■ Legacy Option ROM: 17.2.5.4046

• AHCI Code: Based on AHCI 19

Wired LAN Adapter:

• Option ROM: 0.1.13

■ Gbe NVM: v0.5

• Visual BIOS: Intel AptioV

• Supported Flash Devices:

WinBond W25Q128JVSIQ 16MB

• Microcode Updates included in .BIN & .CAP Files:

MD0806EB\_000000DE.pdb M94806EC\_000000DE.pdb M2240671 0000001E.mcb

## New Fixes/Features:

- Improved BIOS code.
- Updated ME Firmware to 12.0.72.1757

BIOS Version 0039 - INWHL357.0039.2020.1112.1133

## About This Release:

• Date: November 11, 2020

• ROM Image Checksum: 0xAF 562B6D

• ME Firmware: 12.0.71.1681

• EC Firmware: 18.00

• Memory Reference Code: Based on 7.0.5E.40

• Intel RST Pre-OS:

■ UEFI Driver: 17.2.5.4046

■ Legacy Option ROM: 17.2.5.4046

• AHCI Code: Based on AHCI 19

• Wired LAN Adapter:

• Option ROM: 0.1.13

■ Gbe NVM: v0.5

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

- Visual BIOS: Intel AptioV
- Supported Flash Devices:

WinBond W25Q128JVSIQ 16MB

• Microcode Updates included in .BIN & .CAP Files:

MD0806EB\_000000DE.pdb M94806EC\_000000DE.pdb M2240671 0000001E.mcb

## New Fixes/Features:

- ME firmware update 12.0.71.1681
- Updated BIOS code for security fixes.

## BIOS Version 0038 - INWHL357.0038.2020.0701.1702

#### About This Release:

• Date: July 01, 2020

• ROM Image Checksum: 0xAF 756F41

• ME Firmware: 12.0.49.1534

● EC Firmware: 18.00

• Memory Reference Code: Based on 7.0.5E.40

• Intel RST Pre-OS:

• UEFI Driver: 17.2.5.4046

■ Legacy Option ROM: 17.2.5.4046

• AHCI Code: Based on AHCI 19

Wired LAN Adapter:

■ Option ROM: 0.1.13

■ Gbe NVM: v0.5

• Visual BIOS: Intel AptioV

• Supported Flash Devices:

WinBond W25Q128JVSIQ 16MB

• Microcode Updates included in .BIN & .CAP Files:

MD0806EB\_000000CA.pdb M94806EC\_000000CA.pdb M2240671 0000001E.mcb

## New Fixes/Features:

- Fixed issue where attempting to update NUC BIOS bricked the system.
- Updated BIOS code for security fixes.

## BIOS Version 0036 - INWHL357.0036.2019.1205.1550

## About This Release:

• Date: Dec 05, 2019

• ROM Image Checksum: 0xE67D

• ME Firmware: 12.0.49.1534

• EC Firmware: 18.00

• Memory Reference Code: Based on 7.0.5E.40

• Intel RST Pre-OS:

• UEFI Driver: 17.2.5.4046

Legacy Option ROM: 17.2.5.4046

• AHCI Code: Based on AHCI\_19

• Wired LAN Adapter:

• Option ROM: 0.1.13

■ Gbe NVM: v0.5

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

- Visual BIOS: Intel AptioV
- Supported Flash Devices:

WinBond W25Q128JVSIQ

• Microcode Updates included in .BIN & .CAP Files: MD0806EB 000000B8.mcb M94806EC 000000B8.mcb

#### New Fixes/Features:

- Updated ME Firmware to 12.0.49.1534.
- Fixed Intel DMI Tool issue.

#### BIOS Version 0035 - INWHL357.0035.2019.1021.1806

#### About This Release:

- Date: October 21, 2019
- ROM Image Checksum: 0xB735
- ME Firmware: 12.0.33.1424
- EC Firmware: 18.00
- Memory Reference Code: Based on 7.0.5E.40
- Intel RST Pre-OS:
  - UEFI Driver: 17.2.5.4046
  - Legacy Option ROM: 17.2.5.4046
- AHCI Code: Based on AHCI 19
- Wired LAN Adapter:
  - Option ROM: 0.1.13Gbe NVM: v0.5
- Visual BIOS: Intel AptioV
- Supported Flash Devices:

WinBond W25Q128JVSIQ

• Microcode Updates included in .BIN & .CAP Files: MD0806EB 000000B8.mcbs M94806EC 000000B8.mcb

## New Fixes/Features:

• Changed the SMBIOS Field "Family name" default to "IN".

# BIOS Version 0034 - INWHL357.0034.2019.1002.1952

#### About This Release:

- Date: October 2, 2019
- ROM Image Checksum: 0x16E5
- ME Firmware: 12.0.33.1424
- EC Firmware: 18.00
- Memory Reference Code: Based on 7.0.5E.40
- Integrated Graphics
  - Option ROM: NA
  - UEFI Driver: NA
- Intel RST Pre-OS:
  - UEFI Driver: 17.2.5.4046
  - Legacy Option ROM: 17.2.5.4046
- External SATA Option ROM: NA
- AHCI Code: Based on AHCI 19
- Wired LAN Adapter:
  - Option ROM: 0.1.13Gbe NVM: v0.5
- Supported Flash Devices:

W25Q128JVSIQ WinBond

Microcode Updates included in .ROM File: MD0806EB 000000B8.mcbs

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

M94806EC 000000B8.mcb

• Additional Microcode Updates included only in .BIO File: MD0806EB\_000000B8.mcb M94806EC\_000000B8.mcb

## New Fixes/Features:

- Updated BIOS code for security fixes.
- Implemented SMBIOS field update.
- Updated BIOS to support OAID command

# BIOS Version 0033 - INWHL357.0033.2019.0823.1431

#### About This Release:

- Date: August 23, 2019
- ROM Image Checksum: 0xD7E7
- ME Firmware: 12.0.33.1424
- EC Firmware: 18.00
- Memory Reference Code: Based on 7.0.5E.40
- Intel RST Pre-OS:
  - o UEFI Driver: 17.2.5.4046
  - o Legacy Option ROM: 17.2.5.4046
- AHCI Code: Based on AHCI\_19
- Wired LAN Adapter:
  - o Option ROM: 0.1.13
  - o Gbe NVM: v0.5
- Visual BIOS: Intel AptioV
- Supported Flash Devices:
  - o WinBond W25Q128JVSIQ 16MB
- Microcode Updates included in .BIN & .CAP Files:
  - o MD0806EB 000000B8.mcb
  - o M94806EC 000000B8.mcb

## New Fixes/Features:

• Improved BIOS code.

#### Known Errata

• Due to a security enhancement and ME firmware update in BIOS version 0032, you will not be able to downgrade the BIOS to any version earlier than 0032.

# BIOS Version 0032 - INWHL357.0032.2019.0531.1516

#### About This Release:

- Date: May 31, 2019
- ME Firmware: 12.0.33.1424
- EC Firmware: 18.00
- PMC Firmware: 300.1.20.1023
- Memory Reference Code: Based on 7.0.5E.40
- Intel RST Pre-OS:
  - o UEFI Driver: 17.2.5.4046
  - o Legacy Option ROM: 17.2.5.4046
- AHCI Code: Based on AHCI 19
- Wired LAN Adapter:
  - o Option ROM: 0.1.13
  - o Gbe NVM: v0.5
- Visual BIOS: AptioV

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

## New Fixes/Features:

- Fixed issue: Waking the system from S5 would fail.
- Fixed issue: BIOS defaults wouldn't load correctly on some options when pressing F9 in BIOS setup.
- Updated: ME firmware to version 12.0.33.1424.
- Updated: RST PreOS firmware to version 17.2.5.4046.
- Fixed issue: Legacy USB support wouldn't save settings.

#### Known Errata

• Due to a security enhancement and ME firmware update in BIOS version 0032, you will not be able to downgrade the BIOS to any version earlier than 0032.

BIOS Version 0028 - INWHL357.0028.2019.0408.2051

#### About This Release:

```
• Date: April 30, 2019
```

• ROM Image Checksum: 12ca

• ME Firmware: 12.0.32.1421

• EC Firmware: v18.00

• PMC Firmware: v300.1.20.7023

• Boot Guard ACM: 4351

• Memory Reference Code: Based on 7.0.51.41

Intel RST Pre-OS:

o UEFI Driver: 17.2.0.3790 o Legacy Option ROM: 17.2.0.3790

AHCI Code: Based on AHCI 19

Wired LAN Adapter:

o Option ROM: 0.1.13

o Gbe NVM: v0.5

#### 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.

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, life saving, 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) 2019 Intel Corporation.

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