



## BIOS Update Release Notes

**PRODUCTS: CM8i7CB8N, CM8i5CB8N, CM8i3CB4N, CM8PCB4R,  
CM8CCB4R**

**BIOS Version 0095 - CBWHL357.0095.2021.0624.0012**

### About This Release:

- Date: June 24, 2021
- ROM Image Checksum: 0xB2A4
- ME Firmware: 12.0.81.1753 v4
- EC1 Firmware:
  - AB\_A: 2.23.0
  - AB\_B: 2.23.0
  - AB\_C: 2.23.1
  - BB: 2.21.0
  - Test Board: 2.16.0
  - FB: 2.24.0
- EC2 Firmware: 2.17.0
- PMC Firmware: 300.1.20.1030
- Boot Guard ACM: 1.6.0
- Memory Reference Code: Based on 00.07.01.110
- Integrated Graphics:
  - UEFI Driver: 9.0.1095
- Intel RST Pre-OS
  - UEFI Driver: 17.7.0.4404
- Wired LAN Adapter:
  - UEFI Driver:
    - I219: 0.0.29
    - I211: 8.7.10
    - Realtek: 2.048
  - Gbe NVM: 0.4
- AHCI Code: Based on AHCI\_19
- Visual BIOS: Intel AptioV Text Setup
  
- Supported Flash Devices:

WINBOND	W25Q128J	16MB
---------	----------	------
  
- Microcode Updates included in .BIN & .CAP Files:

M94806EC_000000EA.pdb
-----------------------

### New Fixes/Features:

- Updated eDP related setup items.
- Removed non-supported SMBIOS type from CB/EB.
- [EIP 616960] Remove non-supported SMBIOS type from CB/EB.
- Updated ME FW version to 12.0.81.1753 v4.
- Updated EC Firmware v2.23.1.

**BIOS Version 0094 - CBWHL357.0094.2021.0514.2254**

### About This Release:

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

- Date: May 14, 2021
- ROM Image Checksum: 0xB777
- ME Firmware: 12.0.70.1652
- EC1 Firmware:
  - AB\_A: 2.23.0
  - AB\_B: 2.23.0
  - AB\_C: 2.23.0
  - BB: 2.21.0
  - Test Board: 2.16.0
  - FB: 2.24.0
- EC2 Firmware: 2.17.0
- PMC Firmware: 300.1.20.1030
- Boot Guard ACM: 1.6.0
- Memory Reference Code: Based on 00.07.01.110
- Integrated Graphics
  - UEFI Driver: 9.0.1095
- Intel RST Pre-OS
  - UEFI Driver: 17.7.0.4404
- Wired LAN Adapter:
  - UEFI Driver:
    - I219: 0.0.29
    - I211: 8.7.10
    - Realtek: 2.048
  - Gbe NVM: 0.4
- AHCI Code: Based on AHCI\_19
- Visual BIOS: Intel Text Setup
- Supported Flash Devices:
 

WINBOND	W25Q128J	16MB
---------	----------	------
- Microcode Updates included in .BIN & .CAP Files:
 

M94806EC_000000EA.pdb
-----------------------

**New Fixes/Features:**

- Support Kernel DMA Protection
- Updated NTFS DXE driver when parsing NTFS file system partition.
- Fixed SMI handler vulnerabilities.
- Updated CPU Microcode to M94806EC\_000000EA.pdb
- Enable token "BEEP\_ENABLE" to allow sound.
- Fixed issue when installing Optane H10 device.
- Fixed issue with "UUID" where it could not be updated.
- Fixes issue with "BIOS Setup Menu Visibility Control" displayed/hidden behavior.

**BIOS Version 0093 - CBWHL357.0093.2021.0223.1042**

**About This Release:**

- Date: Feb 23, 2021
- ROM Image Checksum: 0xC89F
- ME Firmware: 12.0.70.1652
- EC1 Firmware:
  - AB\_A: 2.20.0
  - AB\_B: 2.20.0
  - AB\_C: 2.20.0

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

- BB: 2.18.0
  - Test Board: 2.16.0
  - FB: 2.20.0
- EC2 Firmware: 2.15.0
- PMC Firmware: 300.1.20.1030
- Boot Guard ACM: 1.6.0
- Memory Reference Code: Based on 00.07.01.110
- Integrated Graphics:
  - UEFI Driver: 9.0.1095
- Intel RST Pre-OS:
  - UEFI Driver: 17.7.0.4404
- Wired LAN Adapter:
  - UEFI Driver:
    - I219: 0.0.29
    - I211: 8.7.10
    - Realtek: 2.048
  - Gbe NVM: 0.4
- AHCI Code: Based on AHCI\_19
- Visual BIOS: Intel Text Setup
- Supported Flash Devices:
 

WINBOND	W25Q128J	16MB
---------	----------	------
- Microcode Updates included in .BIN & .CAP Files:
 

M94806EC_000000DE.pdb
-----------------------

**New Fixes/Features:**

- Fixed issue with eMMC controller.
- Fixed issue with WOL (Wake on Lan) Power On.

**BIOS Version 0092 - CBWHL357.0092.2021.0108.1742**

**About This Release:**

- Date: Jan 08, 2021
- ROM Image Checksum: 0xA138
- ME Firmware: 12.0.70.1652
- EC1 Firmware:
  - AB\_A: 2.20.0
  - AB\_B: 2.20.0
  - AB\_C: 2.20.0
  - BB: 2.18.0
  - Test Board: 2.16.0
  - FB: 2.20.0
- EC2 Firmware: 2.15.0
- PMC Firmware: 300.1.20.1030
- Boot Guard ACM: 1.6.0
- Memory Reference Code: Based on 00.07.01.110
- Integrated Graphics:
  - UEFI Driver: 9.0.1095
- Intel RST Pre-OS:
  - UEFI Driver: 17.7.0.4404
- Wired LAN Adapter:
  - UEFI Driver:
    - I219: 0.0.29

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

- o I211: 8.7.10
  - o Realtek: 2.048
- Gbe NVM: 0.4
- AHCI Code: Based on AHCI\_19
- Visual BIOS: Intel Text Setup
- Supported Flash Devices:
  - WINBOND W25Q128J 16MB
- Microcode Updates included in .BIN & .CAP Files:
  - M94806EC\_000000DE.pdb

**New Fixes/Features:**

- Updated NEW NUC Element splash screen logo.
- Updates BIOS code for security fixes.
- Fixed issue with BIOS WMI interface feature.
- Updated ECD to 1.17

<b>BIOS Version 0091 - CBWHL357.0091.2020.1127.2054</b>
---

**About This Release:**

- Date: Nov 27, 2020
- ROM Image Checksum: 0xB88C
- ME Firmware: 12.0.70.1652
- EC1 Firmware:
  - AB\_A: 2.20.0
  - AB\_B: 2.20.0
  - AB\_C: 2.20.0
  - BB: 2.18.0
  - Test Board: 2.16.0
  - FB: 2.20.0
- EC2 Firmware: 2.15.0
- PMC Firmware: 300.1.20.1030
- Boot Guard ACM: 1.6.0
- Memory Reference Code: Based on 00.07.01.110
- Integrated Graphics:
  - UEFI Driver: 9.0.1095
- Intel RST Pre-OS:
  - UEFI Driver: 17.7.0.4404
- Wired LAN Adapter:
  - UEFI Driver:
    - I219: 0.0.29
    - I211: 8.7.10
    - Realtek: 2.048
  - Gbe NVM: 0.4
- AHCI Code: Based on AHCI\_19
- Visual BIOS: Intel Text Setup
- Supported Flash Devices:
  - WINBOND W25Q128J 16MB
- Microcode Updates included in .BIN & .CAP Files:
  - M94806EC\_000000DE.pdb

**New Fixes/Features:**

- Updated BIOS code for security fixes.

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

- Fixed yellow bang issue with TXT driver.
- Fixed issue with eMMC device.
- Fixed random data loss issue with DMI type 2.
- Fixed infinite loop issue when using H10 device and RST enabled.
- Fixed issue with SMBIOS type 1 or type 3 where info would not clear when CB module was changed to docking which did not save SMBIOS type 1 or type 3 info in EC.
- Upgraded EC firmware to v2.20.0\_1.14r3
- Upgraded ME firmware to 12.0.70.1652 v3

<b>BIOS Version 0089 - CBWHL357.0089.2020.0907.1812</b>
---

**About This Release:**

- Date: Sep 07, 2020
- ROM Image Checksum: 0x3C50
- ME Firmware: 12.0.68.1606
- EC1 Firmware:
  - AB\_A: 2.19.0
  - AB\_B: 2.19.0
  - AB\_C: 2.19.0
  - BB: 2.17.0
  - Test Board: 2.15.0
  - FB: 2.19.0
- EC2 Firmware: 2.14.0
- PD Firmware: 1.6.0
- PMC Firmware: 300.1.20.1030
- Boot Guard ACM: 1.6.0
- Memory Reference Code: Based on 00.07.01.110
- Integrated Graphics:
  - UEFI Driver: 9.0.1095
- Intel RST Pre-OS
  - UEFI Driver: 17.7.0.4404
- Wired LAN Adapter:
  - UEFI Driver:
    - I219: 0.0.29
    - I211: 8.7.10
    - Realtek: 2.048
  - Gbe NVM: 0.4
- AHCI Code: Based on AHCI\_19
- Visual BIOS: Intel Text Setup
- Supported Flash Devices:
 

WINBOND	W25Q128J	16MB
---------	----------	------
- Microcode Updates included in .BIN & .CAP Files:
 

M94806EC_000000D6.pdb
-----------------------

**New Fixes/Features:**

- Fixed issue with Intel AMT message.
- Fixed DMI information error when CM8i7CB8N, CM8i5CB8N, CM8i3CB4N, CM8PCB4R, CM8CCB4R were plugged into different docking boards.
- Fixed issue with BIOS watchdog counter not clearing.
- Fixed issue where BIOS Self Recovery must be disabled if Failsafe Watchdog is disabled.

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

- Updated WMI and Element WMI.
- Fixed LAN issue.
- Fixed issue with Extra COM device in device manager when S3 or S4 resumes.
- Fixed WHQL issue.
- Updated EC Firmware version to 2.19.0
- Fixed BIOS code for PCIE10 SCLK setting.
- Added I2C device "HID Descriptor Address" code to support ECD 1.13
- Fixed CMOS register definition.
- Updated USB Dual rule setup item string.
- Updated ME firmware to 12.0.68.1606
- Fixed issue where PWN BTN menu was triggering random failures.
- Fixed issue where ECD profile for SATA driving strength was not set correctly.
- Reviewed modern standby setting.
- Changed TOKE "FLUSH\_KEYS\_AFTER\_READ" to 0
- Fixed system hang issue after loading defaults in BIOS setup menu.
- Fixed SRCCLKREF not set to GPIO mode if set "Always Enabled" in the ECD.
- Fixed issue updating EC Firmware when doing ME Firmware update.
- Fixed timing issue displaying Intel Logo.
- Added dual role support for front USB 3.0 Type A port.
- Fixed issue with USB S4/S5 wake function.
- Fixed issue with incorrect iSetupCfg string.
- Fixed BIOS recovery issue in Optane mode.
- Updated Intel Client Ethernet Connection I219.

**Known Errata:**

- EC Firmware cannot be updated when doing "F7" update from BIOS version CB0079 to CB0089. To overcome this known issue, please perform "F7" update twice when upgrading from CB0079 to CB0089.

<b>BIOS Version 0079 - CBWHL357.0079.2020.0602.1820</b>
---

**About This Release:**

- Date: June 02, 2020
- ROM Image Checksum: 0xC482
- ME Firmware: 12.0.49.1534
- EC1 Firmware:
  - AB\_A: 2.17.0
  - AB\_B: 2.17.0
  - AB\_C: 2.17.0
  - BB: 2.15.0
  - Test Board: 2.14.0
  - FB: 2.17.0
  - FB with Capture Card: 2.17.0
- EC2 Firmware: 2.13.0
- PMC Firmware: 300.1.20.1025
- Boot Guard ACM: 1.6.0
- Memory Reference Code: Based on 00.07.01.110

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

- Integrated Graphics:
  - UEFI Driver: 9.0.1095
- Intel RST Pre-OS
  - UEFI Driver: 17.7.0.4404
- Wired LAN Adapter:
  - UEFI Driver:
    - I219: 0.024
    - I211: 8.7.10
    - Realtek: 2.048
  - Gbe NVM: 0.4
- AHCI Code: Based on AHCI\_19
- Visual BIOS: Intel Text Setup
  
- Supported Flash Devices:
 

WINBOND	W25Q128J	16MB
---------	----------	------
  
- Microcode Updates included in .BIN & .CAP Files:
 

M94806EC_000000CA.pdb
-----------------------

**New Fixes/Features:**

- Updated EC2 firmware to version 2.13.0.
- Added support for OA3 payload injection with OEMID/OEM Table ID through iFlashV tool
- Added support for iSetupCfg tool.
- Updated EC1 firmware to version 2.17.0 for CMB1ABA, CMB1ABB and CMB1ABC.
- Updated EC1 firmware to version 2.15.0 for CMA1BB.
- Added the option to show LAN MAC Address, ECD revision in BIOS setup.
- Added Element Configuration Data (ECD) 1.11 support for HIDI2C, USB camera, platform configuration, HSIO driving strength override, USB camera, verb table, UCSI, brightness control, tablet/slate mode notification, FAN and GOP override.
- Added mobile battery, LID and EC keyboard matrix support
- Removed the option update bios from flash tool or F7 when in battery mode.

**BIOS Version 0058 - CBWHL357.0058.2020.0107.1849**

**About This Release:**

- Date: January 07, 2020
- ROM Image Checksum: 0xDC22
- ME Firmware: 12.0.49.1534
- EC1 Firmware:
  - AB\_A: 2.8.0
  - AB\_B: 2.8.0
  - AB\_C: 2.8.0
  - BB: 2.9.0
  - Test Board: 2.8.0
- EC2 Firmware: 2.4.0
- PMC Firmware: 300.1.20.1025
- Boot Guard ACM: 1.6.0
- Memory Reference Code: Based on 00.07.01.110

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

- Integrated Graphics:
  - UEFI Driver: 9.0.1095
- Intel RST Pre-OS:
  - UEFI Driver: 17.7.0.4404
- Wired LAN Adapter:
  - UEFI Driver:
    - I219: 0.024
    - I211: 8.7.10
    - Realtek: 2.048
  - Gbe NVM: 0.4
- AHCI Code: Based on AHCI\_19
- Visual BIOS: Intel Text Setup
- Supported Flash Devices:
 

WINBOND	W25Q128J	16MB
---------	----------	------
- Microcode Updates included in .CAP Files:
 

M94806EC_000000B8.mcb
-----------------------

**New Fixes/Features:**

- Added the option to update SMBIOS and PLx setting from EC config data.
- Fixed issue where User settings changed to default value after using EBU method to update bios.
- Fixed issue where Fan2 and Fan3 values are incorrect.
- Set the default value for "sleep type support" to follow EC profile.
- Fixed issue with front panel power LED blinking
- Updated EC firmware to version 2.9.0 for CMB1BB.
- Fixed issue where Intel TXT BIOS setup item missing.
- Improved fan curve setting.
- Fixed issue with BIOS display orientation.
- Updated EC firmware to version 2.8.0 for CMB1ABA, CMB1ABB and CMB1ABC.
- Fixed the issue where cannot update ME after capsule update.

**BIOS Version 0053 - CBWHL357.0053.2019.1127.2001**

**About This Release:**

- Date: November 27, 2019
- ROM Image Checksum: 0xB4E8
- ME Firmware: 12.0.49.1534
- EC1 Firmware:
  - AB\_A: 2.6.0
  - AB\_B: 2.6.0
  - AB\_C: 2.6.0
  - BB: 2.6.0
- EC2 Firmware: 2.3.0
- PMC Firmware: 300.1.20.1025
- Boot Guard ACM: 1.6.0
- Memory Reference Code: Based on 00.07.01.110
- Integrated Graphics:
  - UEFI Driver: 9.0.1095
  - Option ROM: 1020

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



- Intel RST Pre-OS
  - Option ROM: 17.5.0.4136
- Wired LAN Adapter:
  - Option ROM:
    - I219: 0.024
    - I211: 8.7.10
    - Realtek: 2.048
  - Gbe NVM: 0.4
- AHCI Code: Based on AHCI\_19
- Visual BIOS: Intel AptioV
- Supported Flash Devices:  
WINBOND      W25Q128J      16MB
  
- Microcode Updates included in .CAP Files:  
M94806EC\_000000B8.mcb

**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) 2021 Intel Corporation.