



## BIOS Update Release Notes

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

**BIOS Version 0094 - CBWHL357.0094.2021.0514.2254**

### About This Release:

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

M94806EC_000000EA.pdb
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### 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.

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

**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
  - 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
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- Microcode Updates included in .BIN & .CAP Files:

M94806EC_000000DE.pdb
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**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
    - 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
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- Microcode Updates included in .BIN & .CAP Files:
 

M94806EC_000000DE.pdb
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**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

**BIOS Version 0091 - CBWHL357.0091.2020.1127.2054**

**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

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

- 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.
- 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

**BIOS Version 0089 - CBWHL357.0089.2020.0907.1812**

**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

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

- 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.
- 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>
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**About This Release:**

- Date: June 02, 2020
- ROM Image Checksum: 0xC482
- ME Firmware: 12.0.49.1534
- EC1 Firmware:
  - AB\_A: 2.17.0

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

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

M94806EC_000000CA.pdb
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**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

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

- 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
- 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
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- Microcode Updates included in .CAP Files:
 

M94806EC_000000B8.mcb
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**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

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

- 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
- 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
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- Microcode Updates included in .CAP Files:  
M94806EC\_000000B8.mcb

**New Fixes/Features:**

- Initial production BIOS release

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