



BIOS Update Release Notes

PRODUCTS: QC71A, QC71B, QC71C, QC71D (Standard BIOS)

BIOS Version 0120 - QCCFL357.0120.2020.0813.1334

About This Release:

- Date: Aug 13, 2020
- ROM Image Checksum: 0xB66C3AA1
- ME Firmware: Consumer 12.0.65.1567
- EC Firmware: 1.25.09
- PMC Firmware: 300.2.11.1025
- Boot Guard ACM: 4351
- Memory Reference Code: Based on 0.7.1.104
- Integrated Graphics:
 - Option ROM: 9.2.1019
 - UEFI Driver: 9.0.1085
- Intel RST Pre-OS:
 - Option ROM: 17.5.0.4055
 - RAID Option ROM: 17.5.0.4055
- Supported Flash Devices:
 - Winbond W25Q128JV 16MB
- Microcode Updates included in .ROM File:
 - M22906EA_000000B4.mcb
 - M22906ED_000000BE.mcb
- Additional Microcode Updates included only in .BIO File:
 - M22906EA_000000B4.mcb
 - M22906ED_000000BE.mcb

New Fixes/Features:

- Enabled: Kernel DMA protection.
- Added: Missing_RP3 ACPI table.

BIOS Version 0118 - QCCFL357.0118.2020.0720.1610

About This Release:

- Date: July 20, 2020
- ROM Image Checksum: 0xB66AF702
- ME Firmware: Consumer 12.0.65.1567
- EC Firmware: 1.25.09
- PMC Firmware: 300.2.11.1025
- Boot Guard ACM: 4351
- Memory Reference Code: Based on 0.7.1.104
- Integrated Graphics:
 - Option ROM: 9.2.1019
 - UEFI Driver: 9.0.1085
- Intel RST Pre-OS:
 - Option ROM: 17.5.0.4055
 - RAID Option ROM: 17.5.0.4055
- Supported Flash Devices:
 - WinBond W25Q128JV 16MB
- Microcode Updates included in .ROM File:
 - M22906EA_000000B4.mcb

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

- o M22906ED_000000BE.mcb
- Additional Microcode Updates included only in.BIO File:
 - o M22906EA_000000B4.mcb
 - o M22906ED_000000BE.mcb

New Fixes/Features:

- Fixed: An issue with the DmiEdit tool.
- Enabled: CPU core voltage lock to enable.
- Updated: BIOS functionality so that the BIOS can only be updated via the power cord.
- Added: F8 recovery functions.
- Fixed: Issue where GT/GTU prefix showed the incorrect sign.
- Added: Solution for DPC error when running LantencyMon

BIOS Version 0116 - QCCFL357.0116.2020.0619.1354

About This Release:

- Date: June 19, 2020
- ROM Image Checksum: 0xB66FCC58
- ME Firmware: Consumer 12.0.65.1567
- EC Firmware: 1.25.09
- PMC Firmware: 300.2.11.1025
- Boot Guard ACM: 4351
- Memory Reference Code: Based on 0.7.1.104
- Integrated Graphics:
 - o Option ROM: 9.2.1019
 - o UEFI Driver: 9.0.1085
- Intel RST Pre-OS:
 - o Option ROM: 17.5.0.4055
 - o RAID Option ROM: 17.5.0.4055
- Supported Flash Devices:
 - o WinBond W25Q128JV 16MB
- Microcode Updates included in .ROM File:
 - o M22906EA_000000B4.mcb
 - o M22906ED_000000BE.mcb
- Additional Microcode Updates included only in.BIO File:
 - o M22906EA_000000B4.mcb
 - o M22906ED_000000BE.mcb

New Fixes/Features:

- Update Me FW: 12.0.65.1567
- Update PMC Firmware: 300.2.11.1025

BIOS Version 0114 - QCCFL357.0114.2020.0401.1544

About This Release:

- Date: April 1, 2020
- ROM Image Checksum: 0xB661C2A7
- ME Firmware: Consumer 12.0.40.1433
- EC Firmware: 1.25.09
- PMC Firmware: 300.2.11.1020
- Boot Guard ACM: 4351
- Memory Reference Code: Based on 0.7.1.104
- Integrated Graphics:
 - o Option ROM: 9.2.1019
 - o UEFI Driver: 9.0.1085

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- Intel RST Pre-OS:
 - Option ROM: 17.5.0.4055
 - RAID Option ROM: 17.5.0.4055
- Visual BIOS: Intel Text Setup
- Supported Flash Devices:
 - WinBond W25Q128JV 16MB
- Microcode Updates included in .BIN & .CAP Files:
 - M22906EA_000000B4.mcb
 - M22906ED_000000BE.mcb

New Fixes/Features:

- Added support for: Minimum Fan Duty Cycle.
- Added support for: Battery Life Extension.
- Added support for: Undervoltage.
- Added support for: FN Lock + Esc.
- Added support for: Project Aurora

Known Errata:

- You will NOT be able to flash/recover to previous BIOS versions before 0114.

BIOS Version 0064 - QCCFL357.0064.2020.1226.1657

About This Release:

- Date: March 31, 2020
- ROM Image Checksum: 0xB68445D4
- ME Firmware: Consumer 12.0.40.1433
- EC Firmware: 1.20.09
- PMC Firmware: 300.2.11.1020
- Boot Guard ACM: 4351
- Memory Reference Code: Based on 0.7.1.104
- Integrated Graphics:
 - Option ROM: 9.2.1019
 - UEFI Driver: 9.0.1085
- Intel RST Pre-OS:
 - Option ROM: 17.8.0.4507
 - RAID Option ROM: 17.8.0.4507
- Supported Flash Devices:
 - WinBond W25Q128JV 16MB
- Microcode Updates included in .ROM File:
 - M22906EA_000000B4.mcb
 - M22906ED_000000BE.mcb
- Additional Microcode Updates included only in .BIO File:
 - M22906EA_000000B4.mcb
 - M22906ED_000000BE.mcb

New Fixes/Features:

- Removed 1.8 seconds of delay to fix a thunderbolt yellow bang issue.
- Added Thunderbolt HRESET Sequence.

BIOS Version 0062 - QCCFL357.0062.2020.1226.1657

About This Release:

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

- Date: March 13, 2020
- ROM Image Checksum: 0xB68207FB
- ME Firmware: Consumer 12.0.40.1433
- EC Firmware: 1.20.09
- PMC Firmware: 300.2.11.1020
- Boot Guard ACM: 4351
- Memory Reference Code: Based on 0.7.1.104
- Integrated Graphics:
 - Option ROM: 9.2.1019
 - UEFI Driver: 9.0.1085
- Intel RST Pre-OS:
 - Option ROM: 17.8.0.4507
 - RAID Option ROM: 17.8.0.4507
- Supported Flash Devices:
 - WinBond W25Q128JV 16MB
- Microcode Updates included in .ROM File:
 - M22906EA_000000B4.mcb
 - M22906ED_000000BE.mcb
- Additional Microcode Updates included only in .BIO File:
 - M22906EA_000000B4.mcb
 - M22906ED_000000BE.mcb

New Fixes/Features:

- Added a 1.8 second delay to fix thunderbolt yellow bang.
- Updated BIOS RAID driver/RAID ROM to 17.8.0.4507.
- Fixed Hybrid sleep issues where the system couldn't enter S4 status.
- Enabled FAST_BOOT_TSE_HOTKEY_SUPPORT.
- Removed Thunderbolt HRESET Sequence.

BIOS Version 0060 - QCCFL357.0060.2019.1226.1657

About This Release:

- Date: December 26, 2019
- ROM Image Checksum: 0xB6888787
- ME Firmware: Consumer 12.0.40.1433
- EC Firmware: 1.20.09
- PMC Firmware: 300.2.11.1020
- Boot Guard ACM: 4351
- Memory Reference Code: Based on 0.7.1.104
- Integrated Graphics:
 - Option ROM: 9.2.1019
 - UEFI Driver: 9.0.1085
- Intel RST Pre-OS:
 - Option ROM: 17.5.0.4055
 - RAID Option ROM: 17.5.0.4055
- Visual BIOS: Intel Text Setup
- Supported Flash Devices:
 - WinBond W25Q128JV 16MB
- Microcode Updates included in .BIN & .CAP Files:
 - M22906EA_000000B4.mcb
 - M22906ED_000000BE.mcb

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New Fixes/Features:

- Added Thunderbolt HRESET Sequence.

BIOS Version 0058 - QCCFL357.0058.2019.1209.1324**About This Release:**

- Date: December 9, 2019
- ROM Image Checksum: 0xB6848D14
- ME Firmware: Consumer 12.0.40.1433
- EC Firmware: 1.20.09
- PMC Firmware: 300.2.11.1020
- Boot Guard ACM: 4351
- Memory Reference Code: Based on 0.7.1.104
- Integrated Graphics:
 - Option ROM: 9.2.1019
 - UEFI Driver: 9.0.1085
- Intel RST Pre-OS:
 - Option ROM: 17.5.0.4055
 - RAID Option ROM: 17.5.0.4055
- Supported Flash Devices:
 - WinBond W25Q128JV 16MB
- Microcode Updates included in .ROM File:
 - M22906EA_000000B4.mcb
 - M22906ED_000000BE.mcb
- Additional Microcode Updates included only in.BIO File:
 - M22906EA_000000B4.mcb
 - M22906ED_000000BE.mcb

New Fixes/Features:

- Per INTEL QC PRD v1.8 releasing, BIOS update Chassis Info Type from "09h" to "0Ah".
- Fixed SSD device information.
- Fixed performance issues when using battery.
- Updated EC to version 1.20.09.

BIOS Version 0056 - QCCFL357.0056.2019.1030.1000**About This Release:**

- Date: October 30, 2019
- ROM Image Checksum: 0xB6883C22
- ME Firmware: Consumer 12.0.40.1433
- EC Firmware: 1.19.09
- PMC Firmware: 300.2.11.1020
- Boot Guard ACM: 4351
- Memory Reference Code: Based on 0.7.1.104
- Integrated Graphics:
 - Option ROM: 9.2.1019
 - UEFI Driver: 9.0.1085
- Intel RST Pre-OS:
 - Option ROM: 17.5.0.4055
 - RAID Option ROM: 17.5.0.4055
- Supported Flash Devices:
 - WinBond W25Q128JV 16MB
- Microcode Updates included in .ROM File:
 - M22906EA_000000B4.mcb
 - M22906ED_000000BE.mcb

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- Additional Microcode Updates included only in.BIO File:
 - M22906EA_000000B4.mcb
 - M22906ED_000000BE.mcb

New Fixes/Features:

- Fixed the thunderbolt issue by doing the following:
 - Added a 1 second delay.
 - Disabled HRESET.
 - Did not implement UCM related code.
- Added setup HDD Security.
- Fixed the Q-Key function that would randomly become Fan Boost, so that it is a mode change only.
- Added the setup items in Boot -> Secure Boot:
 - Restore Factory Keys
 - Reset to Setup Mode
- Updated EC to version 1.19.09.

BIOS Version 0048 - QCCFL357.0048.2019.0808.1937

About This Release:

- Date: August 8, 2019
- ROM Image Checksum: 0xB6860E2B
- ME Firmware: Consumer 12.0.40.1433
- EC Firmware: 1.16.09
- PMC Firmware: 300.2.11.1020
- Boot Guard ACM: 4351
- Memory Reference Code: Based on 0.7.1.104
- Integrated Graphics:
 - Option ROM: 9.2.1019
 - UEFI Driver: 9.0.1085
- Intel RST Pre-OS:
 - Option ROM: 17.5.0.4055
 - RAID Option ROM: 17.5.0.4055
- Microcode Updates included in .BIN & .CAP Files:
 - M22906EA_000000B4.mcb
 - M22906ED_000000BE.mcb

New Fixes/Features:

- Updated: EC version to 1.16.09.
- Fixed: Where the system would automatically wake up from sleep even when the lid is closed.
- Updated: EFI BIOS raid driver / Legacy OROM raid driver.
- Added: Support for wake on S3 when the top cover is opened.
- Fixed: No display on restart when using Windows® 10 19H1.

BIOS Version 0042 - QCCFL357.0042.2019.0708.1015

About This Release:

- Date: July 8, 2019
- ROM Image Checksum: 0xB68A5398
- ME Firmware: Consumer 12.0.40.1433
- EC Firmware: 1.13.09
- PMC Firmware: 300.2.11.1020

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- Boot Guard ACM: 4351
- Memory Reference Code: Based on 0.7.1.104
- Integrated Graphics:
 - Option ROM: 9.2.1019
 - UEFI Driver: 9.0.1085
- Intel RST Pre-OS:
 - Option ROM: 17.2.0.3790
 - RAID Option ROM: 17.2.0.3790
- Microcode Updates included in .BIN & .CAP Files:
 - M22906EA_000000B4.mcb
 - M22906ED_000000BE.mcb

New Fixes/Features:

- Initial production BIOS release

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