BIOS Update Release Notes

PRODUCTS: LAPRC510, LAPRC710

BIOS Version 0063 - RCADL357.0063.2023.0821.1414

About This Release:
- Date: Aug 21, 2023
- ROM Image Checksum: 0x96D21238
- ME Firmware: 16.1.27.2176
- EC Firmware: 00.22.00.0000
- PCH Configuration Firmware: 16.0.0.1012
- PMC Firmware: 160.1.0.1029
- iTBT Firmware: 16.0.0.1901
- IOM Firmware: 36.6.0.0000
- NPHY Firmware: 14.530.508.8257
- Platform Properties Assessment Module: 11.23.0.4
- CRB Label: 1AXFE052
- Boot Guard ACM: 1.18.15
- BIOS Guard: 2.0.5021
- Silicon Initialization Code: 0C.00.69.74
- Memory Reference Code: Based on 0.0.4.6
- AHCI Code: AHCI_30
- Integrated Graphics:
  - UEFI Driver: 21.0.1054
- Visual BIOS: Intel AptioV

Supported Flash Devices:
- WinBond W25Q256FV 32MB
- GigaDevice GD25B256D 32MB

- Microcode Updates included in .BIN & .CAP Files:
  M80906A3_000042C.pdb

Feature Changes/Updates/Fixes:
- Updated SecureBoot DBX Update.
- Updated Harden SMM Write Flash support.
- Fixed issue where OpenSSL vulnerabilities.
- Fixed issue where Heap Buffer Overflow in TCG2MeasurPeImage.
- Updated IPU 2023.3 Update.
- Updated Support for latest flash tool: iFlashV 5.13.00.2106 (X64) / 5.13.00.2106 (IA32).

BIOS VERSION 0062 - RCADL357.0062.2023.0607.1517

About This Release:
- Date: June 07, 2023
- ROM Image Checksum: 0x9761A107

*Other names and brands may be claimed as the property of others.
- ME Firmware: 16.1.27.2176
- EC Firmware: 00.22.00.000
- PCH Configuration Firmware: 16.0.0.1012
- PMC Firmware: 160.1.0.1029
- iTBT Firmware: 16.0.0.1901
- IOM Firmware: 36.6.0.0000
- NPHY Firmware: 14.530.508.8257
- CRB Label: 1AXFE052
- Boot Guard ACM: 1.18.10
- Bio Guard: 2.0.5021
- Silicon Initialization Code: 0C.00.69.74
- Memory Reference Code: Based on 0.0.4.6
- AHCI Code: AHCI_30
- Integrated Graphics:
  - UEFI Driver: 21.0.1054
- Visual BIOS: Intel AptioV
- Supported Flash Devices:
  - WinBond W25Q256FV 32MB
  - GigaDevice GD25B256D 32MB
- Microcode Updates included in .BIN & .CAP Files: M80906A3_0000042C.pdb

**Feature Changes/Updates/Fixes:**
- Fixed the GenericSio Information Disclosure vulnerability.
- Added the PlatformLang Timeout Variable Access.
- Fixed the EDK2 vulnerabilities.
- Updated IPU to 2023.1.
- Fixed the OpenSSL vulnerabilities.
- Fixed the "SmmEntryPoint" Underflow vulnerability.
- Fixed the Intel NUC information leak vulnerability.
- Fixed the UEFI Variable access vulnerability.
- Added the "Extend CSME Measurement to TPM-PCR" function.
- Updated ME FW to version 16.1.27.2176 (v2).
- Updated the CPU Microcode to 0x42C.
- Fixed the issue where the BIOS update through the Power Button Menu [F7] Flash option fails when the Thunderbolt support items are disabled in the BIOS.

**BIOS Version 0061 - RCADL357.0061.2023.0218.1043**

**About This Release:**
- Date: 02/18/2023
- ROM Image Checksum: 0x97CB926B
- ME Firmware: 16.1.25.1865
- EC Firmware: 00.22.00.000
- PCH Configuration Firmware: 16.0.0.1012
- PMC Firmware: 160.1.0.1028
- iTBT Firmware: 16.0.0.1705

*Other names and brands may be claimed as the property of others.*
• IOM Firmware: 36.4.0.0000
• NPHY Firmware: 14.528.505.8211
• CRB Label: 1AXFE052
• Boot Guard ACM: 1.18.10
• Bios Guard: 2.0.5021
• Silicon Initialization Code: 0C.00.69.74
• Memory Reference Code: Based on 0.0.4.6
• AHCI Code: AHCI_30
• Integrated Graphics:
  ▪ UEFI Driver: 21.0.1054
• Visual BIOS: Intel AptioV

• Supported Flash Devices:
  WinBond W25Q256FV 32MB
  GigaDevice GD25B256D 32MB

• Microcode Updates included in .BIN & .CAP Files:
  M80906A3_00000429.pdb

**Feature Changes/Updates/Fixes:**

- Fixed issue where SDIO_DEV_CONFIGURATION SetVariable NVRAM Corruption.
- Fixed issue where UEFI Boot Variables Access.
- Fixed issue where GRUB Bootloader Vulnerability.
- Fixed issue where Intel NUC information disclosure vulnerability.
- Fixed issue where TianoCore Security Issues.
- Fixed issue where The stack buffer overflow vulnerability leads to arbitrary code execution in DXE driver on select Intel platforms.
- Added Adding BIOS Setup item for BIOS WU function support.
- Fixed issue where With Admin Password set, and User Access Level configured, POST Hotkeys, POST hotkey F8 should not pop-up the password prompt.
- Fixed issue where Duplicated UQI value issue fix.
- Fixed issue where iSetupCfg tool displays the unexpected message, “WARNING: Duplicate questions”.
- Fixed issue where TBT GR card power-on hang code. BIOS POST hang w/TBT GR card connected.
- Fixed issue where BIOS Setup menu will hang while cursor quick click on scrollbar.
- Fixed issue where BIOS WU:DF - InfVerif INF Verification-Fails.
- Fixed issue where System cannot boot to OS after suppressing BIOS Jumper Recovery Menu until the BIOS Security Jumper was replaced.

*Other names and brands may be claimed as the property of others.*
About This Release:

- Date: Oct 21, 2022
- ROM Image Checksum: 35A1
- ME Firmware: 16.1.25.1865
- EC Firmware: 00.22.00.000
- PCH Configuration Firmware: 16.0.0.1012
- PMC Firmware: 160.1.0.1028
- iTBT Firmware: 16.0.0.1705
- IOM Firmware: 36.4.0.0000
- NPHY Firmware: 14.528.505.8211
- CRB Label: 1AXFE052
- Bios Guard: 2.0.5021
- Memory Reference Code: Based on 0.0.4.6
- AHCI Code: AHCI_30
- Integrated Graphics:
  - UEFI Driver: 21.0.1054
- Visual BIOS: Intel AptioV
- Supported Flash Devices:
  - WinBond W25Q256FV 32MB
  - GigaDevice GD25B256D 32MB
- Microcode Updates included in .BIN & .CAP Files:
  - M80906A3_00000423.pdb

New Fixes/Features:

- Updated E-labeling to v1.1.
- Updated CPU Microcode to 0x423.
- Updated CRB to 5.26_1AXFE_RCO0.00.69.74(3253.00)_052
- Updated ME FW to 16.1.25.1865
- Updated EC FW to PL5AUXC_EC00.22.00.00 (00.22.00.00)
- Updated 2022 IPU update: 2022.3.
- Fixed issue where Potential hack of EBU DLL.
- Updated PTK2712, SA50151 patch.
- Fixed issue where SMM memory corruption vulnerability in SMM driver on Intel platforms.
- Fixed issue where vulnerability/info leak vulnerability.
- Fixed issue where System cannot bring USB back to work in BIOS after disabling all the USB ports in the BIOS Setup USB menu.
- Updated Follow RC0C.00.71.76(3275.00) to revert TME TPM log change.
- Fixed issue where Modify display wording in Config Mode.
- Added Variable Struct Counter.
- Added StdDefaults into ProtectedNvVariableForRuntime ELink.
- Fixed issue where iSetupCfg not able to change default value of PLx/Fan cuver parameters due to stdDefault override mechanism.
About This Release:
• Date: July 06 2022
• ROM Image Checksum: 0x9CA02751
• ME Firmware: 16.0.15.1735
• EC Firmware: 0.21.00.00
• PMC Firmware: 160.01.00.1023
• Boot Guard ACM: 1.18.09
• Reference Code: Based on 0C.00.65.70
• Memory Reference Code: Based on 0.0.3.128
• Integrated Graphics:
  o UEFI Driver: 21.0.1046
• Visual BIOS: Intel AptioV
• Supported Flash Devices:
  o WinBond W25Q256FV 32MB
  o GigaDevice GD25B256D 32MB
• Microcode Updates included in .BIN & .CAP Files:
  o M80906A3_0000041E.pdb

New Fixes/Features:
1. Updated CPU Microcode to M80906A3_0000041E
2. Added Enabled SETUP_EXIT_MFG_SUPPORT.
3. Fixed issue where Vulnerability PTK2699.
5. Changed Disable FIVR by default.
6. Changed Disabled "PchUsb2SusWellPgEnable".
7. Fixed issue Add panel flicker work-around for platforms using internal 1.05v VR.
8. Updated EC FW updated to 00.21.00.00

BIOS Version 0053 - RCADL357.0053.2022.0512.2055

About This Release:
• Date: May 12, 2022
• ROM Image Checksum: 0x9CBEF8BB
• ME Firmware: 16.0.15.1735
• EC Firmware: 0.20.00.00
• PMC Firmware: 160.01.00.1023
• Boot Guard ACM: 1.18.09
• Reference Code: Based on 0C.00.65.70
• Memory Reference Code: Based on 0.0.3.128
• Integrated Graphics:
  o UEFI Driver: 21.0.1046
• Visual BIOS: Intel AptioV
• Supported Flash Devices:
  o WinBond W25Q256FV 32MB
  o GigaDevice GD25B256D 32MB
• Microcode Updates included in .BIN & .CAP Files:
  o M80906A3_0000041b.pdb

New Fixes/Features:
• Initial BIOS version.

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