PRODUCTS: CD1C32GK, CD1C64GK, CD1P64GK (Standard BIOS)

BIOS Version 0051 - GKAPLCPX.86A.0051.2019.0611.1331

About This Release:
- Date: June 11, 2019
- ROM Image Checksum: 0x4279
- TXE Firmware: 3.1.65.2288
- EC Firmware: 16.38.00
- Memory Reference Code: Based on 1.2.3
- Integrated Graphics
  - Option ROM: 14.34 04/15/2016 08:07:50
  - UEFI Driver: 10.0.1036
- AHCI Code: Based on AHCI_12
- LAN Option ROM: 7.6.09
- Supported Flash Devices:
  ```
  GigaDevice  GD25LQ128C  16MB
  Macronix    MX25U12873F 16MB
  Winbond     W25Q128FW   16MB
  ```
- Microcode Updates included in .ROM File:
  ```
  M03506C9_00000038.PDB
  ```
- Additional Microcode Updates included only in .BIO File:
  ```
  M03506C9_00000038.PDB
  ```

New Fixes/Features:
- Updated TXE firmware to version 3.1.65.2288 for security advisory Intel-SA-00185.
- Updated CPU microcode for security fix.

Known Errata:
- Due to the Intel® TXE firmware update in BIOS version 0051, you can't downgrade to version 0050 or earlier.

BIOS Version 0050 - GKAPLCPX.86A.0050.2019.0223.1819

About This Release:
- Date: February 23, 2019
- TXE Firmware: 3.1.50.2244
- EC Firmware: 16.38.00
- Memory Reference Code: Based on 1.2.3
- Integrated Graphics
  - Option ROM: 14.34 04/15/2016 08:07:50
  - UEFI Driver: 10.0.1036
- AHCI Code: Based on AHCI_12
- LAN Option ROM: 7.6.09

New Fixes/Features:
- Updated BIOS code for security fixes.

BIOS Version 0049 - GKAPLCPX.86A.0049.2018.1001.1532

About This Release:
- Date: October 01, 2018
- TXE Firmware: 3.1.50.2244
- EC Firmware: 16.38.00
- Memory Reference Code: Based on 1.2.3
- Integrated Graphics
  - o   Option ROM: 14.34 04/15/2016 08:07:50
  - o   UEFI Driver: 10.0.1036
- AHCI Code: Based on AHCI_12
- LAN Option ROM: 7.6.09

New Fixes/Features:
- Added support that allows USB 3.0 boot devices to be detected in the boot menu.

BIOS Version 0048 - GKAPLCPX.86A.0048.2018.0828.1135

About This Release:
- Date: August 28, 2018
- TXE Firmware: 3.1.50.2244
- EC Firmware: 16.38.00
- Memory Reference Code: Based on 1.2.3
- Integrated Graphics:
  - o   Option ROM: 14.34 04/15/2016 08:07:50
  - o   UEFI Driver: 10.0.1036
- AHCI Code: Based on AHCI_12
- LAN Option ROM: 7.6.09

New Fixes/Features:
- BIOS code improvements for Intel® Integrator Toolkit.

BIOS Version 0047 - GKAPLCPX.86A.0047.2018.0801.1633

About This Release:
- Date: August 1, 2018
- ROM Image Checksum: 0x3C06
- TXE Firmware: 3.1.55.2244
- EC Firmware: 16.38.00
- Memory Reference Code: Based on 1.2.3
- Integrated Graphics
  - o   Option ROM: 14.34 04/15/2016 08:07:50
  - o   UEFI Driver: 10.0.1036
- AHCI Code: Based on AHCI_12
- LAN Option ROM: 7.6.09

New Fixes/Features:
- Removed/disabled Intel Ready Mode Technology code/items in BIOS for Intel security fix.

BIOS Version 0046 - GKAPLCPX.86A.0046.2018.0725.1043

About This Release:
- Date: July 25, 2018
- TXE Firmware: 3.1.55.2244
- EC Firmware: 16.37.00
- Memory Reference Code: Based on 1.2.3
- Integrated Graphics:
    - Option ROM: 14.34 04/15/2016 08:07:50
    - UEFI Driver: 10.0.1036
- AHCI Code: Based on AHCI_12
- LAN Option ROM: 7.6.09

New Fixes/Features:
- Updated CPU Microcode (Security Advisory-00115).
- Updated TXE firmware to version 3.1.55.2244.
- Added "Boot USB Devices First" item in BIOS setup.
- Fixed issue where system can't boot automatically after updating BIOS when Power State is set to "Always Off".
- Fixed issue where system can't wake on WLAN after it has been in the S3 power state 1.5 minutes.
- Updated EC firmware to version 1637.
- Fixed issue where Storage information is displayed wrong in BIOS Setup.

Known Errata:
Can't downgrade BIOS to version 0043 or earlier due to security updates.

BIOS Version 0043 – GKAPLCPX.86A.0043.2018.0516.1624

About This Release:
- Date: May 16, 2018
- TXE Firmware: 3.1.50.2222
- EC Firmware: 16.36.00
- Memory Reference Code: Based on 1.2.3
- Integrated Graphics:
    - Option ROM: 14.34 04/15/2016 08:07:50
    - UEFI Driver: 10.0.1036
- AHCI Code: Based on AHCI_12
- LAN Option ROM: 7.6.09

New Fixes/Features:
- Fixed the issue where LAN would disappear after resuming from S3 when using the Compute Card Dock.
- Fixed the issue where the system would boot to the operating system without the HDD user password prompt.
- Security enhancements.

BIOS Version 0042 – GKAPLCPX.86A.0042.2018.0305.1116

About This Release:
- Date: March 05, 2018
- TXE Firmware: 3.1.50.2222
- EC Firmware: 16.36.00
- Memory Reference Code: Based on 1.2.3
- Integrated Graphics
    - Option ROM: 14.34 04/15/2016 08:07:50

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     o   UEFI Driver: 10.0.1036
- AHCI Code: Based on AHCI_12
- LAN Option ROM: 7.6.09

New Fixes/Features:
- Fixed issue where setup only shows information for one SATA interface.
- Implemented hard disk password functionality.
- Updated the EC code.

BIOS Version 0041 - GKAPLCPX.86A.0041.2018.0108.1330

About This Release:
- Date: January 08, 2018
- TXE Firmware: 3.1.50.2222
- EC Firmware: 16.35.00
- Memory Reference Code: Based on 1.2.3
- Integrated Graphics
  - Option ROM: 14.34 04/15/2016 08:07:50
  - UEFI Driver: 10.0.1036
- AHCI Code: Based on AHCI_12
- LAN Option ROM: 7.6.09

New Fixes/Features:
- Updated CPU Microcode (Security Advisory-00088)
- Fixed issue where the USB 3.0 ports would run at USB 2.0 speeds.
- Fixed issue where the HSIO port information showed incorrectly in the BIOS setup.

BIOS Version 0039 - GKAPLCPX.86A.0039.2017.1211.1631

About This Release:
- Date: December 11, 2017
- TXE Firmware: 3.1.50.2222
- EC Firmware: 16.35.00
- Integrated Graphics
  - Option ROM: 14.34 04/15/2016 08:07:50
  - UEFI Driver: 10.0.1036
- LAN Option ROM: 7.6.09

New Fixes/Features:
- Updated TXE firmware to version 3.1.50.2222 for Security Advisory-00086.
- Updated EC firmware to version A16.35.00.
- Fixed issue with HDMI no display in AGL OS.
- Implemented security updates.
- Added "(Y/N)" confirmation to the warning for clearing HDD password.

Known Errata:
Due to a security enhancement, the BIOS version cannot be downgraded to a version earlier than BIOS 0039.

BIOS Version 0033 - GKAPLCPX.86A.0033.2017.0830.1010

About This Release:
- Date: August 30, 2017

- TXE Firmware: 3.0.13.1144
- EC Firmware: 16.31.00
- Integrated Graphics:
  - Option ROM: 14.34 04/15/2016 08:07:50
  - UEFI Driver: 10.0.1036
- LAN Option ROM: 7.6.09

New Fixes/Features:
- Initial production BIOS release.

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