ADI Engineering RCCVE Bootrom Software Release Notes

Contents

The RCC-VE platform is based on the Intel Intel AtomTM C2000 processor (previously referred to as Rangeley/Avoton). The C2000 is a multi-core (up to 4 for RCC-VE) Intel Atom based SOC product featuring high levels of I/O integration and an Intel QuickAssist hardware acceleration engine, targeting for the routers and security communications market segment.

This document serves as the release notes for ADI RCC-VE bootrom that resides in the 8M SPI flash. The SPI flash can be updated using either an external programmer or the flashrom Linux utility provided by ADI. Please refer to RCC-VE Platform User's Manual for details.

1   RELEASE ADI_RCCVE-00.00.00.01

Release Date : 8/28/2014

The FSP and microcode version used in this release:
RANGELEY_FSP_POSTGOLD_001_20131218.

1.1   New Features

This is the initial release of the RCC-VE bootrom software.

The RCC-VE bootrom is an Intel Firmware Support Package (FSP) and Open Source coreboot (http://coreboot.org) based boot loader. It performs basic initialization for the C2000 SoC and its memory subsystem. It uses seabios as payload and supports booting OS from the on-board eMMC, external SATA or mSATA drive, or external USB drive. sgabios VGA emulator is loaded as option rom to redirect VGA output to console.

1.2   Bug Fixes

None.

1.3   Known Issues & Limitations

1.3.1   Hardware Reset Does Not Work

The CPU hard reset does not work in this release. Pushing the reset button results in system hang. Only power cycling the board could recover the system. This issue is being investigated.

1.3.2 Issue with Linux Installation CD

It has been observed in ADI lab that the boot process stalls when booting from a Linux installation CD connected via SATA port. The issue is being investigated.

2   RELEASE ADI_RCCVE-01.00.00.00

Release Date: 12/10/2014

The RCC-VE bootrom is based on Intel Firmware Support Package (FSP) and Sagebios (open source coreboot based). It supports booting OS from the on-board eMMC, external SATA or mSATA drive, external USB drive, and ipxe network boot. sgabios VGA emulator is loaded as option rom to redirect VGA output to console.

The versions of software components used in this release are:
- SageBIOS: SageBios_Mohon_Peak_292.
- FSP: RANGELEY_FSP_POSTGOLD_001_20131218: (December 18, 2013).
- microcode: M01406D8125 for B0 stepping.
- Descriptor: ADI unlocked.

2.1 New Features

2.1.1 Migration to SageBIOS

The code base for coreboot and all the payloads, option ROMs included in this release has been migrated from public open source repository to SageBios for Rangeley reference platform Mohon Peak (SageBios_Mohon_Peak_292). Customization has been performed for RCC-VE by ADI Engineering.

2.2 Bug Fixes

2.2.1 Hardware Reset Does Not Work

In release 00.00.00.01, the CPU hard reset did not work. Pushing the reset button resulted in system hang. Only power cycling the board would recover the system. This issue has been fixed in this release.

2.2.2   Reboot and shutdown failure

In previous release, rebooting and issuing shutdown command in Linux resulted in system hang. Only power cycling the board would recover the system. This issue has been fixed in this release.

2.3   Known Issues & Limitations

2.3.1   Issue with Linux Installation CD

It has been observed in ADI lab that the boot process stalls when booting from a Linux installation CD connected via SATA port or a Linux Live image on a USB memory stick. This issue is being investigated.