Release Notes for EV-2156x EZ-KIT® Rel. 2.0.0

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Contents

1 Release Notes

Thank you for installing the EV-2156x EZ-KIT® Board Support Package (BSP). The BSP provides software and documentation in support of the EV-21569 EZ-KIT®.
The EV-21569 EZ-Kit is designed for use with CrossCore® Embedded Studio (CCES) for Analog Devices Processors software development tools. The CCES development environment aids advanced application code development and debug, such as:

- Create, compile, assemble, and link application programs written in C++, C, and assembly
- Load, run, step, halt, and set breakpoints in application programs
- Read and write data and program memory
- Read and write core and peripheral registers
- Plot memory

For more details on CCES, please visit www.analog.com/cces.
The EV-2156x EZ-KIT® BSP provides comprehensive software support for the EV-21569 EZ-KIT. In this release, various examples are provided to demonstrate the on-chip drivers and services.

2 Release Dependencies

- Requires CrossCore® Embedded Studio version 3.0.0: www.analog.com/cces
- EV-21569-SOM REV E: www.analog.com/EV-21569-SOM
- EV-SOMCRR-EZKIT REV D: www.analog.com/EV-SOMCRR-EZKIT
- EV-SOMCRR-EZLITE REV B: www.analog.com/EV-SOMCRR-EZLITE
- EV-SOMCRR-BRKOUT: www.analog.com/EV-SOMCRR-BRKOUT

The release notes for EV-2156x EZ-KIT Board Support Package 2.0.0 is available in C:\Analog Devices\EV-2156x_EZ-KIT-Rel2.0.0\Docs

3 Examples:

3.1 Power_On_Self_Test:

This example allows the user to test many peripherals of the EV-21569 EZ-KIT®. Readme is provided in the POST example to understand how these tests are run.

3.2 Device_Programmer:

This example allows the user to program the flash device on the EV-21569 EZ-KIT® in conjunction with the "Command-Line Device Programmer (cldp)".

A pre-built binary exists so that users can just program the flash device without having to build the example.

3.3 Device Drivers examples:

Examples are provided for following peripherals-

- ADC
- Asynchronous Sampling Rate Converter (ASRC)
- Cyclic Redundancy Check (CRC)
- Security Packet Engine (PKTE)
- FIR Accelerator
- IIR Accelerator
- LinkPort (LP)
- Octal SPI (OSPI)
- Sony/Philips Digital Interface (S/PDIF)
- Serial Peripheral Interface (SPI)
- Serial Port (SPORT)
- Thermal Monitoring Unit (TMU)
- Two-Wired Interface (TWI)
- Universal Asynchronous Receiver Transmitter (UART)

3.4 System Services examples:

Examples are provided for following peripherals-

- Enhanced Memory DMA (EMDMA)
- General Purpose Ports (GPIO)
- Memory DMA (MDMA)
- Clock Generation Unit (CGU/PWR)
- Reset Control Unit (RCU)
- System Memory Protection Unit (SMPU)
- Standard I/O (STDIO)
- General Purpose Timer (TMR)
- Watchdog Timer (WDOG)

4 Known Issues:

- POST adi_post_hadc_test passes intermittently.
- SPI based SPIEEPROMAccess example is not functional
- Sometimes noise is observed when SPDIF_ASRC_DAC_AudioPassthrough example is ran across EZ-KITs of different revisions. Provide a hardware reset/power-up and reload the application to avoid the noise.
- CGU Power Service Config example fails in release mode when *ADI_PWR_CGU_PARAM_SETTINGS.enable_IDLE* is set to true, due to this the second CGU configuration gets stuck in release mode