



# **Release Notes for EV-2156x EZ-KIT<sup>®</sup> Rel. 3.0.0**

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# 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-2156x-SOM.

The EV-2156x 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](http://www.analog.com/cces).

The EV-2156x EZ-KIT® BSP provides comprehensive software support for the EV-21569-SOM and EV-21568-SOM. In this release, various examples are provided to demonstrate the on-chip drivers and services.

Board combinations are supported :

- For ADSP-21569 : Example are supported with both EV-SOMCRR-EZKIT and EV-SOMCRR-EZLITE.
- For ADSP-21568 : Example is supported only on EV-SOMCRR-EZLITE.

## 2 Release Dependencies

- Requires CrossCore® Embedded Studio version 3.0.1
- EV-21569-SOM Rev E
- EV-21568-SOM Rev B
- EV-SOMCRR-EZKIT Rev D
- EV-SOMCRR-EZLITE Rev B
- EV-SOMCRR-BRKOUT

The release notes for EV-2156x EZ-KIT Board Support Package 3.0.0 is available in C:\Analog Devices\EV-2156x\_EZ-KIT-Rel3.0.0\Docs

## 3 Examples:

### 3.1 Power\_On\_Self\_Test:

POST example allows the user to test many peripherals of the EV-2156x SOM EZ-KIT®. Readme is provided in the POST example to understand how these tests are run. Power\_On\_Self\_Test (POST) is available for ADSP-21569 with both EV-SOMCRR-EZ-KIT and EV-SOMCRR-EZ-LITE while for ADSP-21568 it is available with EV-SOMCRR-EZLITE.

### 3.2 Device\_Programmer:

This example allows the user to program the flash device on the EV-2156x SOM 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-DAC
- 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.
- CGUClockGating example fails due to an issue with PWR service which will be fixed in upcoming version of CCES.
- RCU core reset example projects for 21568 and 21569 does not showcase any LED blink while using with EV-SOMCRR-EZLITE