

OpenCPI

AD9361 ADC Test App Guide (E31x platform)

OpenCPI Release: v2.4.7

Revision History

Revision	Description of Change	Date
v1.4	Initial release	10/2018
v1.5	Updated to clarify expected intermittent failure for ADC overrun. Initial release date corrected.	4/2019

1 Description

This application is intended to perform a hardware-in-the-loop test of the `ad9361_adc.hdl` worker.

2 Hardware Portability

This application is specific to the `e31x` platform.

3 Execution

3.1 Prerequisites

The following must be true before application execution:

- The following assets are built and their build artifacts (FPGA bitstream file/shared object file) are contained within the directory list of the `OCPI_LIBRARY_PATH` environment variable.
 - for `e31x/xilinx13_4` HDL/RCC platforms:
 - * `ad9361_1r1t_test_adc_asm/cnt_1rx_0tx_thruasm_mode_2_cmos_e31x` assembly/container
 - * `ad9361_config_proxy.rcc` (from assets project)
 - * `file_write.rcc` (from core project)
- The current directory is the `applications/ad9361_adc_test` directory.

3.2 Command(s)

```
./<target-dir>/ad9361_adc_test
```

4 Verification

An application exit status of 0 indicates success, and non-zero indicates failure. This application is expected to intermittently fail its tests on the E31x platform(s). See next section for explanation.

5 Troubleshooting

This test is known to intermittently fail with ADC overruns. The test does intermittently pass. Investigation is pending on this issue.