OpenCPI AD9361 ADC Test App Guide (E3xx platform)

Version 1.5

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 e3xx 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 OCPLLIBRARY_PATH environment variable.
 - for e3xx/xilinx13_4 HDL/RCC platforms:
 - * ad9361_1r1t_test_adc_asm/cnt_1rx_0tx_thruasm_mode_2_cmos_e3xx assembly/container
 - * ad9361_config_proxy.rcc (from assets project)
 - * file_write.rcc (from core project)
- \bullet 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 E3xx 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.