

OpenCPI

HSMC Loopback Stratix IV (alst4) Test App Guide

OpenCPI Release: v2.4.6

Revision History

Revision	Description of Change	Date
v1.4	Converted to application from unit test structure.	9/2018
v1.5	Added more commands and expanded text	4/2019

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1 Description

Intended to test HSMC slots on the alst4 platform.

2 Hardware Setup

x86 machine with the Stratix IV PCIE card with both HSMC slots populated with a Loopback HSMC Card[1].

3 Prerequisites

The prerequisites are the empty assembly with the container `cnt_hsmc_loopback_card_hsmc_alst4_a_hsmc_alst4_b` built for alst4 platform.

To build the container navigate to the empty assembly `/hdl/assemblies/empty` and run the command:

```
make HdlPlatforms=alst4 Containers=cnt_hsmc_loopback_card_hsmc_alst4_a_hsmc_alst4_b
```

4 Execution

4.1 OCPI_LIBRARY_PATH Requirements/Considerations

The `OCPI_LIBRARY_PATH` environment variable must be set to `<assets project directory>/artifacts`.

4.2 Command(s)

Execution must occur from within the `applications/hsmc_loopback_test` directory using the following command:

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

5 Verification

Application exit status indicates success (status of 0 indicates success, status of 1 indicates failure, status of 100 indicates test unexpectedly could not complete). Either `PASSED` or `FAILED` is also printed to `stdout/stderr`, respectively. To get the exit code use `(echo $?)` immediately after the last command.

References

- [1] Terasic - Components - Extras - HSMC Debug & Loopback Connector Package <https://www.terasic.com.tw/cgi-bin/page/archive.pl?Language=English&No=495>