

OpenCPI

HSMC Debug Header Breakout Stratix IV (alst4) Test App Guide

OpenCPI Release: v2.4.7

Revision History

Revision	Description of Change	Date
v1.4	Converted to application from unit test structure.	9/2018
v1.5	Version bump only.	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 one of the HSMC slots populated with a Debug HSMC Card[1].

3 Prerequisites

The empty assembly w/ both of the

- cnt_hsmc_alst4_debug_header_breakout_card_hsmc_alst4_a,
- cnt_hsmc_alst4_debug_header_breakout_card_hsmc_alst4_b

containers must be built for the alst4 platform.

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 hsmc_debug_header_breakout_test directory.

If HSMC Port A is populated:

```
./<target-dir>/hsmc_debug_header_breakout_test a  
./<target-dir>/hsmc_debug_header_breakout_test a p # to prompt you before each LED
```

if HSMC Port B is populated:

```
./<target-dir>/hsmc_debug_header_breakout_test b  
./<target-dir>/hsmc_debug_header_breakout_test b p # to prompt you before each LED
```

5 Verification

Application exit status indicates *completion* (status of 0 indicates completion, status of 1 indicates no completion), not whether or not the test was *successful*. Test success is determined by visually inspecting LEDs while executing (verifying each LED transitions from OFF, RED, RED+GREEN, GREEN, OFF).

References

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