UNH-IOL MIPI Alliance Test Program

CSI-2 Transmitter Protocol Conformance Test Report

UNH-IOL — 121 Technology Drive, Suite 2 — Durham, NH 03824 — +1-603-862-0090

UNH-IOL MIPI Alliance Test Program — mipilab@iol.unh.edu — +1-603-862-0701

Engineer Name
engineer@company.com
Camera Company
1010 Lense Way
San Jose, CA USA

09/27/10
Report Rev. 1.0

Enclosed are the results from the MIPI CSI-2 Transmitter Protocol Conformance testing performed on:

Camera Company MIPI Host 2 Lane CSI-2 Transmitter

This testing was performed by UNH-IOL from September 20, 2010 – September 25, 2010.

The test suite referenced in this report is available on the MIPI Alliance website, along with other Test Suites documenting test procedures and reports for MIPI Hosts and Peripherals.

http://www.iol.unh.edu/services/testing/mipi/testsuites.php

Issues Observed While Testing
• The CSI Transmitter under test was observed to meet all requirements tested for CSI-2 Transmitters.

For specific details regarding issues please see the corresponding test result.

Test Report Completed
9/27/2010

David Woolf
david@iol.unh.edu

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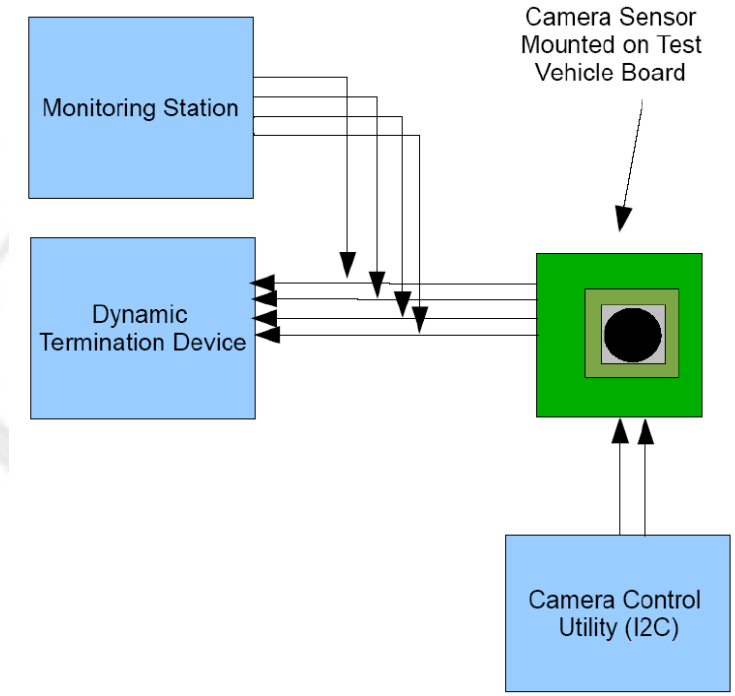
Section 1: DUT and Test Setup Information

Test Setup Details	
Manufacturer	Camera Company
Model	MIPI Host 2 Lane CSI-2 Transmitter
Firmware Revision	Not Available
Hardware Revision	Not Available
UNH-IOL ID:	Not Available
CSI-2 Protocol Generator	Moving Pixel Company P331
Monitoring Station	Tektronix DSA70804 Oscilloscope with UNH-IOL D-PHYGUI Software

Additional Comments/Notes

The below diagram shows the test setup used in performing this testing.



The following table contains possible results and their meanings:

Result	Interpretation
PASS	The Device Under Test (DUT) was observed to exhibit conformant behavior.
PASS with Comments	The DUT was observed to exhibit conformant behavior however an additional explanation of the situation is included, such as due to time limitations only a portion of the testing was performed.
FAIL	The DUT was observed to exhibit non-conformant behavior.
Warning	The DUT was observed to exhibit behavior that is not recommended.
Informative	Results are for informative purposes only and are not judged on a pass or fail basis.
Refer to Comments	From the observations, a valid pass or fail could not be determined. An additional explanation of the situation is included.
Not Applicable	The DUT does not support the technology required to perform these tests.
Not Tested	Not tested due to the time constraints of the test period.

Section 2: Protocol Conformance Test Results

Group 1 Low Level Protocol Test Results

Test 9.1.1: Long Packet Data Types	Result
Valid Long Packet Data Type used.	PASS
Test 9.1.2: Long Packet Format	**Result**
Valid Word Count in Long Packet header.	PASS
Test 9.1.5 Short Packet Data Types	**Result**
Valid Short Packet Data Type used.	PASS
Test 9.1.6 Short Packet Format	**Result**
Valid Short Packet Format used.	PASS

Group 4 Data Type Test Results

Test 9.4.1: Data Type	Result
Valid Data Types used in all packets.	PASS

Group 5 Packet Header Error Correction Code Test Results

Test 9.5.1: Proper ECC Bits Used	Result
Bits 6,7 of ECC Byte always set to 0	PASS

Group 7 Packet Spacing Test Results

Test 9.7.1: Packet Spacing	Result
LPS between all packets.	PASS

Group 8 Synchronization Short Packet Data Type Codes Test Results

Test 9.8.1: Synchronization Short Packet Data Type Codes	Result
Valid Synchronization Short Packet Data Type Codes	PASS
Test 9.8.2: Frame Synchronization Packets	**Result**
Image Data preceded by Frame Start Code	PASS
Test 9.8.3: Frame Number	**Result**
Proper incrementing and resetting of Frame Number	PASS
Test 9.8.4: Line Number Incrementing	**Result**
Proper incrementing of Line Number	PASS
Test 9.8.5: Line Number Reset to 1	**Result**
Proper resetting of Line Number	PASS
Test 9.8.6: Line Start and End Packet Line Number Consistency	**Result**
Line Number consistency	PASS

Group 9 Generic Short Packet Data Type Codes Test Results

Test 9.9.1: Generic Short Packet Data Type Codes	Result
Valid Short Packet Data Type Codes	PASS

Group 10 Packet Spacing Examples Test Results

Test 9.10.1: Line Blanking	Result
Determine TLPX	Informative See Note 1

Test 9.10.2: Frame Blanking	Result
Determine Frame Blanking Period	**Informative** See Note 2

Group 11 Packet Data Payload Size Rules Test Results

Test 9.11.1: Packet Data Payload Size	Result
Same length in all Image Data Packets in one VC	PASS

Notes:

1. The DUT was observed to use a Line Blanking Period between 8020 and 43670 nanoseconds
2. The DUT was observed to use a Frame Blanking Period of approximately 1068080 nanoseconds