

CMIS Test Solutions

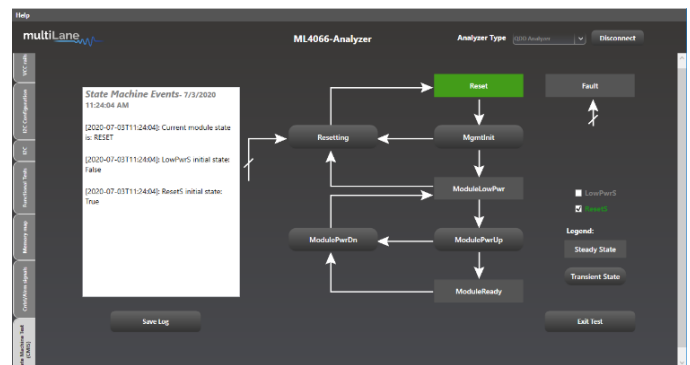
Eliminating Uncertainty in State Machine Interop

CMIS has Challenged the Industry

A sometimes overlooked yet important element of data center interconnects is the new Common Management Interface Specification (CMIS). While legacy transceivers typically operate on a memory map basis, the introduction of Digital Signal Processor (DSP) chips in modern optics necessitates a complex state-machine based management implementation. The robustness of this management technique is critical for transceiver stability. These rules are yet to be finalized; CMIS releases continue to be developed and revised today. MultiLane has recently released Analyzer GUI v2.0, which now supports timing measurements and data logging across multiple operational modes with a refreshed look and feel.

Overcoming Interoperability Gaps

As the data center hyperscaler community ramps up 400G deployments, there is an urgent need for a compact, high-value test solution to minimize uncertainty in CMIS implementations. MultiLane is addressing this need with the new ML4066 adapter and analyzer solution in QSFP-DD, OSFP, SFP and QSFP28 form factors. Avoid the inconvenience of a CMIS mismatch with your customers or vendors with this compact and versatile solution. Get access to an integrated protocol that enables CMIS compliance testing against a target spec release (3.0, 4.0, 4.1 soon) and if there is any gap between the host and module implementations.



Versatile Configuration Options

The CMIS Analyzer enables dynamic testing in three operational modes:

1 - Master Mode

Analyzer acts as a host for a module DUT

- Load or save MSA files
- Read/write individual module registers
- Stretch I2C rate
- Drive control signals
- State machine sequencing test with transition timing and test report generation

2 - Slave Mode

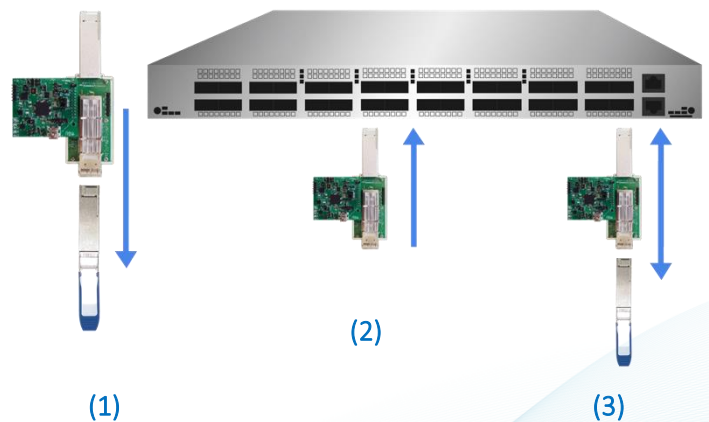
Analyzer acts as a module for a host DUT

- Emulate a pluggable full register mapping
- Load any MSA file onto analyzer
- Clock Stretching during I2C transactions
- Monitor host control signals and raise alarms

3 - Bypass Mode

Analyzer monitors exchange between host and module

- Analyze and log I2C packet exchange between module and host
- Observe control and alarm signal transactions
- Monitor VCC levels in real time



For more information, please contact us at sales@multilaneinc.com.