

Overview

The XJLink2-CFM is an advanced multi-TAP JTAG controller that fits into one of four Custom Function Module (CFM) locations on a Teradyne Multi-Function Application Board. It offers convenient, integrated access to XJTAG's powerful test and programming tools from Teradyne's TestStation[™] In-Circuit Test Systems.

Improve test coverage and reduce cost

The XJTAG XJLink2-CFM adds the power of XJTAG's boundary scan solution to the Teradyne TestStation, giving test access to hard-to-probe parts of a board. Both JTAG and non JTAG devices, such as Flash, RAM, Ethernet controllers, SPI, and I²C devices can be tested without physical probe access, reducing probe count and fixture cost, while increasing the test coverage. In addition to testing, memory devices, FPGAs and CPLDs can be programmed.

Flexible configuration

A single or multiple XJLink2-CFM controllers can be added to the same Teradyne Multi-Function Application Board for supplementary test and program capabilities, for instance testing panels of boards.

The XJLink2-CFMx expander card is available to maximize available connectivity from an XJLink2-CFM controller, from a maximum of 8 fixture-connectable signals when just using the XJLink2-CFM, up to 18 signals by adding one, two or three XJLink2-CFMx cards.

More than JTAG

The interface of XJLink2-CFM is completely configurable and can be used for more than JTAG: I²C, SPI and other manufacturer-specific protocols can be driven as part of test and programming operations. Programming speeds close to the theoretical maximum of a device can be achieved using the advanced features of the XJLink2-CFM.

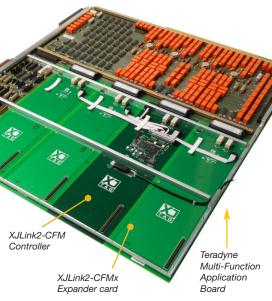
Integration benefits

The combined system can realize the maximum potential of your test investment. For example, by using boundary scan access to configure and enable an analog output from the board and then use the ICT to measure and validate the output. The XJLink2-CFM is fully compatible with other types of XJLink2 controller from XJTAG, so identical tests can be run in the TestStation as on another unit on a test bench. This allows boundary scan tests to be developed and debugged without taking up time on the tester.

Reduced stages and increased throughput

The XJLink2-CFM's capability to combine test and programming allows a reduction in the number of stages and handling operations on a production line.

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Configuration example: 1 CFM + 3 CFMx (above). Other configurations are possible. Each CFM has 4 direct + 4* shared Mux. *depends on configuration

Benefits

- Reduce fixture cost and complexity
- Improve test coverage
- Reduce handling operations
- Reduce production line footprint
- Develop and debug tests off-line

Features

- Fully compatible with all XJTAG software
- High-speed programming via JTAG, SPI, I²C, or custom protocols
- Up to 4 JTAG chain connections to UUT
- TCK clock frequencies up to 166 MHz
- Two different interface voltages can be configured, from 1.1 V to 3.3 V
- Adjustable signal slew rate, drive strength
- Automatic signal skew control
- Frequency counter on all I/O pins Frequency input up to 200 MHz
- Fits into one slot on the Teradyne Multi-Function Application Board
- Optionally fit one or more XJLink2-CFM controllers or XJLink2-CFMx cards per Teradyne board

Advanced connectivity

The XJLink2-CFM has variable signal slew rate and drive strength so it can handle boards either with or without signal termination. Advanced auto-skew control enables use of the JTAG chain at the maximum frequency, while the configurable voltage levels allow direct connection to most JTAG chains.

Flexible licensing

The XJLink2-CFM can contain an XJTAG software license, for stand-alone operation without additional dongles or network access — or the system can be licensed from a network server for maximum use of your XJTAG products without moving licensed hardware between machines.