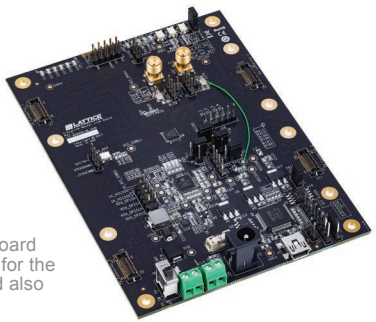
CrossLink: LIF-MD6000 Master Link Board

This document provides a brief introduction and overview of the CrossLink: LIF-MD6000 Master Link Board, Rev C.

1 Check Kit Contents

The CrossLink: LIF-MD6000 Master Link Board includes the following items:

- LIF-MD6000 Master Link Board
- SMA I/O Link Board
- Breakout I/O Link Board
- USB cable for programming
- 12 V AC adapter power supply
- Quick Start Guide



The CrossLink: LIF-MD6000 Master Link Board is an evaluation and development platform for the CrossLink (LIF-MD6000) device. The board also features a MachXO3LF-1300E FPGA.

In addition to general-purpose resources, the board includes two Tx and two Rx connectors on the edges of the board for building CrossLink video bridging solutions. For more information on these and all board features, see the Lattice website at www.latticesemi.com/masterlink.

To develop your own designs, you can use the Lattice Diamond software, available at www.latticesemi.com/diamond.

To re-program the board, you will need Diamond Programmer version 3.7 or later. Diamond programmer can be downloaded from the Lattice web site at www.latticesemi.com/programmer.

2 Check Jumper Settings

JUMPER	DESCRIPTION	DEFAULT SETTINGS
J7	SW2 selector	SHORT 1-2
J16	SPI/I²C programming selector for LIF-MD6000	SHORT 1-2 (SPI)
J19	SPI Flash chip select	SHORT 1-2
J24	VCCIO1 Bank voltage selector	SHORT 2-3 (3.3 V)
J25	VCCIO2 Bank voltage selector	SHORT 2-3 (3.3 V)
J26	Internal/External clock and I²C SDA Mux	OPEN

JUMPER	DESCRIPTION	DEFAULT SETTINGS
J27	Internal/External reference clock and I²C SCL Mux	OPEN
J29	Reset signal voltage selector	OPEN
J35	SPI/I²C programming selector for LIF-MD6000	SHORT 1-2 (SPI)
J36	SPI/I²C programming selector for MachXO3LF-1300E	SHORT 1-2 (SPI)
J37	FT2232H reset	OPEN

Note: SW1 is the master power switch. Switch is ON when moved toward the edge of the board.

3 Power-up Board and Observe Results

The board is pre-programmed with a basic demonstration, which verifies the board is in working order.

- Connect 12 V adapter to J3 or connect the included USB mini cable from a powered source to connector J2
- Set SW1 to ON (down) position
- Observe the following LEDs

LED	COLOR	MEANING
D3	Green	5 V Power OK
D25	Green	3.3 V Power OK
D29	Green	2.5 V Power OK
D27	Green	1.2 V Power OK
D28	Green	1.8 V Power OK

LED	COLOR	MEANING
D26	Green	12 V Power OK (only lit if 12 V adapter is used)
D6, D7, D8, D9	Blue	CrossLink General Purpose IO CrossLink is programmed
D10	Green	CrossLink CDONE – indicates CrossLink is programmed
LED1, 2, 3, 4	Blue	MachXO3 General purpose IO Default is a sequential pattern
D23	Red	MachXO3 DONE – indicates MachXO3 is programmed

For more information about the CrossLink: LIF-MD6000 Master Link Board, including the Evaluation Board User's Guide, Demonstrations and more, see the Lattice web site at www.latticesemi.com/masterlink.

Technical Support

www.latticesemi.com/support

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