XMOD FTDI JTAG Adapter - Xilinx compatible

- **Order number:** TE0790-03

Product information "XMOD FTDI JTAG Adapter - Xilinx compatible"

This article is the replacement for the XMOD adapter TE0790-02. All changes caused by the new revision are included in the Product Change Notification (PCN).

Xmod-USB-X is a universal USB adapter with 2 channels based on FTDI FT2232H USB2 HS Interface chip. In the consigned default configuration Port A is JTAG and Port B is a serial interface.

FT2232H port A and B are connected to small on-board programmable CPLD to allow flexible application specific remappings of FT2232H functions into 8 user I/O pins of single Xmod 12 x 8 Module.

Minimum PCB area on base board to support JTAG function: 5 x 10 mm (does not include mounting hole space).

NOTE: This adapter is **compatible** with Xilinx Tools!

The adapter not compatible with Xilinx-Tools can be found here: **TE0790-02L**

Notice

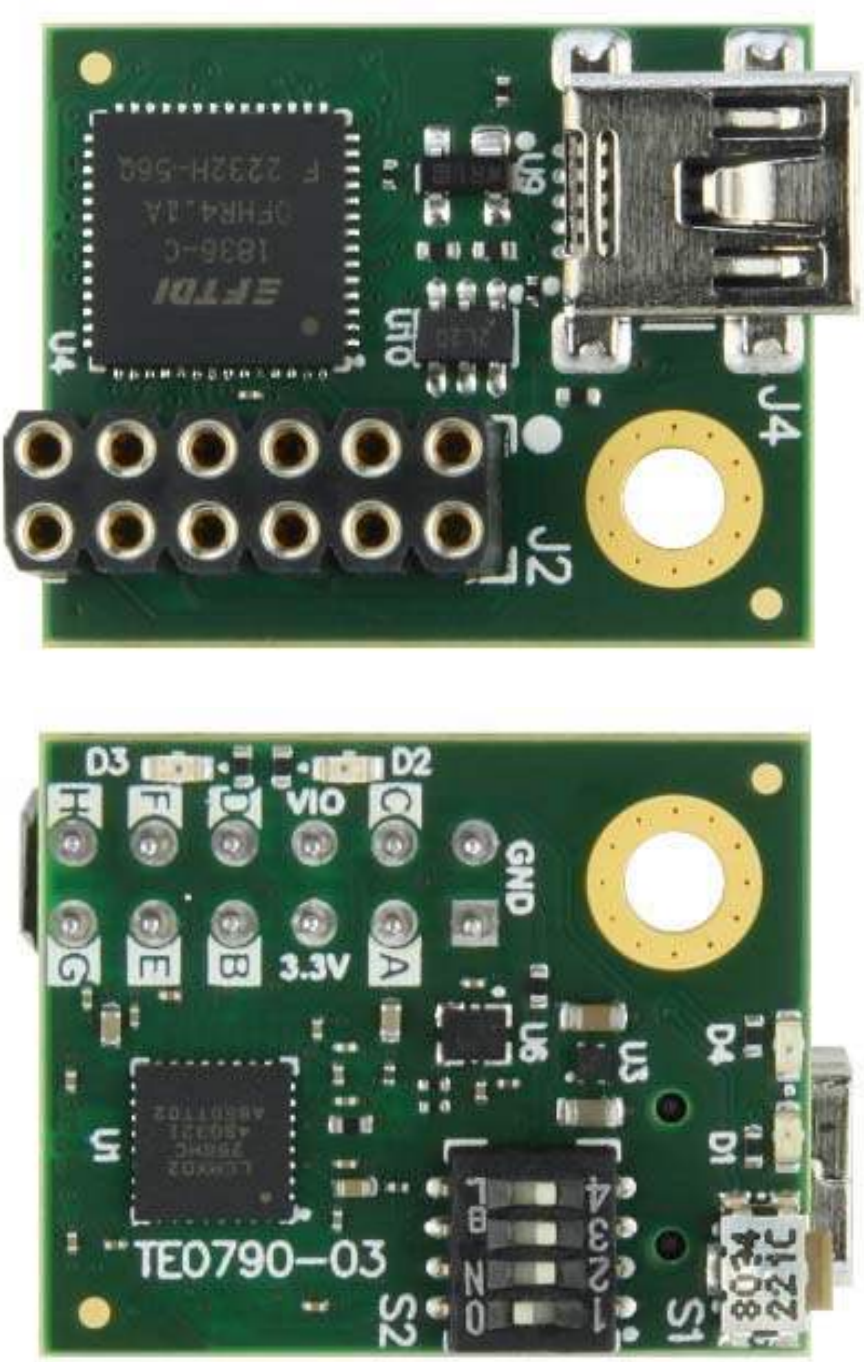
Do not access the FT2232H EEPROM using FTDI programming tools, doing so will erase normally invisible user EEPROM content and invalidate stored Xilinx JTAG license. Without this license the on-board JTAG will not be accessible any more with any Xilinx tools. Software tools from FTDI website do not warn or ask for confirmation before erasing user EEPROM content.

Key Features

- Xmod form-factor
  - Supported base slots: 6 x 2, 8 x 4, 10 x 6, 12 x 8, 5 x 2, 5 x 3
  - Size: 20 x 25 mm
  - M3 mounting hole
- FT2232H
  - Channel B RX/TX LED's (on top, not visible from front)
  - Mini USB connector (more rigid then micro USB)
  - 93C56 EEPROM
- Lattice XO2-256 CPLD
  - On-board programmable using Lattice tools
  - 8 universal I/O pins
  - VCCIO either 3.3 V or user supplied (1.8 to 3.3V)
  - Red user LED (front visible)
  - 12 MHz clock from on-board Oscillator
- Step down DC DC Converter for optional power supply via USB-Power
- Green Power-on LED (front visible)
- User button (front accessible)
- 4 position DIP switch
  - Choose CPLD program mode
  - FTDI EEPROM disable (not implemented in PCB REV 1)
  - Use VIO same as VCC
  - Use VCC from USB

Scope of Delivery

- 1 x TE0790-03 with soldered header (USB cable not included with delivery)


J4
J2
D3
D2
VIO
GND
3.3V
TE0790-03
S2
S1