

# TE0790 CPLD - XMOD Standard\_RXTXSWAP

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## Overview

CPLD Device with designator U1: LCMX02-256HC. This is the same as the standard configuration except that UART RXD and TXD pins are swapped.

## Feature Summary

- JTAG routing
- Pinheader routing

## Firmware Revision and supported PCB Revision

See Document Change History

## Product Specification

## Port Description

Name / opt. VHD Name	Direction	Pin	Description
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A	out	8	XMOD Pin Header / UART TXD (output from adapter)
ACBUS4		27	FTDI / <b>currently_not_used</b>
ACBUS5		28	FTDI / <b>currently_not_used</b>
ADBUS4		5	FTDI / <b>currently_not_used</b>
B	in	12	XMOD Pin Header / UART RXD (input to adapter)
BDBUS2	in	21	FTDI / <b>currently_not_used</b>
BDBUS3	out	20	FTDI / <b>currently_not_used</b>
C	out	9	XMOD Pin Header / TCK
D	in	11	XMOD Pin Header / TDO
E	in	14	XMOD Pin Header / LED
F	out	13	XMOD Pin Header / TDI
FT_B_RX / BDBUS1	out	25	FTDI
FT_B_TX / BDBUS0	in	23	FTDI
G	in	17	XMOD Pin Header / Pushbutton S1
H	out	16	XMOD Pin Header / TMS
JTAGEN	in	26	Enable JTAG access to CPLD for Firmware update (zero: normal IOs, one: CPLD JTAG access). Selectable over S2-1
TCK / ADBUS0	in	30	FTDI
TDI / ADBUS1	in	32	FTDI
TDO / ADBUS2	out	1	FTDI
TMS / ADBUS3	in	29	FTDI
ULED	out	10	LED D4 (RED)
XCLK	in	4	12 MHz OSCI Ref CLK / <b>currently_not_used</b>

## Functional Description

### JTAG

JTAG signals routed directly through the CPLD to 12 pin pinheader. Access between CPLD and pinheader can be multiplexed via JTAGEN (logical one for CPLD, logical zero for pinheader).

### UART

UART is routed through the CPLD.

Output	Input
A	BDBUS0
BDBUS1	B

### LED

ULED D4 (RED) is E xor not G

# Appx. A: Change History and Legal Notices

## Revision Changes

- REV01 to older REV01
  - no logical changes

## Document Change History

To get content of older revision got to "Change History" of this page and select older document revision number.

Date	Document Revision	CPLD Firmware Revision	Supported PCB Revision	Authors	Description
		REV01	REV03,REV02		No changes, also PCB REV03 compatible
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2017-04-26	v.5	REV01	REV02	John Hartfiel	REV01 finished (rework without logical changes released 2017-04-04)
2016-04-11	v.1	---	REV02	<div><div>Error rendering macro 'page-info'  Ambiguous method overloadin g for method jdk. proxy279.\$ Proxy4022 #hasConte ntLevelPer mission. Cannot resolve which method to invoke for [null, class java.lang. String, class com. atlassian. confluence .pages. Page] due to overlappin g prototypes between: [interface</div></div>	Initial release

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