TEB0911 CPLD Firmware

Table of contents

- Table of contents
- CPLD Access
- Available CPLD Firmware
    - Download
- General instructions
    - CPLD Firmware Update - General Requirements
    - CPLD Firmware Update - General Procedure

CPLD Access

1. Connect MiniUSB cable to J35 XMOD (CPLD label)
2. Set DIP Switch S3-2 in ON position
3. Power ON the board
4. Run "Lattice Diamond Programmer"
5. Select Port FTUSB-1 on Cable settings

Available CPLD Firmware

- SC0911 CPLD - Firmware description for PCB REV02 or newer with 1 CPLD
    - Default delivered Firmware
- TEB0911-REV01 CPLD - Firmware description for PCB REV01 with 2 CPLDs

Download

- TEB0911/<PCB Revision>/Firmware/
    - Use files from the subfolders of your PCB revision

General instructions

CPLD Firmware Update - General Requirements

- Lattice Diamond or Lattice Diamond Programmer is available for free on http://www.latticesemi.com/
- Lattice compatible JTAG Programmer, for example:
    - Trenz TE0790 or Carrier with FTDI for JTAG
    - Most JTAG programmer, which used FTDI Chip to translate USB to JTAG
        - Digilent FTDI based programmer are not compatible with Lattice.
- JTAG must be connected to CPLD JTAG
- JTAG Enable Pin of CPLD must be selectable and set to VDD
- Correct CPLD Firmware (JED-File) from Trenz Electronic Download

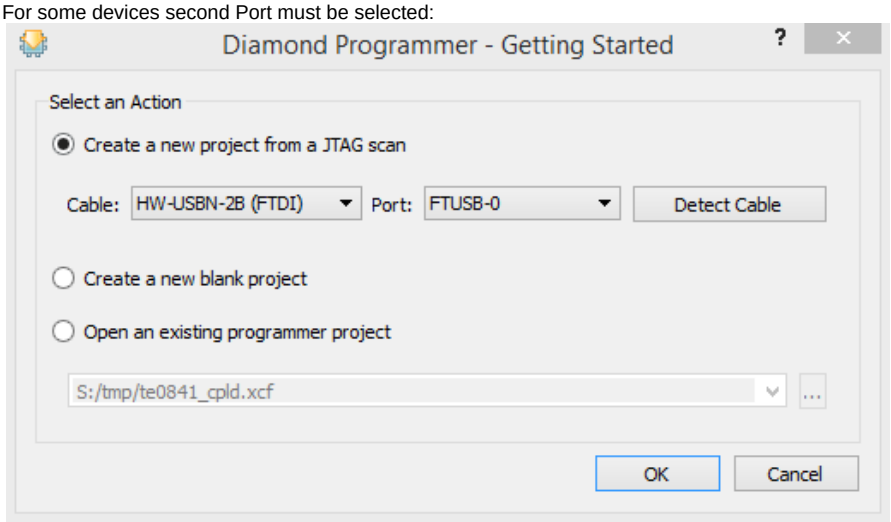
CPLD Firmware Update - General Procedure

Important:

- Connect only one JTAG device to host PC.
- Close all other JTAG programs, like Xilinx tools (on WinOS check hw_server.exe is terminated).

Procedure:

1. **Enable CPLD JTAG access** (See JTAG section on CPLD Firmware description)
2. Connect JTAG
3. Power on System
4. Open Lattice Diamond Programmer
5. Detect Cable and click "Ok"
   For some devices second Port must be selected:



6. Select Device (See CPLD Firmware overview description).
   In the most cases select the correct detected device one time (it's yellow at first on the menue)
7. Select correct Firmware from Download Area (JED File)
8. Program CPLD:
9. **Disable CPLD JTAG access** (See JTAG section on CPLD Firmware description)
10. Restart System

More Information are available on the CPLD Firmware description and on the readme.txt included into the download zip.