# **TEI0006 Intel MAX 10 Firmware**

### Table of contents

- 1 Table of contents
- 2 Intel MAX 10 Access
- 3 Available Firmware
  - 3.1 Description
    3.2 Download
- 4 General instructions

  - 4.1 MAX 10 Firmware Update General Requirements
    4.2 MAX 10 Firmware Update General Presedure
  - 4.2 MAX 10 Firmware Update General Procedure

## Intel MAX 10 Access

JTAGEN pin is already pulled up to 3.3V for access to Intel MAX 10.

With carrier board TEIB0006: Set DIP Switch S1-1 to OFF position.

For more Information see Firmware description TEI0006 Intel MAX 10 JTAG.

### **Available Firmware**

#### **Description**

- TEI0006 Intel MAX 10 Firmware description for PCB REV04 and newer
- TEI0006-REV03 Intel MAX 10 Firmware description for PCB REV03

#### Download

## **General instructions**

#### MAX 10 Firmware Update - General Requirements

- Quartus Prime software, available for free (lite version) on https://www.intel.de/
- Arrow USB Programmer Driver
  Quartus compatible ITAC programmer
  - Quartus compatible JTAG programmer, for example:
    - TEl0004 Arrow USB Programmer2 or carrier board with FTDI for JTAG
      Other JTAG Programmer compatible with Quartus Programmer
- JTAG must be connected to FPGA JTAG
- Correct Firmware (\*.pof file) from Download area

## MAX 10 Firmware Update - General Procedure

#### Important:

- Connect only one JTAG device to host PC.
- Close all other JTAG programs.

#### Procedure:

- 1. Enable FPGA JTAG access (see JTAG section on Firmware description)
- 2. Connect JTAG
- 3. Power on system
- 4. Open Quartus Prime
- 5. Open Quartus Programmer from top menu: Tools Programmer
- 6. Select from Programmer top menu: Edit Hardware Setup
- 7. Select via the drop down menu: Arrow-USB-Blaster [USB0] (Installation of Arrow USB Programmer needed) and close the window
- 8. Click Add File ...
- 9. Select correct Firmware from Download area and press Open
- **10.** Click *Start* to program the device



More information are available on the Firmware description.