

TEC0850 MAX10 Firmware

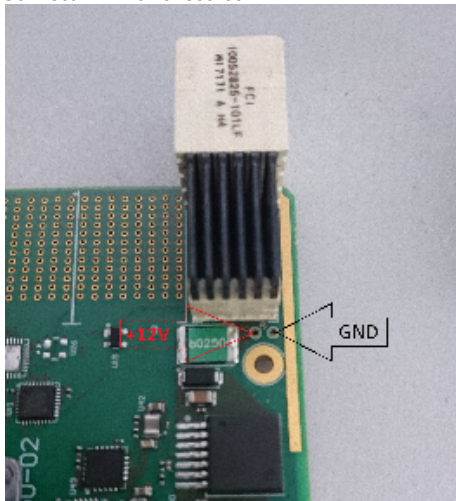
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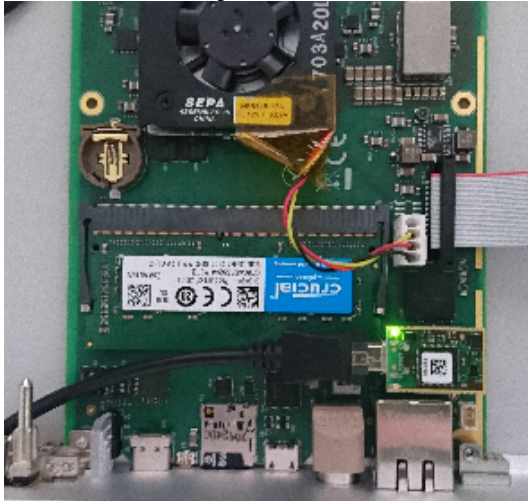
CPLD Access

 Remove TEC0850 from Backplane

- Set DIP S1:1 to OFF
- Connect 12V Power source



- Connect Arrow USB Programmer



Available CPLD Firmware

- - Firmware description
 - [TEC0850 MAX10 - SMB Firmware](#)

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 JTAG programmer, for example:
 - TEI0004 - 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

Programmer - [Chain1.cdf]*

File Edit View Processing Tools Window Help

Search Intel FPGA

Hardware Setup... Arrow-USB-Blaster [USB0] Mode: JTAG Progress:

☐ Enable real-time ISP to allow background programming when available

File	Device	Checksum	Usercode	Program/ Configure	Verify	Blank- Check	Examine	Security Bit	Erase	ISP CLAMP	IPS File	EKP File
S:/firmware.pof	10M08SAU169	01DE4027	005BEA2C	☒	☐	☐	☐	☐	☐	☐		
CFM0				☒	☐	☐	☐	☐	☐	☐		
UFM				☒	☐	☐	☐	☐	☐	☐		

Start Stop Auto Detect Delete Add File... Change File... Save File Add Device... Up Down

The diagram shows a square chip with the Intel logo and the text '10M08SAU169' below it. An arrow labeled 'TDI' points into the top-left corner of the chip. Another arrow labeled 'TDO' points out from the bottom-left corner of the chip.

More information are available on the Firmware description.