

This document describes the firmware update procedure for MQDC-32.

The latest firmware file can be found at

[http://mesytec.com/downloads/firmwareupdates/firmware\\_VME.html](http://mesytec.com/downloads/firmwareupdates/firmware_VME.html)

## Requirements

- XILINX Platform Cable USB II
- XILINX Lab Tools – 14.7 Utilities
- The latest MTDC-32 firmware file
- These steps are for Windows

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## Download

Note: In order to download the software, it is necessary to register on the XILINX homepage.

Download the “**ISE Design Suite for Windows 10 - 14.7**” from the following link:

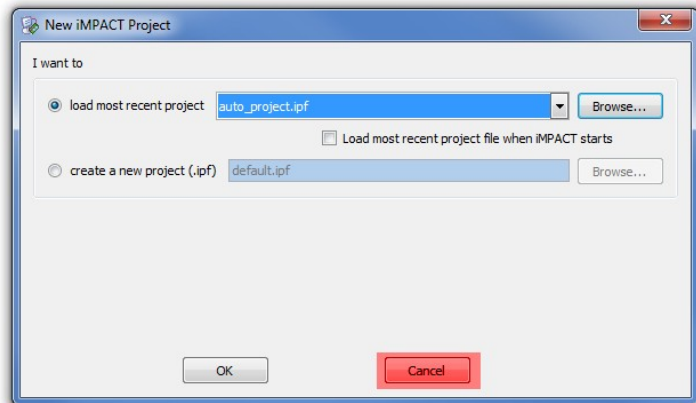
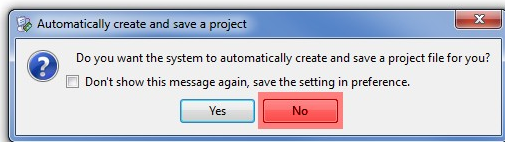
<https://www.xilinx.com/support/download/index.html/content/xilinx/en/downloadNav/vivado-design-tools/archive-ise.html>

An installation guide for the ISE package is available here:

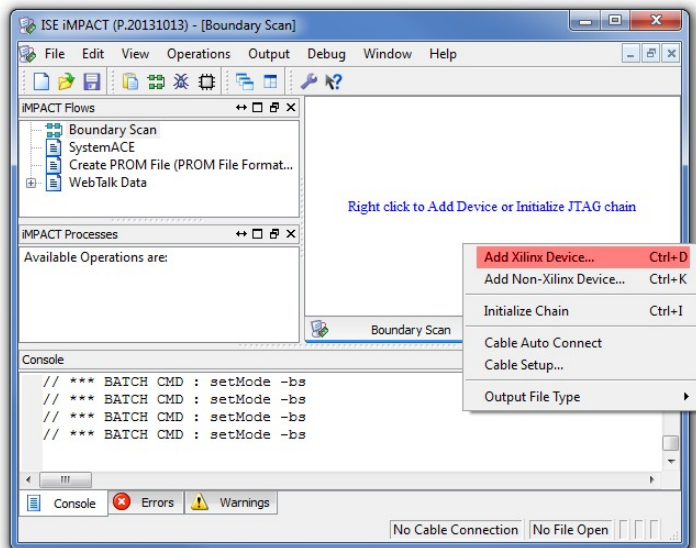
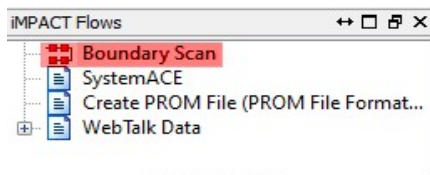
[https://www.xilinx.com/support/documentation/sw\\_manuals/xilinx14\\_7/ug1227-ise-vm-windows10.pdf](https://www.xilinx.com/support/documentation/sw_manuals/xilinx14_7/ug1227-ise-vm-windows10.pdf)

## Start and Configuration

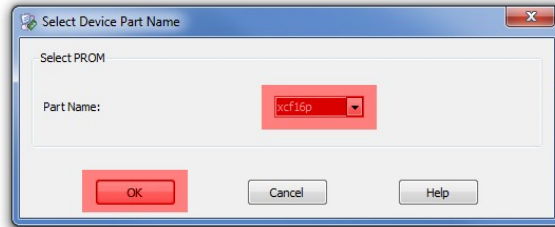
- Start **“iMPACT”** using the desktop shortcut that should have been created by the installer.
- Connect the **“XILINX Programming Device”** with the USB-Cable to your PC.
- The Status-LED of the programming device should turn yellow if the connection can be established. Otherwise use the USB-Passthrough settings of the VirtualBox to forward the device into the virtual machine (right-click the USB plug icon at the bottom of the VirtualBox screen).
- Connect the **“XILINX flat cable”** to the Programming Device.
- Follow the screenshots below for the correct setup.



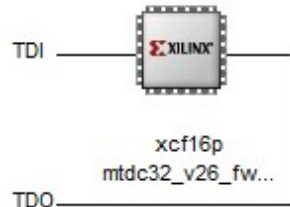
- Double Click on **“Boundary Scan”**
- Then right click into the right window and **“Add Xilinx Device...”**



- In the next window load the “**MTDC-32 Firmware File**” and click open.
- In the Window “Select Device Part Name” choose **xcf16p** and click OK.

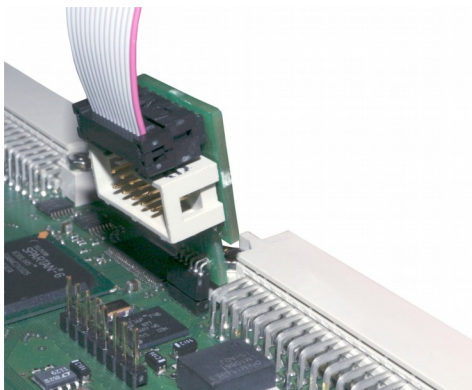


- You can see the XILINX Device Icon with the MTDC-32 Firmware on the right window in the programmer tool.

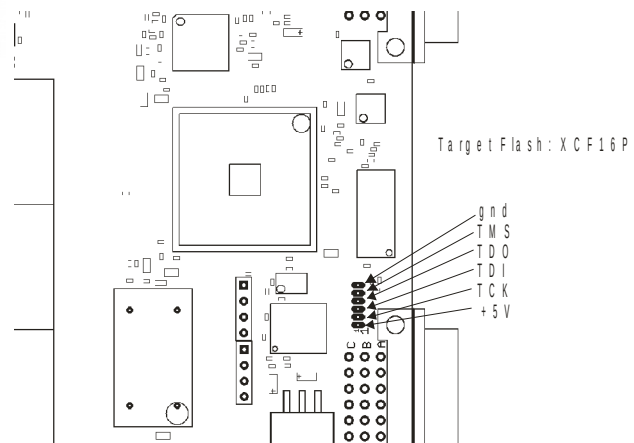


## Connection

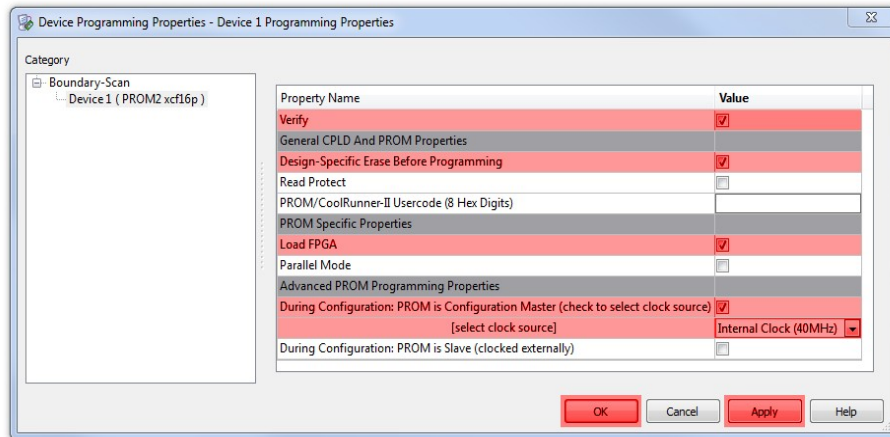
- Connect the flat cable with the mesytec adapter to the MTDC-32 and power on the MTDC-32.
- The Status-LED should turn green.



Programming connector M T D C -32 , M Q D C -32

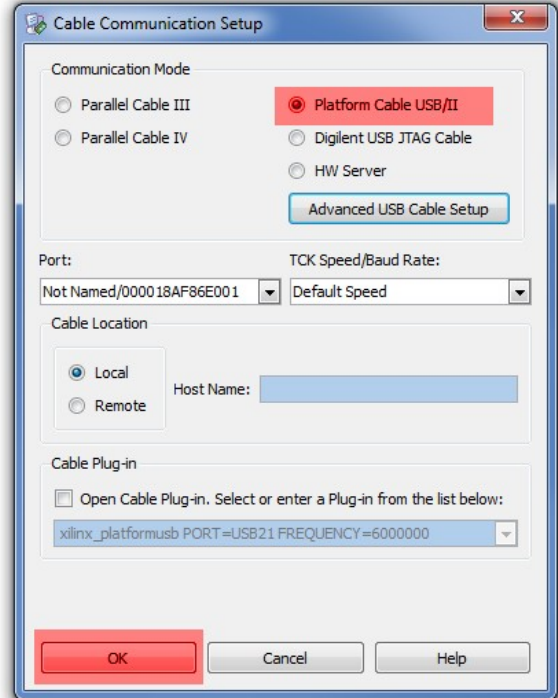
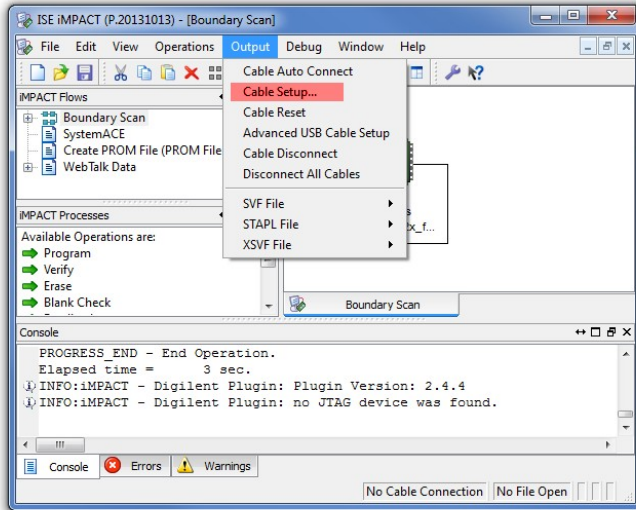


- Right Click on the Device and choose **“Set Programming Properties”**



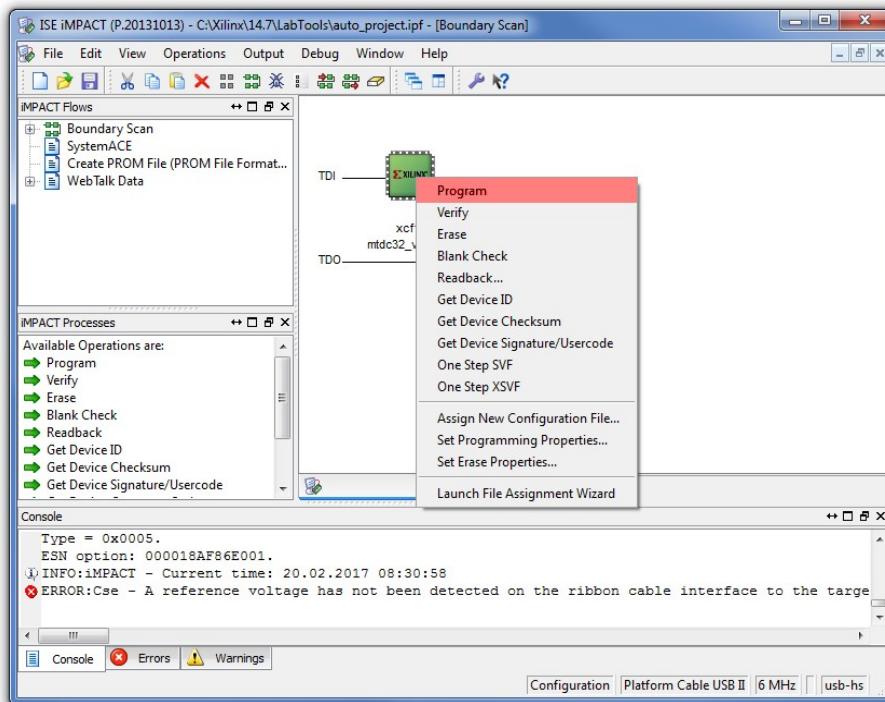
## Cable Setup

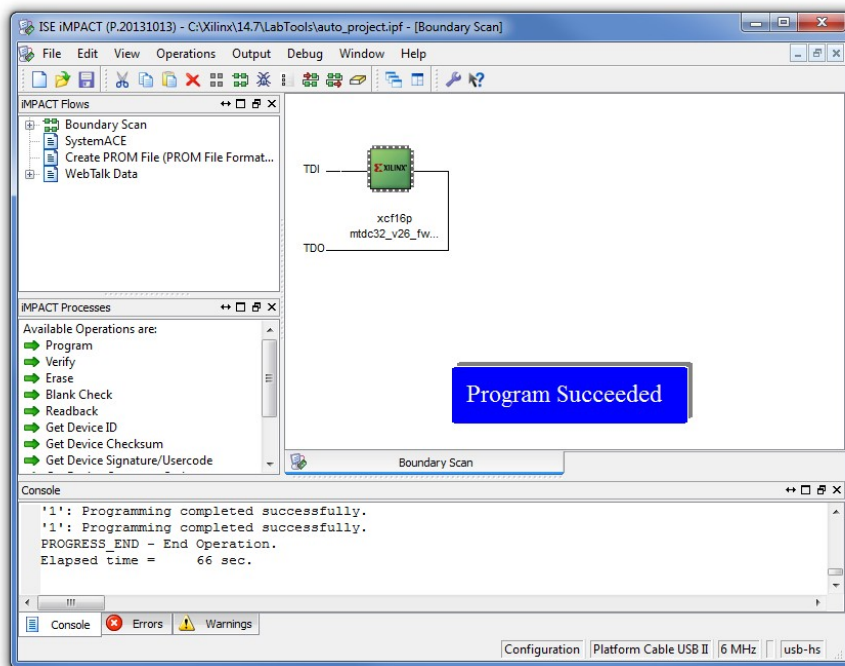
- These settings must be performed only once.



## Programming

- Right click on the XILINX Device and click Program.





**The MTDC-32 Firmware is now updated**

## Project saving

- All settings can be stored to update other MTDC-32 at a later time.

