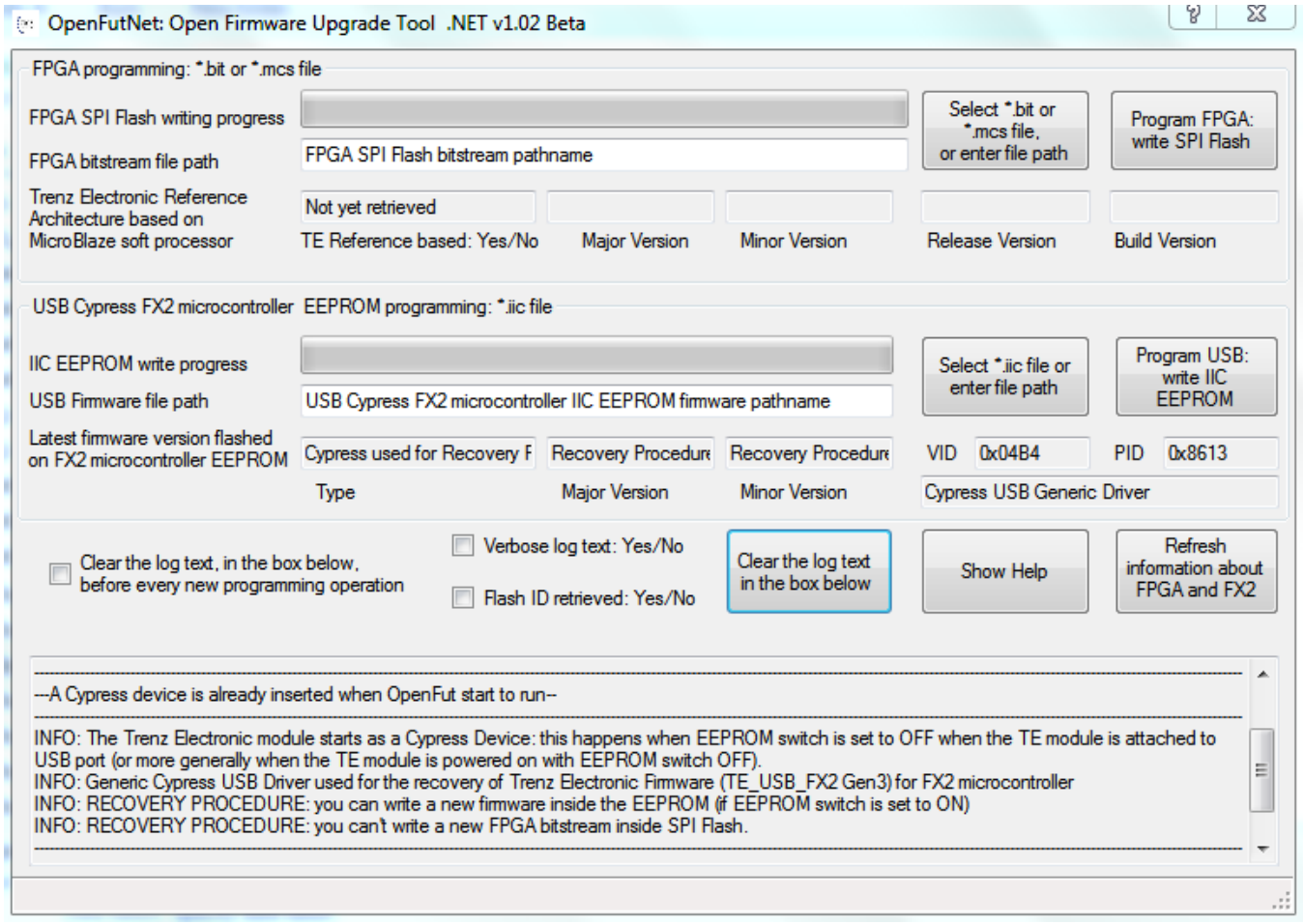
Firmware Recovery (USB EEPROM and RAM)

A *recovery boot* (aka TE USB FX2 firmware recovery) is a multi-step boot operation. It follows these steps.

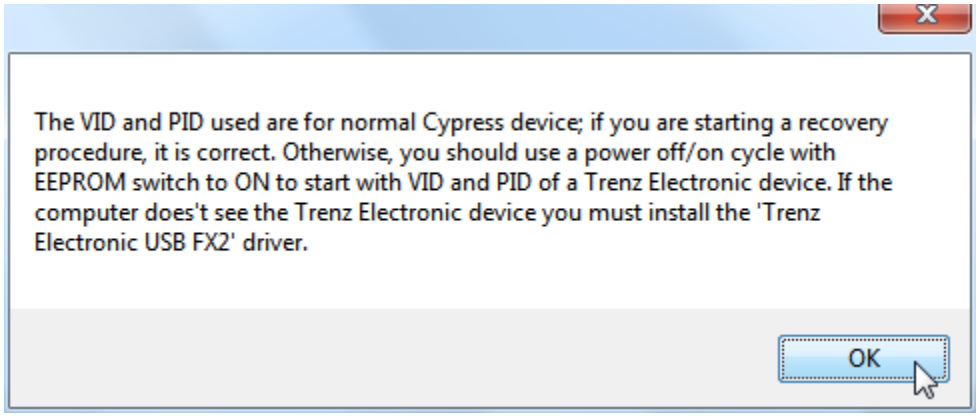
Follow the same procedure desrcibed in recovery boot and use OpenFutNet instead of CyConsole or CyControl.

Open a `USB Firmware Upgrade Tool` (double click `OpenFutNet.exe`).



OpenFutNet start with a Cypress device

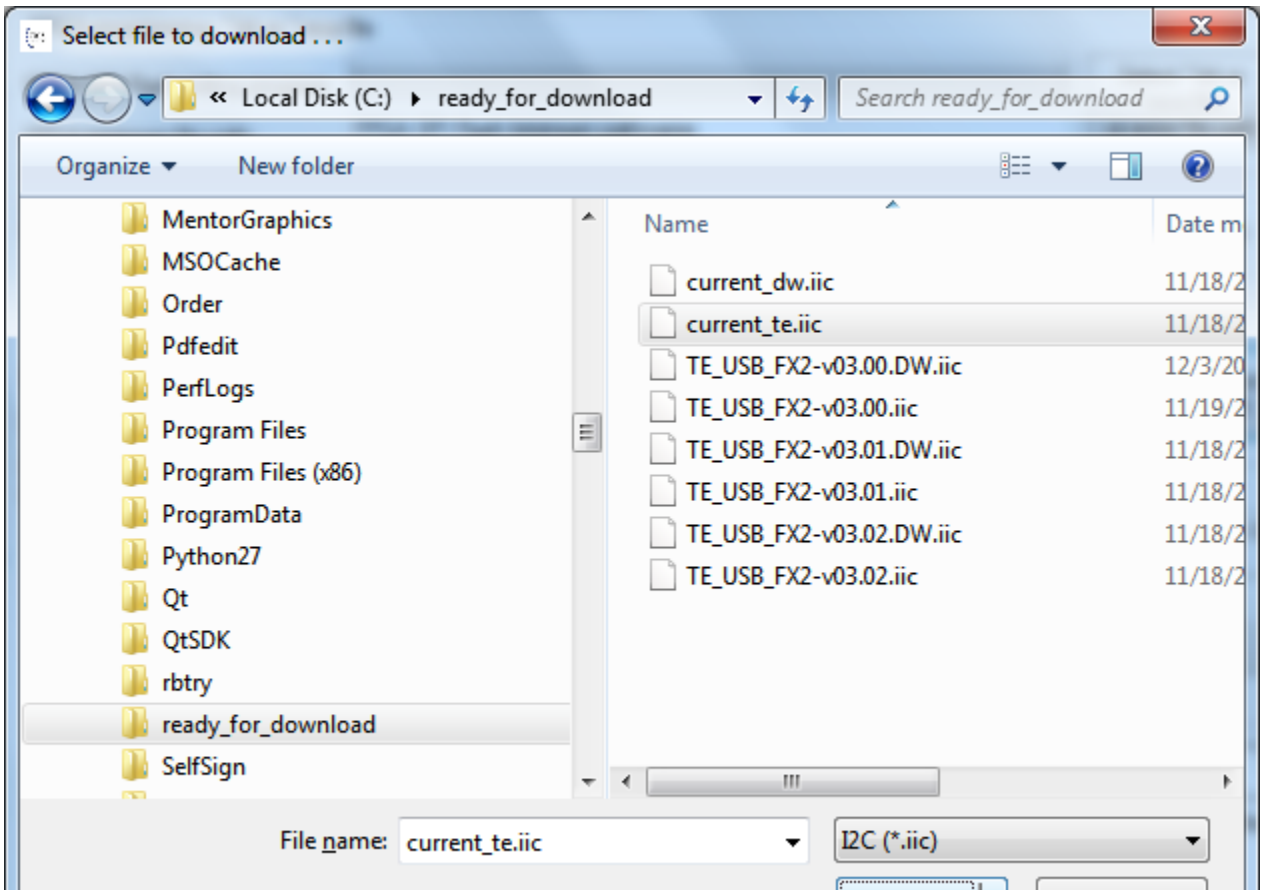
Click OK into the pop-up. (In the next version, it will appears only if Verbose flag is checked).

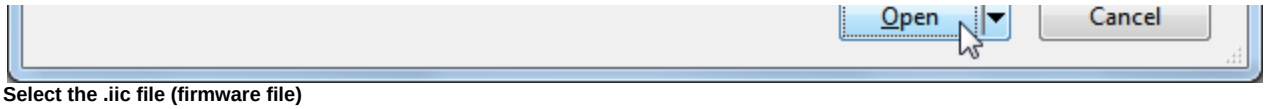


Verbose Recovery Information

Press the "*`Select *.iic file or enter file path`*" button corresponding to the firmware file pathname selection.

Select a suitable `.iic` firmware upload file. You can download the firmware availbale at Trenz Electronic GitHub.

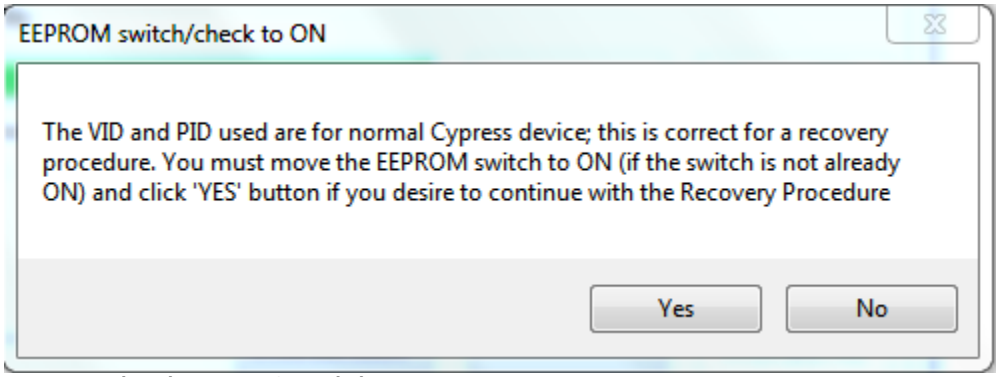

Select file to download . . .
« Local Disk (C:) ▸ ready_for_download
Search ready_for_download
Organize
New folder
MentorGraphics
MSOCache
Order
Pdfedit
PerfLogs
Program Files
Program Files (x86)
ProgramData
Python27
Qt
QtSDK
rbtry
ready_for_download
SelfSign
Name
Date m
current_dw.iic
current_te.iic
TE_USB_FX2-v03.00.DW.iic
TE_USB_FX2-v03.00.iic
TE_USB_FX2-v03.01.DW.iic
TE_USB_FX2-v03.01.iic
TE_USB_FX2-v03.02.DW.iic
TE_USB_FX2-v03.02.iic
File name:
current_te.iic
I2C (*.iic)



Select the .iic file (firmware file)

Press the “Program USB: write IIC EEPROM” button if you want the `*.iic` file to be written into the large EEPROM of the EZ-USB FX2LP USB FX2 microcontroller.

OpenFutNET informs you, with a pop-up, that a Cypress device has been inserted and not a Trenz Electronic device.



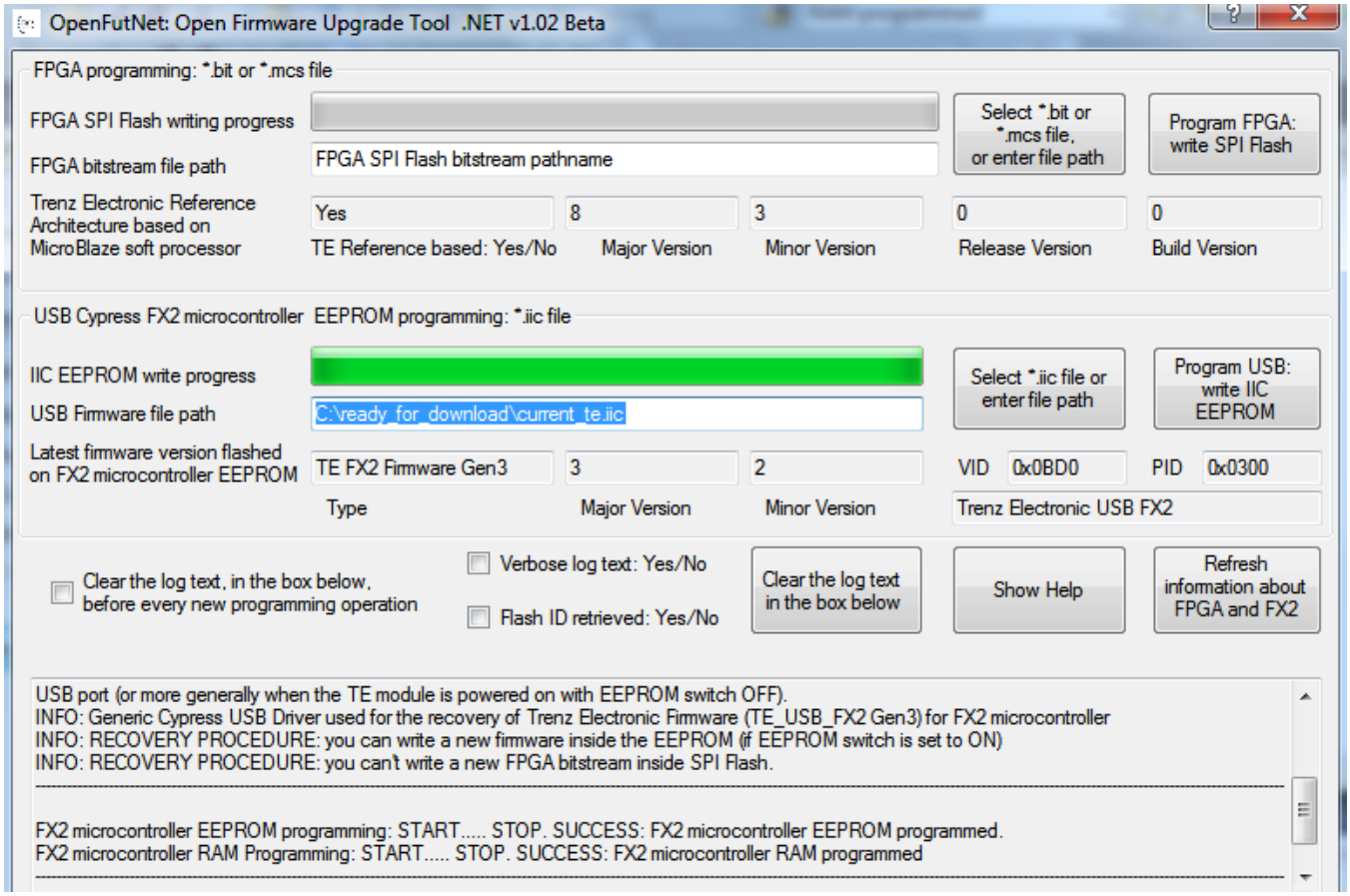
Pop-up warning about EEPROM switch

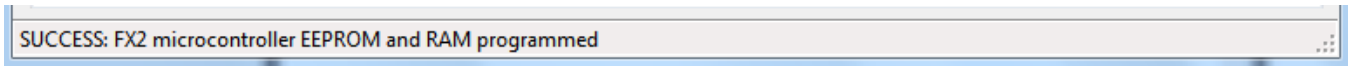
Move the EEPROM switch to enable the USB EEPROM connection, if it is not already done.

> ⚠ Do not turn off (power off) the module when you are enabling the USB EEPROM connection.

Click 'Yes' in the pop-up.

When the progress bar reaches 100%, the following log text message notifies the successful completion of the USB upgrade procedure.


OpenFutNet: Open Firmware Upgrade Tool .NET v1.02 Beta
FPGA programming: *.bit or *.mcs file
FPGA SPI Flash writing progress
FPGA bitstream file path
FPGA SPI Flash bitstream pathname
Select *.bit or *.mcs file, or enter file path
Program FPGA: write SPI Flash
Trenz Electronic Reference Architecture based on MicroBlaze soft processor
Yes
8
3
0
0
TE Reference based: Yes/No
Major Version
Minor Version
Release Version
Build Version
USB Cypress FX2 microcontroller EEPROM programming: *.iic file
IIC EEPROM write progress
USB Firmware file path
C:\ready_for_download\current_te.iic
Select *.iic file or enter file path
Program USB: write IIC EEPROM
Latest firmware version flashed on FX2 microcontroller EEPROM
TE FX2 Firmware Gen3
3
2
VID 0x0BD0
PID 0x0300
Type
Major Version
Minor Version
Trenz Electronic USB FX2
Clear the log text, in the box below, before every new programming operation
Verbose log text: Yes/No
Flash ID retrieved: Yes/No
Clear the log text in the box below
Show Help
Refresh information about FPGA and FX2
USB port (or more generally when the TE module is powered on with EEPROM switch OFF).
INFO: Generic Cypress USB Driver used for the recovery of Trenz Electronic Firmware (TE_USB_FX2 Gen3) for FX2 microcontroller
INFO: RECOVERY PROCEDURE: you can write a new firmware inside the EEPROM (if EEPROM switch is set to ON)
INFO: RECOVERY PROCEDURE: you can't write a new FPGA bitstream inside SPI Flash.
FX2 microcontroller EEPROM programming: START..... STOP. SUCCESS: FX2 microcontroller EEPROM programmed.
FX2 microcontroller RAM Programming: START..... STOP. SUCCESS: FX2 microcontroller RAM programmed



EEPROM and RAM of USB FX2 microcontroller programmed successfully