C++ TE_USB_FX2 API reference manual

This documentation describes the SW API supported by standard Trenz Electronic FPGA modules (TE USB FX2 FPGA module) equipped with Cypress EZ-USB FX2 microcontroller (currently: TE0300, TE0320 and TE0630).

TE USB FX2 module is able to communicate with host computer's USB using

- SW C++ API (TE_USB_FX2_CyAPI.dll) and
- TE USB API Commands.

> ⓘ In order to provide a user interface for driver functions, dynamic link library "TE_USB_FX2_CyAPI.dll" and "CyAPI.lib" have been used.
>
> C++ applications (running on host computer) use directly TE_USB_FX2_CyAPI.dll based on CyAPI.lib.
>
> To avoid copying back and forth large amount of data between these two DLLs, data is passed by reference and not by value.

Host computer requirements

When using TE_USB_FX2_CyAPI.dll API, a host computer should meet the following requirements:

- Operating system: Microsoft Windows 2000, Microsoft Windows XP, Microsoft Windows Vista, Microsoft Windows 7;
- USB driver: Trenz Electronic USB FX2 driver (see here for dedicated driver installation instructions);
- Interface: USB 2.0 host;
- C++ Run Time: it is contained in
  - Microsoft Visual C++ 2010 x64 Redistributable Setup: vcredist_x64.exe for 64 bit;
  - Microsoft Visual C++ 2010 x86 Redistributable Setup: vcredist_x86.exe for 32 bit.