TE0320 Getting Started

Preloaded FPGA Bitstream (FPGA image, SPI Flash)

TE0320 comes with SPI Flash preloaded with a reference design.

Those preloaded image is just for getting started demo, for real designs:

- it is expected that these image could be replaced by the customer;
- it is expected that these image could be used by the customer as starting point.

Preloaded USB Firmware (FX2 USB microcontroller, EEPROM)

TE0320 comes with FX2 USB microcontroller's firmware.

To change the firmware of EEPROM from Generation 2 to Generation 3 you must follow this procedure. You may also watch this video play list.

Those preloaded firmware is used with TE API.

TE USB FX2 modules: common stack description

TE0300, TE0320 and TE0630 common stack is described here.

SW tools to be used with TE USB FX2 modules

They can be found here.

Custom FPGA design: programmable logic

We recommend to download and install the standard Xilinx development tool to develop and debug a custom programmable logic design. License fees may apply when designing with larger devices or debugging with advanced tools. Same conditions apply when modifying the programmable logic of the reference design.

Custom FPGA design: embedded processing system

We recommend to download and install the standard Xilinx development tool to develop and debug a custom embedded processing system. License fees may apply. Same conditions apply when modifying the embedded processing system of the reference design.

Custom USB design

You can download the Firmware code from GitHub and use this code as a start point.
If you do not realize a compatible firmware, the TE API will be no longer available.

Generating bitstreams

- BIT
- MCS

Loading FPGA Bitstream through JTAG

Xilinx Impact can be used to load bitstreams.

Loading FPGA Bitstream through USB

OpenFutNet (recommended) and other software tools can be used to load bitstreams.

Loading USB Firmware through USB

Trenz Electronic Tools (recommended C# OpenFutNet or Python Open_FUT) or Cypress tools (CyConsole or CyControl) can be used to load FX2 USB microcontroller's firmware.