

Configuration via USB bus (firmware and/or bitstream)

To configure a TE USB FX2 module via USB bus, there are different procedures to follow according to module status and purpose of use.

See [OpenFutNet](#), [Firmware Tools Comparison](#),

- [recovery boot](#) and [update boot](#) for USB [firmware](#).
- [C# OpenFutNet](#) or [Python OpenFut](#) for FPGA bitstream

For instance, a full quality control test already performed at Trenz Electronic laboratory premises requires all the following steps to be performed:

1. [Cypress USB generic device driver](#) installation;
2. USB FX2 microcontroller large EEPROM programming;
3. [specific USB device driver](#) installation;
4. an *.iic file generation/download;
5. a firmware upgrade tool ([Cypress tools: CyConsole or CyControlCenter](#) TE tools: [OpenFut](#), [OpenFutNet](#) or FX2EEPROMProgrammer) utilization.

reference bitstream file written on SPI Flash

step	first development cycle	following development cycles	EEPROM recovery (boot recovery)	quality control (lab test)
(1)			✓	✓
(2)			✓	✓
(3)	✓			✓
(4)	✓	✓		✓
(5)	✓	✓		✓
(6)	✓	✓		✓
(7)		✓		✓

(7) custom bitstream file written on SPI Flash is obviously not performed during quality control.
Configuration steps via USB bus according to module status and purpose of use.