XinaBox Datasheet IP02 - Advanced USB Programming Interface

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Overview

This xCHIP forms part of the interface programmer modules.

The FT232R is a USB to serial UART interface device which is equipped to power and program other modules via a USB A connector. The IP02 is required for programming the range of CPU Core xCHIPs over the USB-serial bridge provided by the FT232R.

The IP02 has two switches so that you can switch between DTE and DCE. The other switch is between A and B.

Product Highlights

- Single chip USB to asynchronous serial data transfer interface.
- Transmit and receive LED drive signals.
- Low operating and USB suspend current.
- Low USB bandwidth consumption.
- USB 2.0 Full Speed compatible.

Applications

- Serial Programming of xCHIPs
- Serial Interface for debugging
- Serial Data Monitoring
- USB-Serial Internet Link for IoT Devices

Specifications

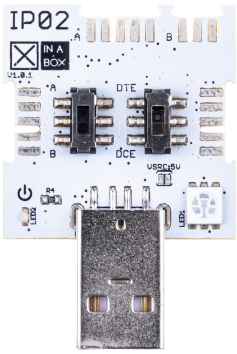
- Entire USB protocol handled on the chip. No USB specific firmware programming required.
- Fully integrated 1024 bit EEPROM storing device descriptors and CBUS I/O configuration.
- Data transfer rates from 300 baud to 3Mbaud at TTL levels.
- 128 byte receive buffer and 256 byte transmit buffer utilising buffer smoothing technology to allow for high data throughput.
- FIFO receives and transmits buffers for high data throughput.
- Supports bus powered, self-powered and high-power bus powered USB configurations.
- Integrated power-on-reset circuit.

External Links

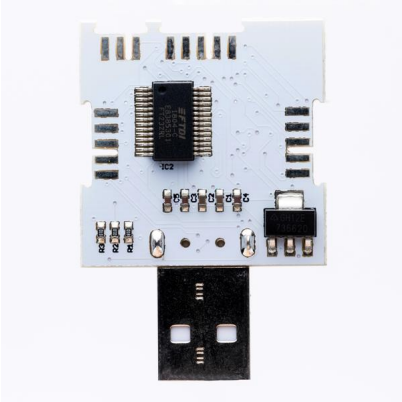
GitHub

- IP02 on GitHub (https://github.com/xinabox/IP02)

IP02 - Advanced USB Programming Interface (FT232R)



Front



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Main Category	Interface
Sub Category	Programmer
Introduced	1 January 2017
Current version	1.0.1
Current version date	1 January 2017
Weight	6.3 g
Height	9/0/0 mm
Non-⊠BUS Connections	
South	USB A
Main Chip Set	
Main Chip	FT232R
EEPROM Memory Size	1024 bit