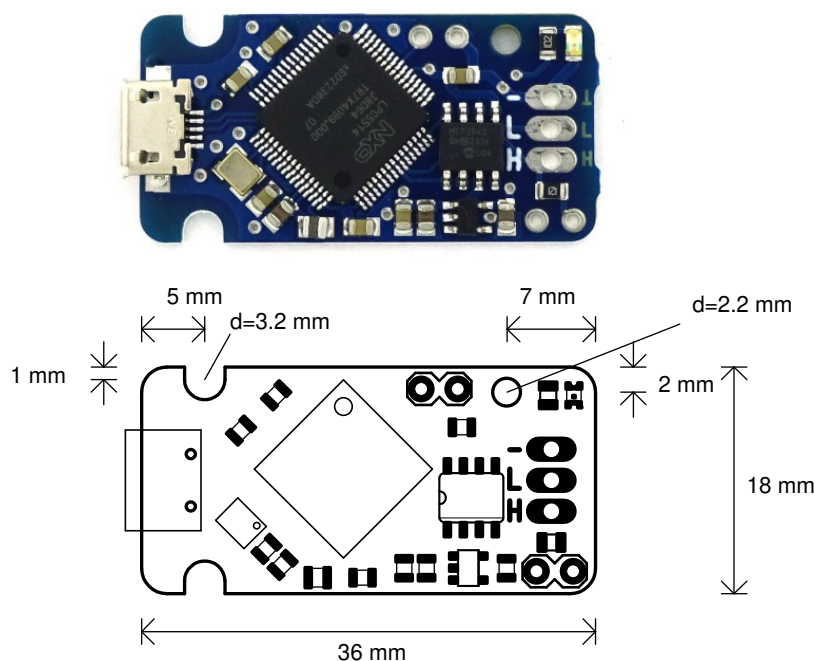

USBtingo EB – USB to CAN-FD Interface

Datasheet

USBtingo is a USB 2.0 HighSpeed to CAN-FD interface. It can monitor CAN buses and transmit CAN messages. All common CAN baud rates are supported. USBtingo features a logic analyzer function to sample the logic levels on the CAN RX line.



Features

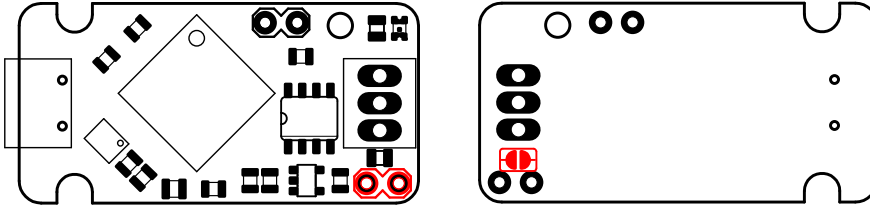
- Classic CAN 2.0 (up to 1 Mbaud) and CAN-FD (up to 8 Mbaud)
- High-Speed USB 2.0 (480 MBit/s), micro-USB connector
- USB powered (no isolation between USB and CAN)
- Open source Python library (Windows, MacOS, Linux)
- Hardware timestamping and message filtering
- Logic analyzer function: sample logic levels on CAN-RX with up to 40 Msps
- 120 Ohm termination via jumper
- Bootloader for firmware updates

Parametrics

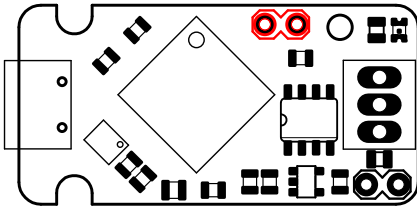
- Board supply voltage (via Micro USB-B): 5 V
- Board supply current @VUSB: 150 mA
- Operating temperature: -20 up to +70°C
- CAN transceiver implementation: ISO11898-2:2003, ISO11898-5:2007, ISO/DIS11898-2:2015

Termination resistor

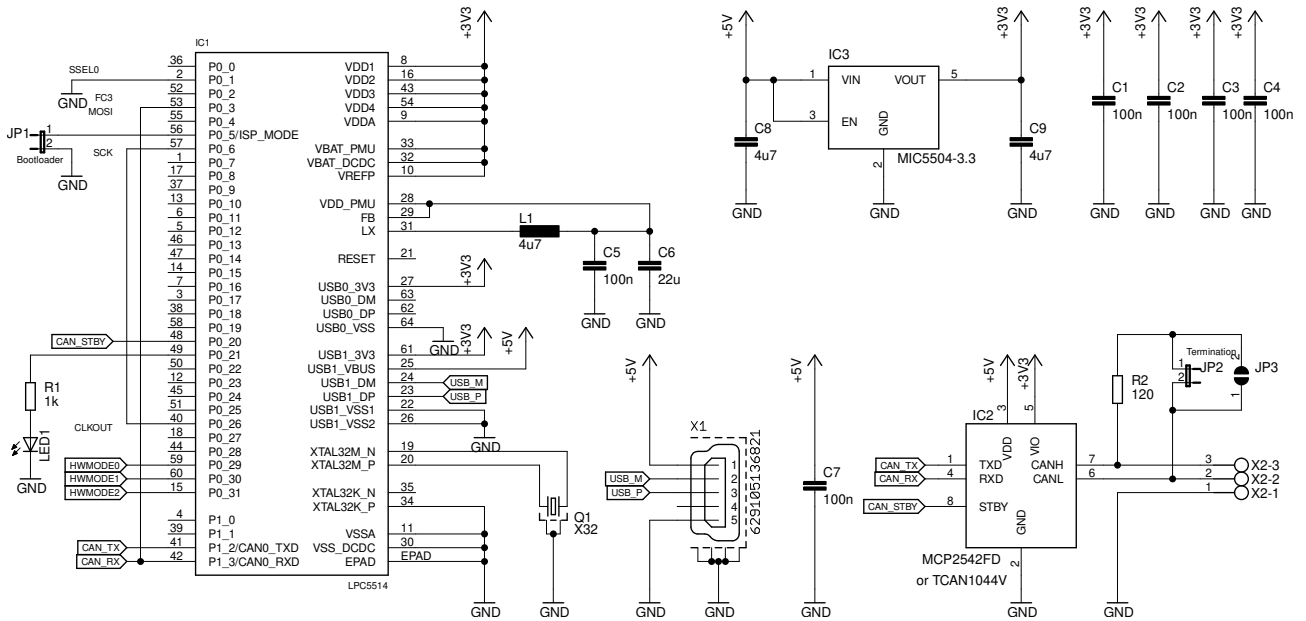
The board comes with a 120 Ohm termination resistor that can be enabled in two ways: via a 2.54mm jumper or a solder bridge on the bottom side.

**Bootloader**

USBtingo contains a bootloader that can be used to install firmware updates. The bootloader can be started by a command via USB or by shorting the following jumper while plugging to USB:



Schematics diagram



Evaluation board notice

USBtingo EB is an evaluation board intended for use for engineering development or evaluation purposes in laboratory environment only. It is not considered as an end user application. If you intend to use it in an end-product, you have to ensure in your own responsibility that the device meets the relevant regulations (e.g. CE, FCC).