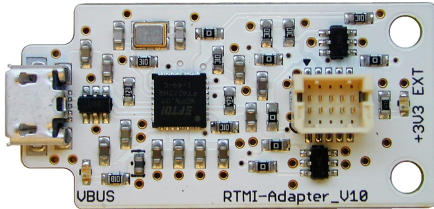


USB-2-RTMI Description

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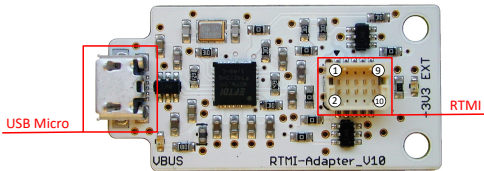
USB-2-RTMI top view



Description

This USB-2-RTMI offers USB interface conversion for the Real-Time Monitoring Interface of the TMC4671 FOC controller IC. The interface converter is based on the FTDI FT4222H USB High-Speed to SPI bridge. It is USB bus powered and offers basic ESD protection. Please note that it does not include galvanic isolation (USB ground is connected to GND pins of RTMI connector). It offers the same tiny 10pin connector with same pin assignment for the RTMI interface as can be found on the TMC4671 line of evaluation boards. Connection cables are available, also.

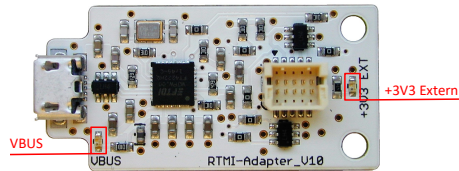
Connectors



Pin	Signal	Pin	Signal
1	+3V3_Extern	2	GPIO0
3	/CS	4	GPIO1
5	SCK	6	GND
7	MOSI	8	GND
9	MISO	10	GND

Table 1: RTMI connector pin assignment

LEDs



LED	Description
VBUS	USB power (+5V) available, USB connected
+3V3_Extern	+3V3 available via RTMI connector from target board

Table 2: LED description

Order code

Order Code	Description	Size (LxWxH)
USB-2-RTMI	USB adapter (USB Micro) for the Real-Time-Monitoring interface (RTMI) of the TMC4671 FOC controller	40mm x 20mm x 7mm (without enclosure)
USB-2-RTMI-CABLE	Cable loom for USB-2-RTMI: <ul style="list-style-type: none"> • 1x cable loom for RTMI connector (cable length 150mm, 10pin Hirose DF20 female connectors at both ends) • 1x USB Micro cable 	



Driver Installation

For installation of drivers for the USB-2-RTMI please follow these steps:

1. Download [D2XX drivers](#) from [FT4222 homepage](#).
2. Download [LibFT4222 Windows Library](#).
3. Connect USB-2-RTMI to your PC.
4. Open device manager -> USB controller-> FT4222H Interface A.
Update drivers by using new drivers from D2XX ZIP file.
5. Copy LibFT4222.dll from LibFT4222-v1.4.1.zip into folder C:/WINDOWS/SysWOW64.

