

# **Click** USB adapter

Connect the desired Click<sup>™</sup> additional board directly to your PC via USB cable. No micro-controllers required.



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The primary aim of our company is to design and produce high quality electronic products and to constantly improve the performance thereof in order to better suit your needs.

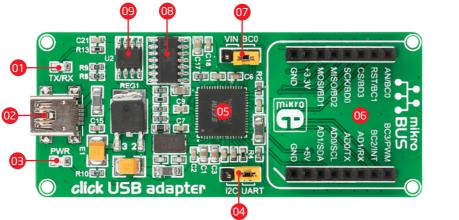
Nebojsa Matic General Manager

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#### Introduction



1 TX/RX indication LED
USB MINI-B connector
Power indication LED
I<sup>2</sup>C/UART jumper (J1)
FT2232H IC
FT2232H IC
mikroBUS<sup>TM</sup> socket
VIN/BCO jumper (J2)
MCP3204 ADC converter
EEPROM memory

Click USB adapter board provides necessary interface for connecting Click<sup>™</sup> add-on boards to your PC through high speed USB connection. There is no need to use a microcontroller. It features FT2232H dual high speed USB to multipurpose IC, Analog-to-Digital converter, EEPROM memory and a single mikroBUS<sup>™</sup> host socket. FT2232H provides necessary communication lines defined by the mikroBUS<sup>™</sup> standard. mikroBUS<sup>™</sup> host connector consists of two 1x8 female headers with SPI (MOSI, MISO, SCK, CS), I<sup>2</sup>C (SDA, SCL), UART (Tx, Rx), RST, PWM, Analog and Interrupt lines as well as 3.3V, 5V and GND power lines. Click USB adapter board can be powered through USB cable only. On-board power circuitry generates 3.3V and 5V. Two jumpers are provided on the board. J1 jumper is used to select whether UART or I<sup>2</sup>C will be used. J2 selects whether AN pin on mikroBUS<sup>TM</sup> socket will be just another GPIO pin, or connected to MCP3204 AD converter circuit, thus serving for analog readings.

3.3V VOLTAGE REGULATOR VCC3V3 VCC3V3 VCC1V8 VCC3V3 VCC5 -2 E1 10uF 3 E2 10uF -÷ ÷ J1 VCC1V8 ÷ VCC3V3 VPH) BC0 BCBUS0 GND BDBUS7 BDBUS6 BDBUS5 BDBUS4 BDBUS4 VCCI0 BDBUS3 BDBUS2 BDBUS1 BDBUS0 VCORE SUSPEND GND ACBUS6 ACBUS6 48 47 46 45 44 43 OSCI OSCO VPHY OSCI OSCO VPHY GND DM DP VPLL AGND GND VCORE TEST RST ADBUSC FP1 BD4 VCC3V V<u>CC</u>5 R1 12K1 C13 22pF C14 22pF USBD\_N USBD\_P 42 CS ● ● mikro ● ● ● BUS FT2232H SDI SDO SCK R2 100K FP2 VPLL PWM INT RX ADB1 ADB0 ADB0 ADB1 RS1 RST/EN 14 15 16 34 33 SCK SDO SDI +3.3V GND TX SCL SDA +5V GND ADB0 1R3 R4 2K2 VCC5 CN1 FP3 FERRITE VBUS LISBD N D-D+ USBD P R9 77 ID VCC3V3 VCC3V3 GND C15 10nF USB MINIB C16 10uF C17 C18 1uF 100nF + ÷ VCC3V3 VCC3V3 сно VCC3V3 VCC3V3 VCC3V3 2 R10 12 1R11 10K AGNE 💅 TX/RX 🗲 🛨 PWR EESK SCK SCK СНЗ OR GN 100nF \_\_\_\_\_ SDI TX/RX 2K2 CAT93C46 SDO BD4 75.SHD

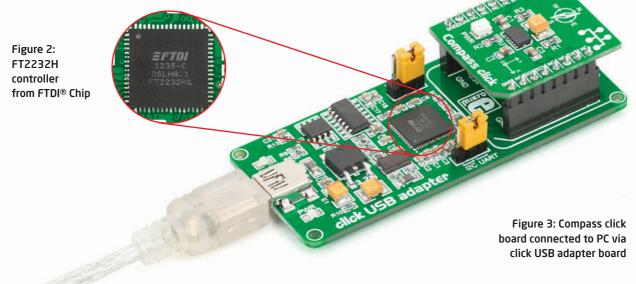
Figure 1: Click USB adapter schematic

MCP3204

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## Install drivers before use

On-board **FT2232H** chip requires drivers to be installed on your PC before operation. Drivers are available on the manufacturer's website: http://www.ftdichip.com/Drivers/VCP.htm



## Click boards are plug and play!

Up to now, MikroElektronika has released more than 60 mikroBUS<sup>TM</sup> compatible Click Boards<sup>TM</sup>. On the average, one click board is released per week. It is our intention to provide you with as many add-on boards as possible, so you will be able to expand your development board with additional functionality. Each board comes with a set of working example codes. Please visit the Click boards<sup>™</sup> webpage for the complete list of currently available boards:



http://www.mikroe.com/click/







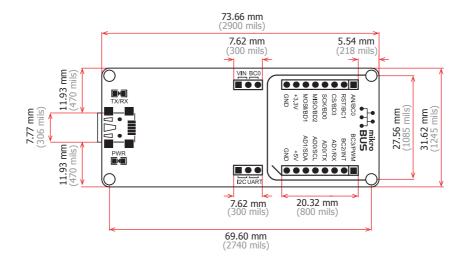


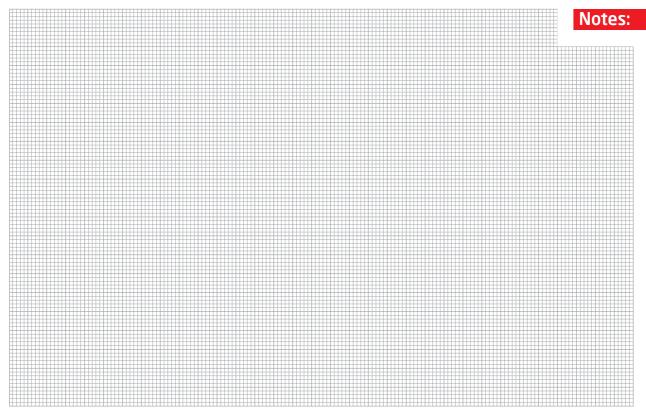


Bluetooth2 click<sup>m</sup>

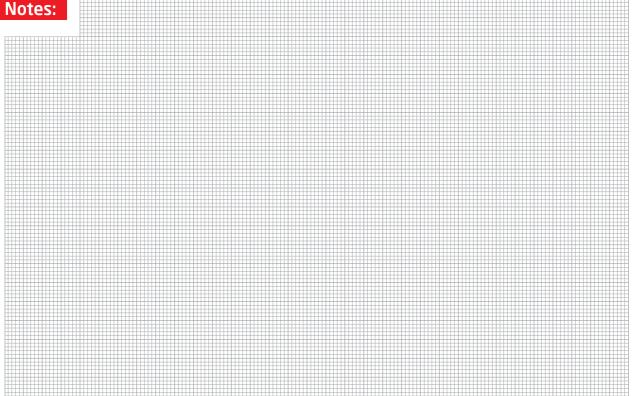
LightHz click <sup>™</sup>	BarGraph click <sup>™</sup>	Gyro click <sup>™</sup>	Flash click <sup>™</sup>	EEPROM click <sup>™</sup>	THERMO click <sup>™</sup>	Pressure click <sup>™</sup>

### Dimensions









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