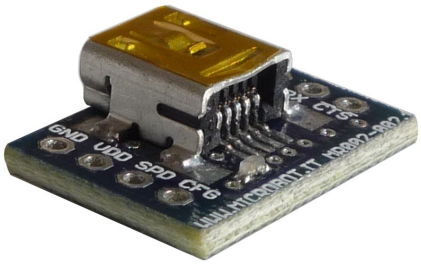
Name: **Micro USB to Serial Adapter**
Code: **MR002-002.1**



Micro USB to Serial Adapter is an usefull tool that allows to connect Personal Computers with any microcontroller system via the USB port.

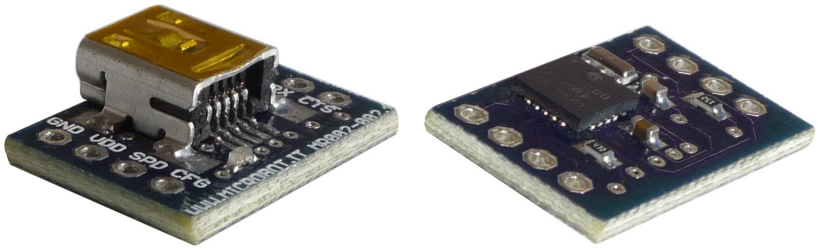
This tiny and lightweight board is only 19x13 mm, including the mini-B connector, and its weight is only 1,4 gr (0,05 oz). Interfacing is realized by two 0,100" strip connectors that are distant 0,600" (15,24mm); this allows a stable and easy mounting on solderless breadboard and sockets.

When you plug the board into the USB port, the PC system will recognize it as a serial VirtualCOM port (VCP) which will realize the communication with the microcontroller system connected to the Micro USB to Serial Adapter; this allows to use systems designed to work with the RS232 serial port without modifying them.

This device operates at data signaling rates up to 921,6kbit/s. Besides TX and RX signals, $\overline{\text{CTS}}$ and $\overline{\text{RTS}}$ are also available for handshaking procedures (see table 2).

The USB Suspend and Resume signals are supported for power managment. The device will enter the Suspend mode when suspend signaling is detected on the bus.

The board is provided with two 0,100" strip connectors.



MICROBOT di Prosseda Mirko – Via della Stazione 288, 04013 Latina Scalo (LT), Italy
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FEATURES

Universal Serial Bus (USB)

- USB2.0 Compliant
- Support Full-speed USB (12Mb/s)
- 128 byte buffer to handle throughput at any UART baud rate
  - 64 byte transmit
  - 64 byte receive
- Fully configurable VID and PID assignments, and string descriptors
- Implements USB protocol composite device CDC for communication and configuration

USB Drivers and Software Support

- Uses standard Microsoft® Windows® drivers for Virtual Com Port (VCP)
- Configuration utility for initial configuration

Universal Asynchronous Receiver/Transmitter (UART)

- Supports baud rates from 300 to 921.6 kbps
- Hardware flow control
- UART signal polarity option
- Respond to `SET LINE CODING` commands to dynamically change baud rates

Other

- 256 bytes of user EEPROM
- ESD protection > 4kV HBM
- SPD Suspend output pin
- CFG Configuration outpin pin

SPECIFICATIONS

Name	*Description*
Supply voltage	5V from the USB port
Supply current	13mA typ. (15mA max.)
Serial signals	TX, RX, $\overline{\text{RTS}}$, $\overline{\text{CTS}}$
Data I/O voltage levels	TTL
Dimensions	19x13x7mm (without strip connectors)
Weight	1.4g / 0,05oz
Operating temperature	-40°C to +85°C
Connector	USB Mini-B

Tab.1 - Specifications

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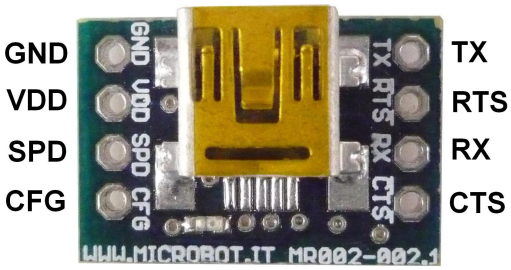
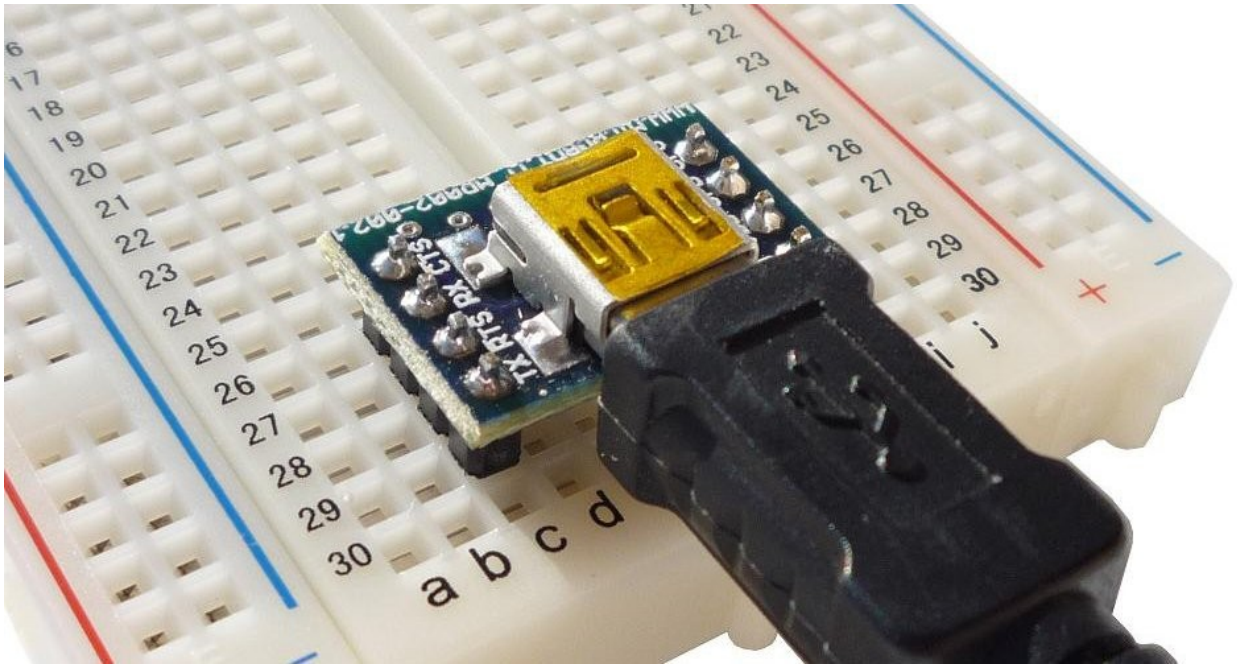
CONNECTIONS

Name	Description
$\overline{RTS}$	“Ready To Send” control output
$\overline{CTS}$	“Clear To Send” control input
RX	Asynchronous serial data receive
TX	Asynchronous serial data transmit
SPD	USB Suspend status pin
CFG	USB Configuration status pin
GND	Ground
VCC	+5V from the USB connector

Tab.2 – Connections





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