MoleGraph shield v 0.3

www.e-mole.cz

BOTTOM SIDE

A ready-made shopping list with parts to build the MoleGraph Shield (without Arduino and BT HC-05 module).
https://www.tme.eu/cz/favourites/d31fe51be6ea25f64fe6f352bb26b41da1daa138.html
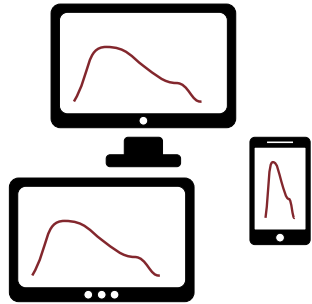
If you want to use the Arduino in education as a **Probeware system**, you need some application for recording and displaying the data. The **MoleGraph** cross-platform application was developed for this very purpose. In order to make working with **MoleGraph** as easy as possible, the **MoleGraph shield** was created. We use standard **RJ12** connectors on it. This makes using our measurement system in education a bit easier.

Build your MoleGraph shield with your students yourself or as part of our practical course!
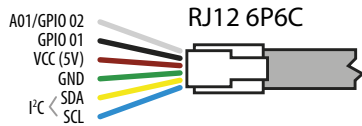
tablet/smart phone/computer

Application

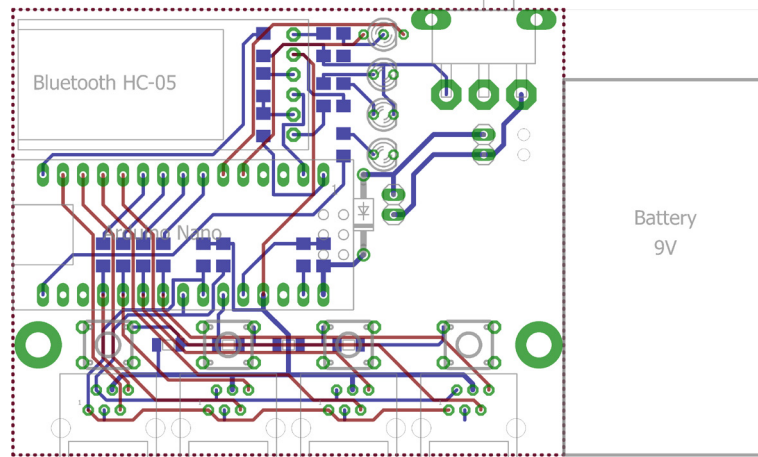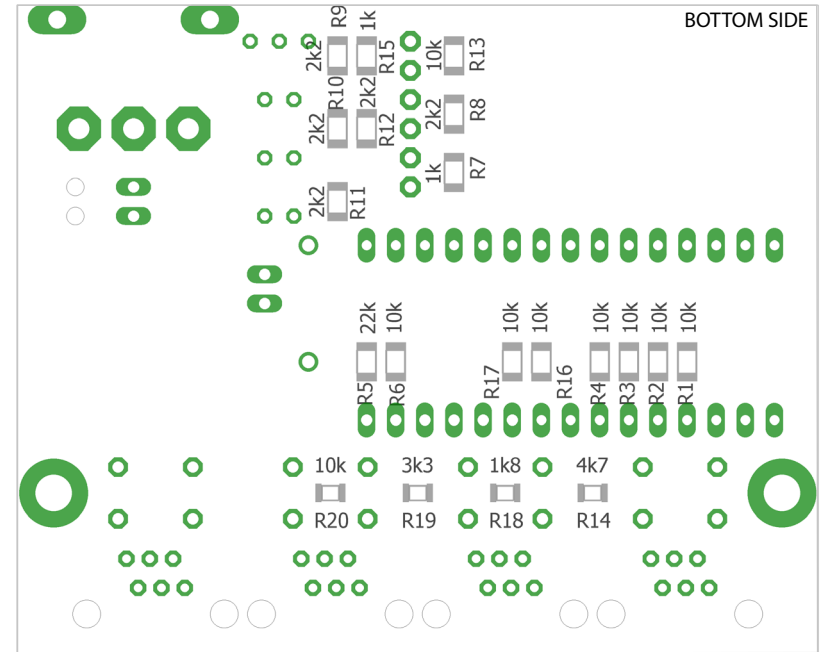## MoleGraph

– MS WIndows
– Mac OS
– Linux
– Android

Description	Part	TME sales code (www.tme.eu/cz)	Pieces
PCB MoleGraph shield			1
R1..R4, R6, R13, R16, R17, R20	Resistor 10k	SMD1206-10k-1%	9
R5	Resistor 22k	SMD1206-22k-1%	1
R7, R15	Resistor 1k	SMD1206-1k-1%	2
R8..R12	Resistor 2k2	SMD1206-2k2-1%	5
R14	Resistor 4k7	SMD1206-4k7-1%	1
R18	Resistor 1k8	SMD1206-1k8-1%	1
R19	Resistor 3k3	SMD1206-3k3-1%	1
LED3	LED 3mm red/green	OSRGHC3132A	1
LED4	LED 3mm blue	OSB5SA3131A-1MA	1
LED1	LED 3mm orange	OSO5JA3131A-1MA	1
LED2	LED 3mm red	FYL-3014SRT1A	1
D1	Diode 1N5819	1N5819	1
SW1	Slide switch	5MS1S102AM6QE	1
SW2..SW5	Micro switch	B3F-1020	4
CON1..CON4	Socket RJ12	RJ12GPCB-M	4
IC1	DuPont Pin socket 16	ZL262-16SG	2
IC2	DuPont Pin socket 6	ZL262-6SG	1
	connector + cable for 9V batt.	SBS-IR-0	1

Pay attention to the correct orientation of the two-color LED3 ❗

TOP SIDE

Bluetooth HC-05

A01/GPIO 02
GPIO 01
VCC (5V)
GND
I²C { SDA
SCL

RJ12 6P6C

CONNECTING THE CONNECTOR
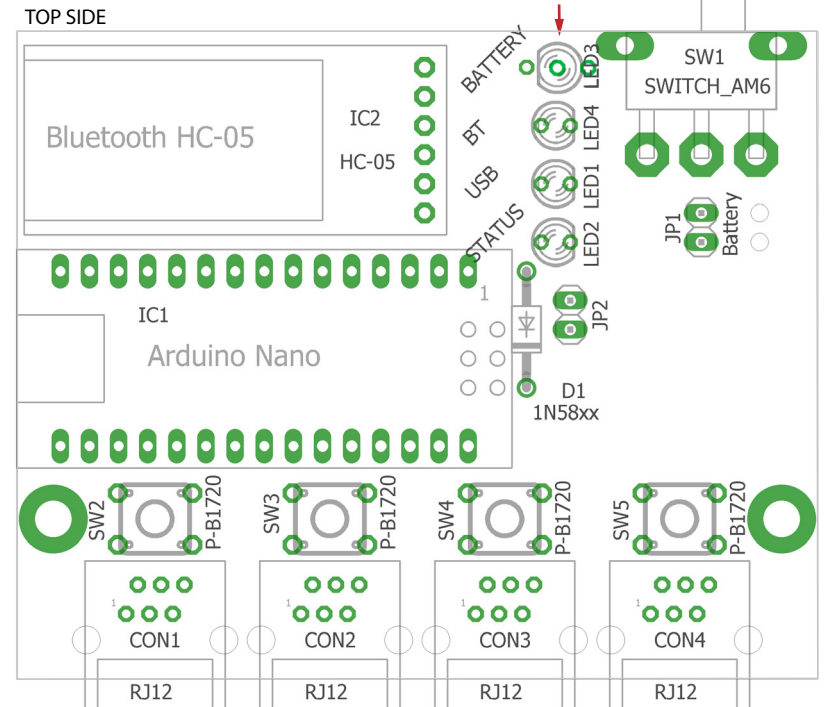
Bluetooth HC-05

Arduino Nano

Battery
9V

CON1: SCL, SDA, GND, VCC (5V), D11, A0
CON2: SCL, SDA, GND, VCC (5V). D10, A1 (SERVO)
CON3: SCL, SDA, GND, VCC (5V), D9, A2 (SERVO)
CON4: SCL, SDA, GND, VCC (5V). D8, A3

CON1   RJ12
CON2   RJ12
CON3   RJ12
CON4   RJ12