

Tahák na RasPi tutoriál

EurOpen 46

IP adresa PI: **10.1.1.10**

IP adresa gw/tj. vašeho NTB: **10.1.1.1**

USER: **pi** (malá písmena)

PASS: **eo** (malá písmena)

Scan sběrnice pro připojená

```
sudo i2cdetect -y 0 # pro raspi B
```

```
sudo i2cdetect -y 1 # pro raspi B+
```

I2C 1602 Display

Bonbonek

Raspberry B+ má 2 I2C porty návod povolení I2C BUS 0

I2C sekce

instalace I2C

```
sudo apt-get install i2c-tools
```

Nezbytné knihovny pro Hroznýše

```
sudo apt-get install python-smbus
```

pin 28 SDA #pin 29 SCL

```
echo 28 | sudo tee /sys/class/gpio/export
```

```
echo 29 | sudo tee /sys/class/gpio/export
```

```
echo in | sudo tee /sys/class/gpio/gpio28/direction
```

```
echo in | sudo tee /sys/class/gpio/gpio29/direction
```

Raspberry Pi B+ J8 Header

Pin#	NAME		NAME	Pin#
01	3.3v DC Power		DC Power 5v	02
03	GPIO02 (SDA1 , I2C)		DC Power 5v	04
05	GPIO03 (SCL1 , I2C)		Ground	06
07	GPIO04 (GPIO_GCLK)		(TXD0) GPIO14	08
09	Ground		(RXD0) GPIO15	10
11	GPIO17 (GPIO_GEN0)		(GPIO_GEN1) GPIO18	12
13	GPIO27 (GPIO_GEN2)		Ground	14
15	GPIO22 (GPIO_GEN3)		(GPIO_GEN4) GPIO23	16
17	3.3v DC Power		(GPIO_GEN5) GPIO24	18
19	GPIO10 (SPI_MOSI)		Ground	20
21	GPIO09 (SPI_MISO)		(GPIO_GEN6) GPIO25	22
23	GPIO11 (SPI_CLK)		(SPI_CE0_N) GPIO08	24
25	Ground		(SPI_CE1_N) GPIO07	26
27	ID_SD (I2C ID EEPROM)		(I2C ID EEPROM) ID_SC	28
29	GPIO05		Ground	30
31	GPIO06		GPIO12	32
33	GPIO13		Ground	34
35	GPIO19		GPIO16	36
37	GPIO26		GPIO20	38
39	Ground		GPIO21	40

Rev. 1.1
16/07/2014

<http://www.element14.com>

Rezistory

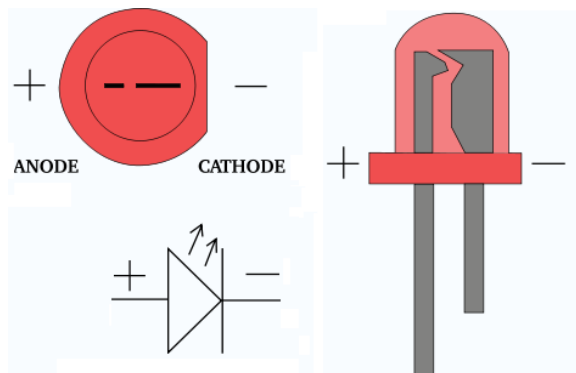
Yellow ▼ Violet ▼ Black Black Gold ▼

Resistor Value: 470 Ohms 5% Search

Brown ▼ Black Black Red ▼ Gold ▼

Resistor Value: 10k Ohms 5% Search

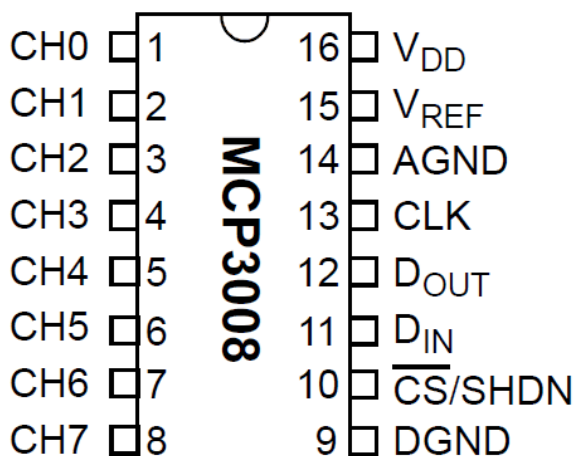
LED



RGB LED



MCP3008/3208



A/D převodník

Vdd - napájení + (2.7-5.5 V)

Vref - referenční napájení pro analogové vstupy ($\leq V_{dd}$)

AGND - zem pro analogové vstupy

CLK - hodiny pro SPI

Dout - out linka SPI

Din - in linka SPI

CS/SHDN - výběr chipu

DGND - digitální zem

CH0-CH7 - analogové vstupy

USB-serial cable adapter

černá GND

bílá RXD

červená +5V

zelená TXD

Built-in TTL COM PC-PL2303HX Chip

