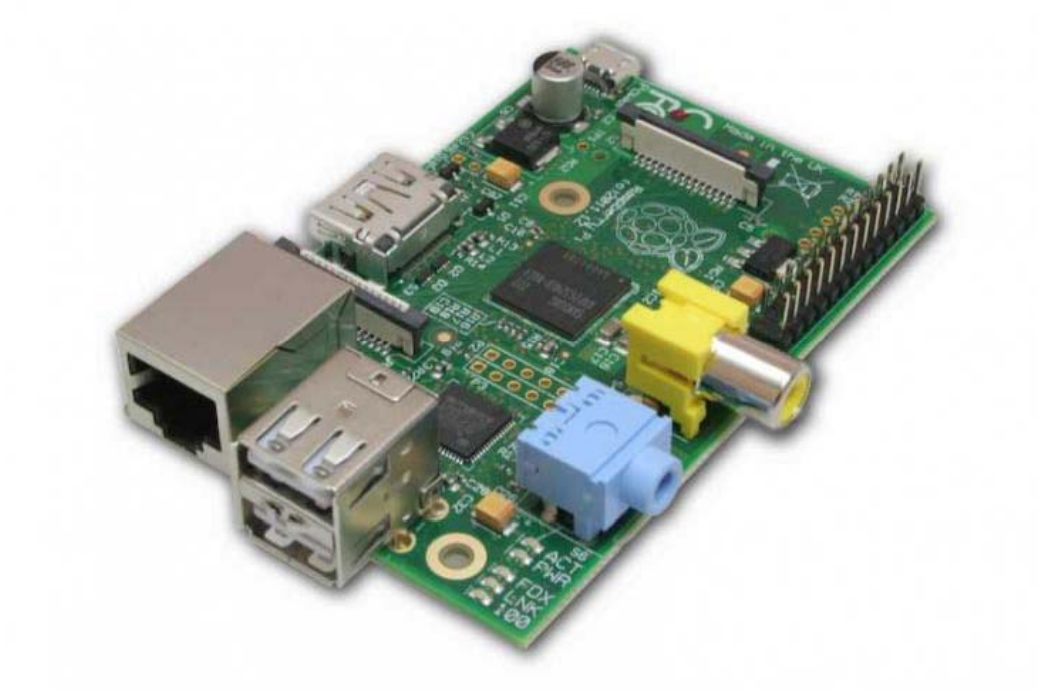
Raspberry Pi – GPIO



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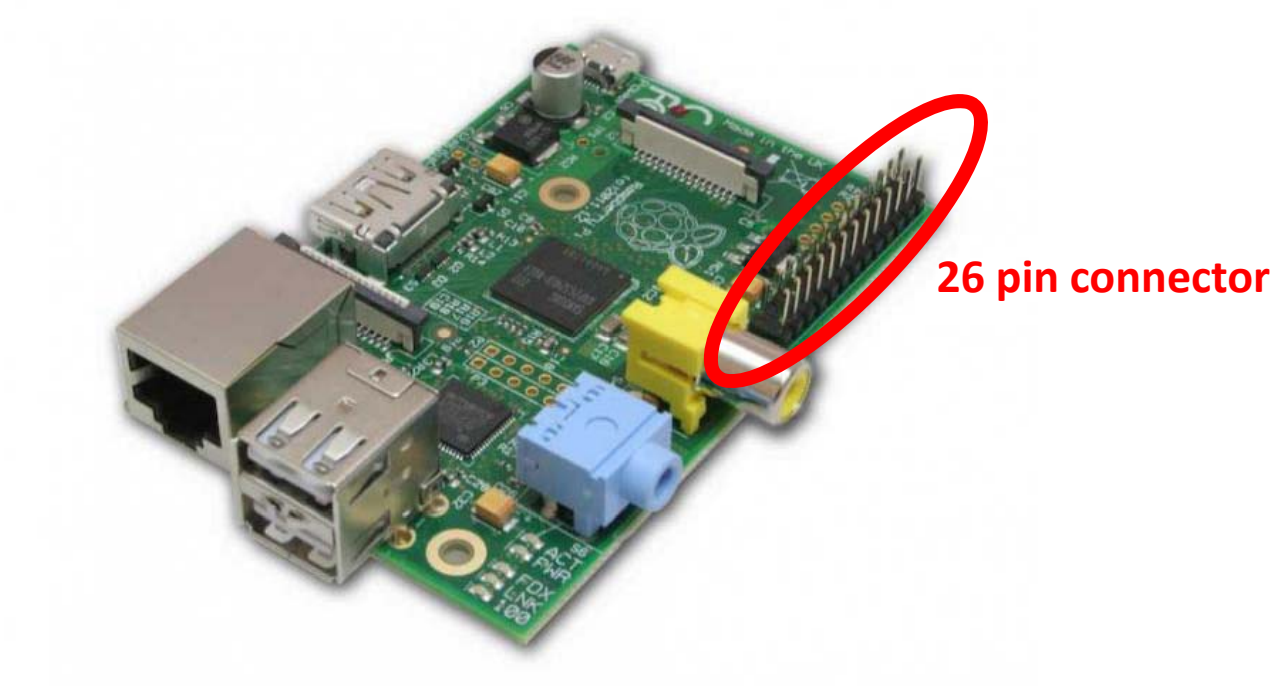


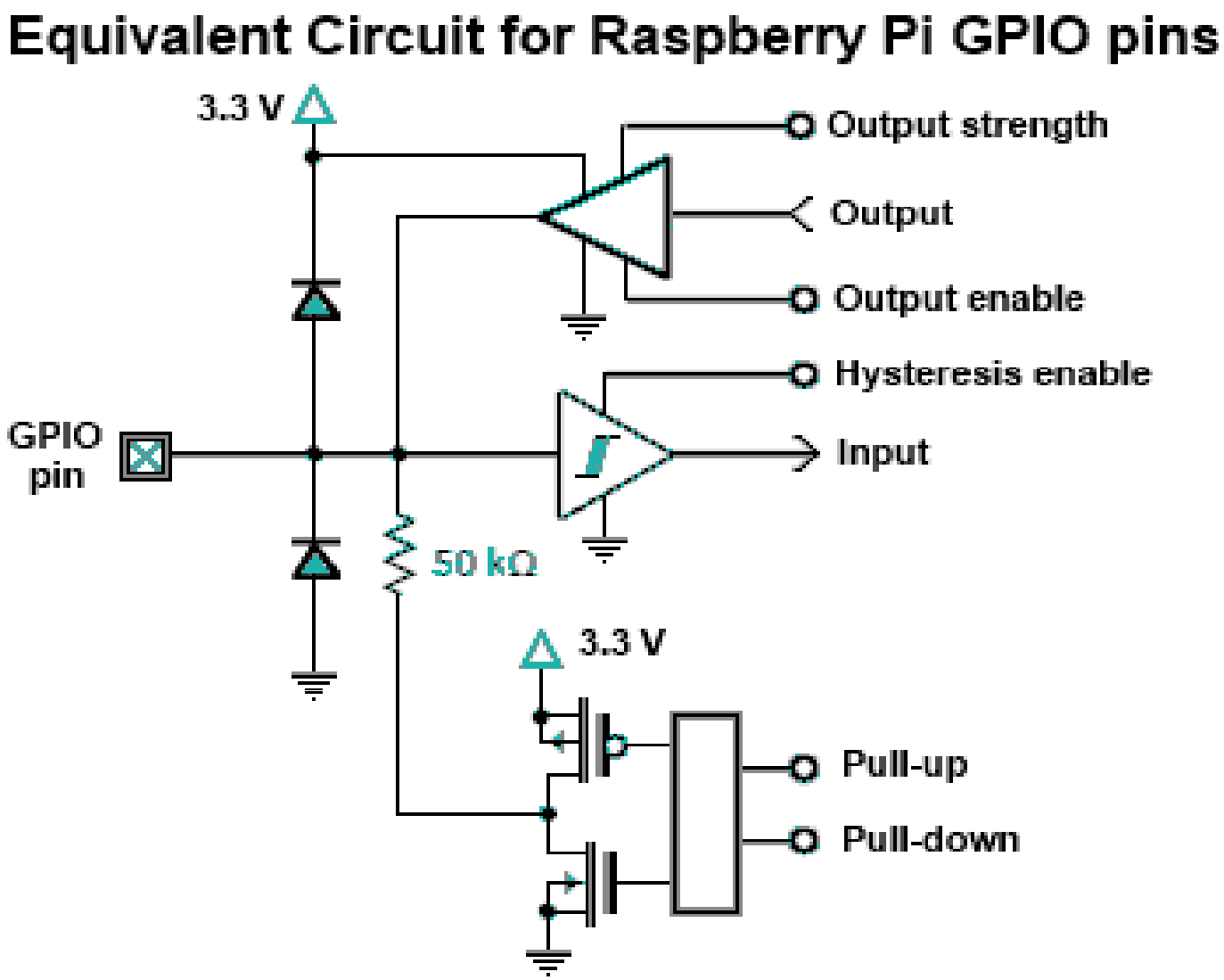
Raspberry Pi – GPIO

PIN-OUT

8 free digital I/O

3.3V	1	2	5V
I2C0 SDA	3	4	DNC
I2C0 SCL	5	6	GROUND
GPIO4	7	8	UART TXD
DNC	9	10	UART RXD
GPIO 17	11	12	GPIO 18
GPIO 21	13	14	DNC
GPIO 22	15	16	GPIO 23
DNC	17	18	GPIO 24
SP10 MOSI	19	20	DNC
SP10 MISO	21	22	GPIO 25
SP10 SCLK	23	24	SP10 CE0 N
DNC	25	26	SP10 CE1 N

Raspberry Pi – GPIO



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Some I/O Electrical Parameters		
V_{IL}	Input low voltage	Typical: < 0,54V
V_{IH}	Input high voltage	Typical: > 2,31V
V_{OL}	Output low voltage	Typical: < 0,40V
V_{OH}	Output high voltage	Typical: > 2,40V
I_{DRV}	Intensity drive (single pin) Sink/Source	2 - 16 mA (2mA step select) Typical: 8mA
I_{DRV}	Intensity drive (all pins)	Maximum: 50mA !!
R_{UD}	Pull Up/down resistor	Typical: 50 KOhm

Raspberry Pi – GPIO

PYTHON CODE EXAMPLE

provaio.py

```
import RPi.GPIO as GPIO

GPIO.setmode(GPIO.BCM)
GPIO.setup(23,GPIO.IN,pull_up_down=GPIO.PUD_UP)

print("Esperant contacte...")

GPIO.wait_for_edge(23,GPIO.FALLING)

print("Sortint")

GPIO.cleanup()
```

Raspberry Pi – GPIO

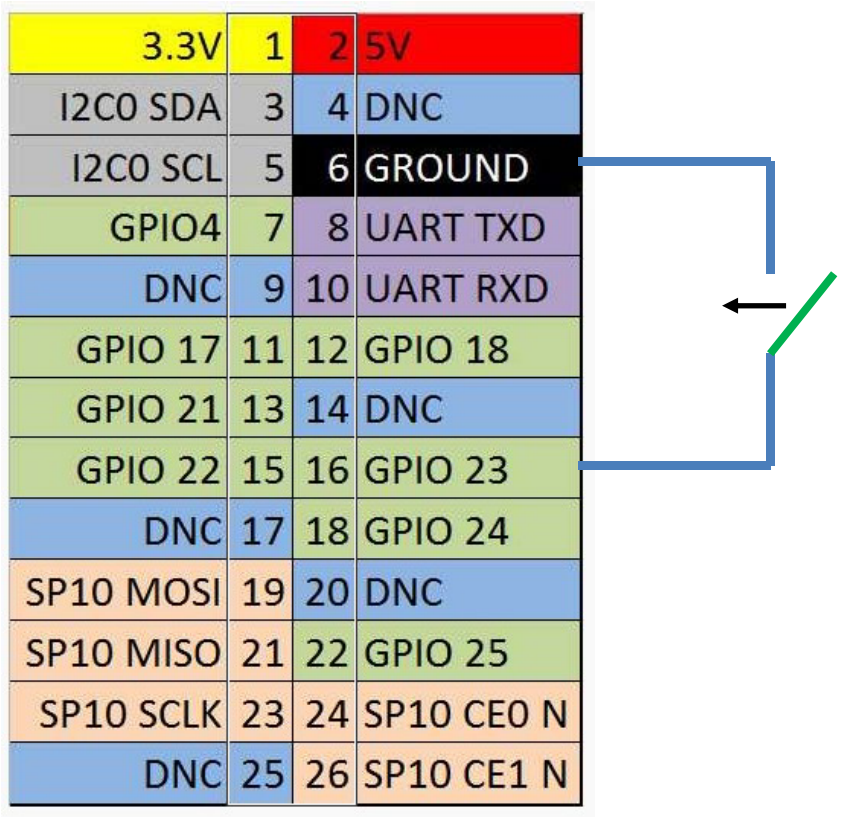
PYTHON CODE EXAMPLE

Prerequisites:

```
>sudo   apt-get update
>sudo   apt-get install python-dev
>sudo   apt-get install python-rpi.gpio
```

Raspberry Pi – GPIO

TEST: GPIO23 (pin 16) connects to GROUND (pin 6)



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