

Python

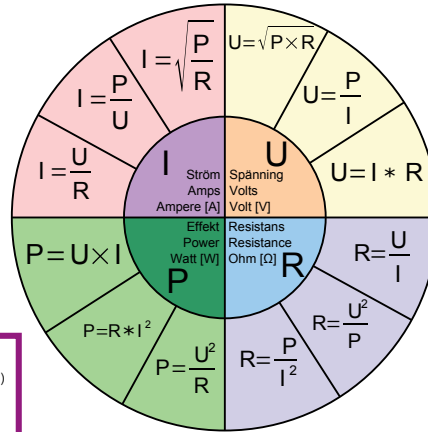
```
import RPi.GPIO as GPIO

Set port as output
GPIO.setup(11, GPIO.OUT)

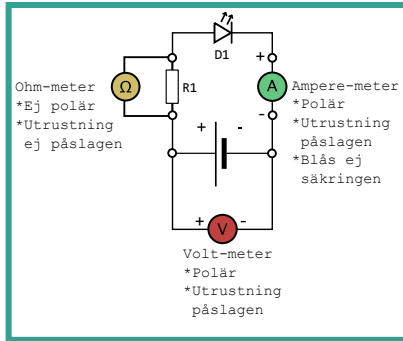
Enable port
GPIO.output(11, False)
```

```
Set port as input
GPIO.setup(12, GPIO.IN)

Read port
if GPIO.input(12):
    GPIO.output(11, False)
```

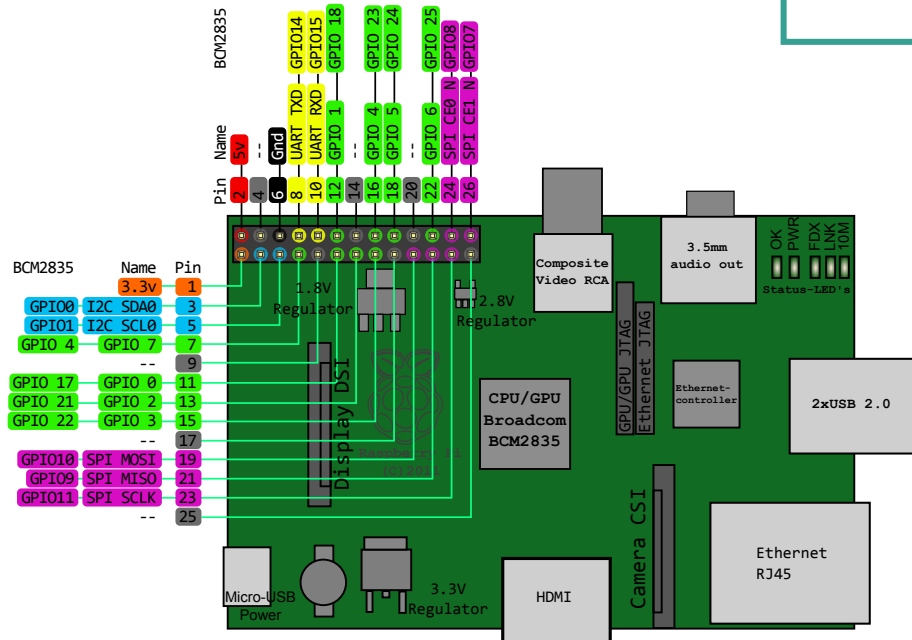


Mätutrustning



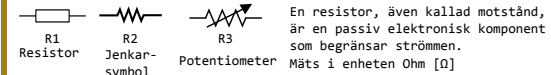
Raspberry Pi - Specification

Developer: Raspberry Pi Foundation
SoC: Broadcom BCM2835 (CPU, GPU, DSP, SDRAM, and single USB port)
Power: 5 volt via MicroUSB or GPIO header
 2.5 W (model A)
 3.5 W (model B)
CPU: ARM1176JZF-S (armv6k, ARM11-family) 700 Mhz
Storage: SD card slot (SD or SDHC card)
Memory: 256 MByte (Model A) (Shared with GPU)
 256 MByte (Model B rev 1) (Shared with GPU)
 512 MByte (Model B rev 2) (Shared with GPU)
Graphics: Broadcom VideoCore IV
Video-out: Composite RCA (PAL and NTSC)
 HDMI (rev 1.3 & 1.4, resolutions from 640x350 to 1920x1200)
 Raw LCD Panels via DSI
Audio-out: 3.5 mm jack
 HDMI
Network: 10/100 Ethernet (8P8C) on USB (model B)
Size: 85.60x53.98 [mm]
Weight: 45g



Elektronikkomponenter, schema-symboler

Resistorer



Strömkällor

Likström (DC)
 Är elektrisk ström som alltid har samma riktning till skillnad från växelström där strömmen byter riktning. Spänning mäts i volt [V]
 Ström mäts i ampere [A]
 Effekt mäts i watt [W]

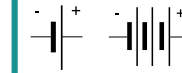
Positiva spänningskällor



0V och Jord

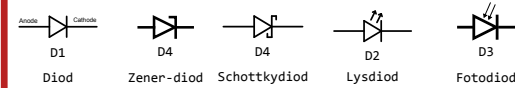


Energi kan lagras i batterier/akumulatorer



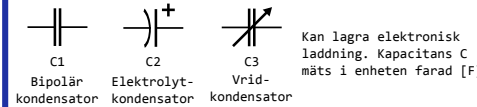
Växelström (AC)
 Är en elektrisk ström vars riktning växlar. Växelspänningar är periodiska och följer med tämligen stor noggrannhet en sinuskurva.

Diöder

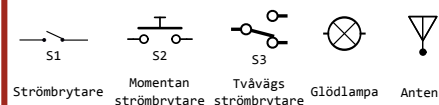


En komponent som idealt leder elektrisk ström i endast en riktning

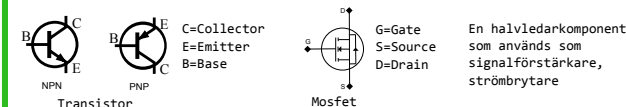
Kondensatorer



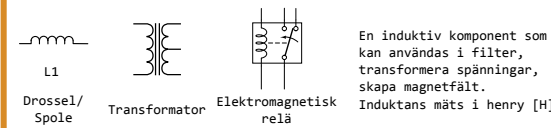
Övrigt



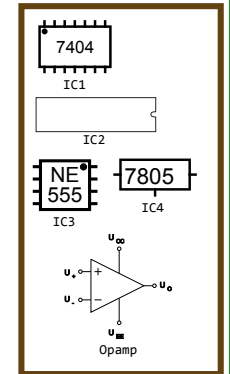
Transistorer



Drosslar och Elektromekanik

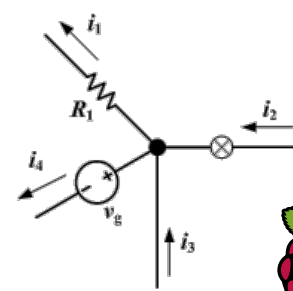


Integrerade kretsar (IC:s)

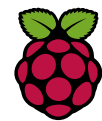
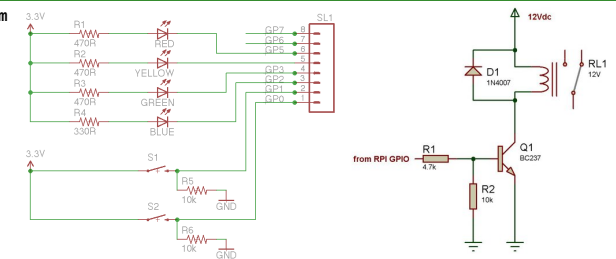


Kirchhoffs strömlag

Summan av alla elektriska strömmar som flyter till en nod är lika med summan av alla strömmar som flyter från noden.



Exempel-diagram



File: Cheat-Sheet elektronik.svg
 Sheet: /
Title: Kodar-LAN tema: Raspberry Pi
 Size: A4 Date: 2013-06-15
 KiCad E.D.A. eeschema

Rev: 3
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