

# Elektronikaskeemid

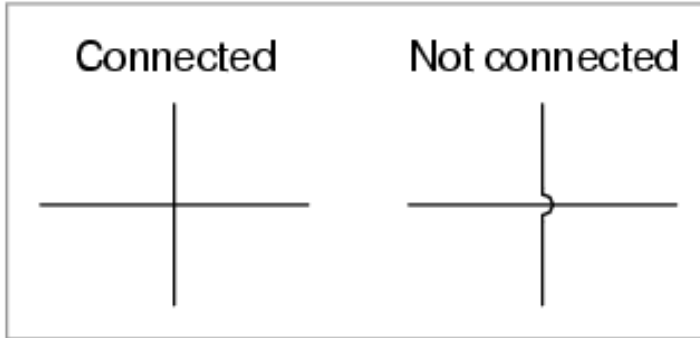
Teeme Ise 2015



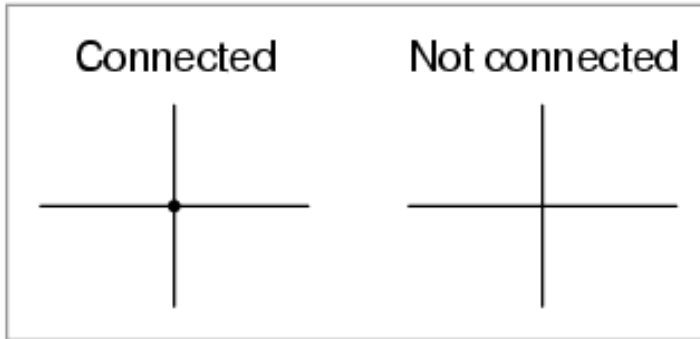
TTÜ Robotiklubi  
Tallinn University of Technology Robotics Club

# Juhtmete ühendus

Older convention



Newer convention



# Takistid

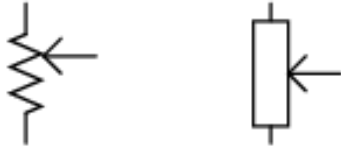
Fixed-value



Rheostat



Potentiometer



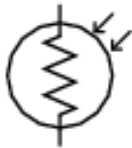
Tapped



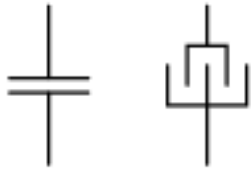
Thermistor



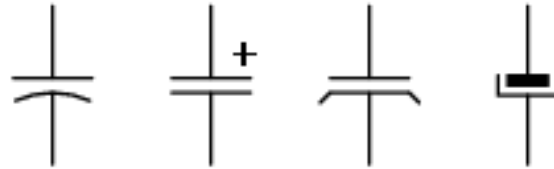
Photoresistor



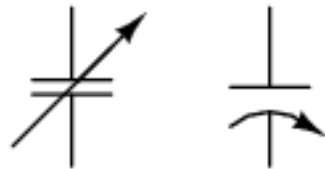
Non-polarized



Polarized (top positive)



Variable



# Poolid

Fixed-value



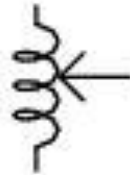
Iron core



Variable



Variac

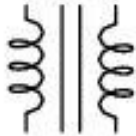


Tapped

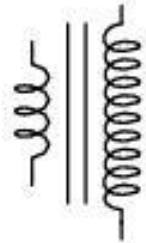


# Trafod

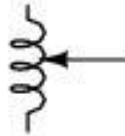
Transformer



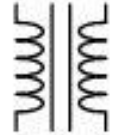
Step-up/step-down transformer



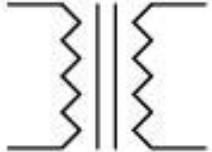
Variac



Transformer



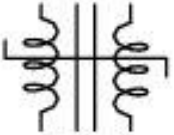
Transformer



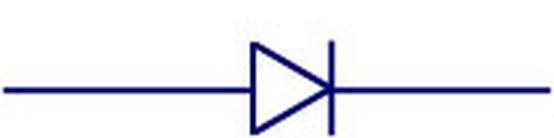
Transformer



Saturable reactor



# Diodes



Diode Circuit Symbol



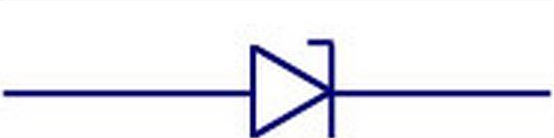
Photo Diode Circuit Symbol



LED Circuit Symbol



Tunnel Diode Circuit Symbol



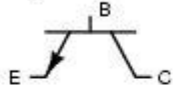
Zener Diode Circuit Symbol



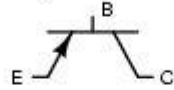
Schottky Diode Circuit Symbol

# Transistorid

Bipolar NPN



Bipolar PNP



... with case

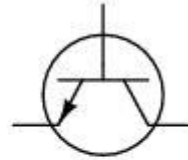
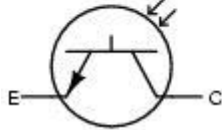
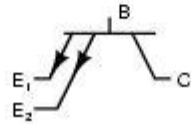


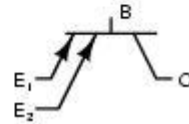
Photo-



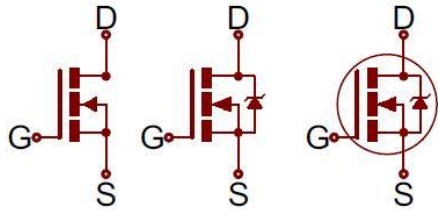
Dual-emitter NPN



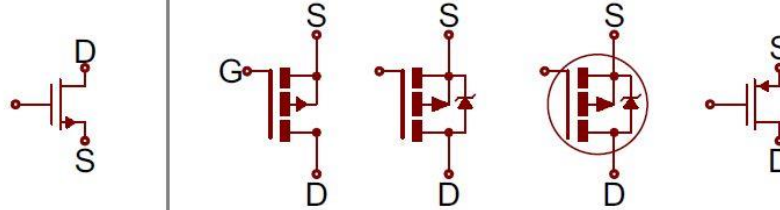
Dual-emitter PNP



n-Channel MOSFETs



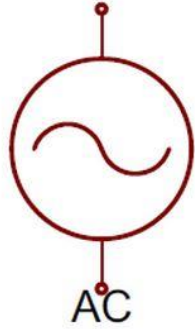
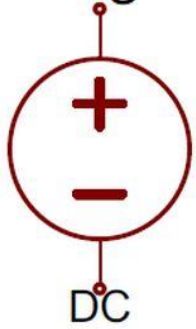
p-Channel MOSFETs





# Toide, maa

## Voltage Sources

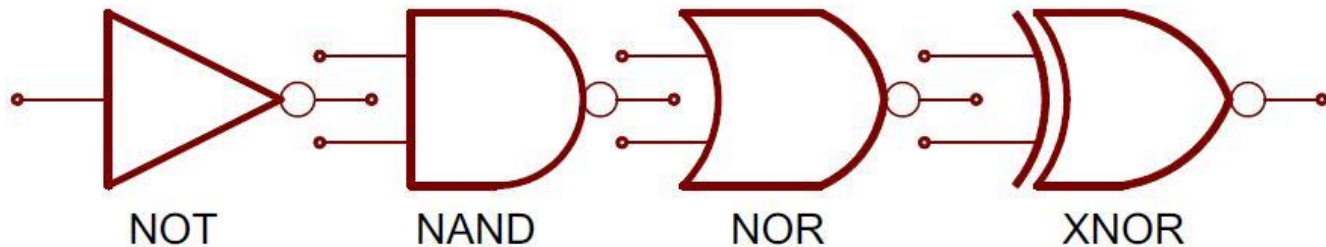
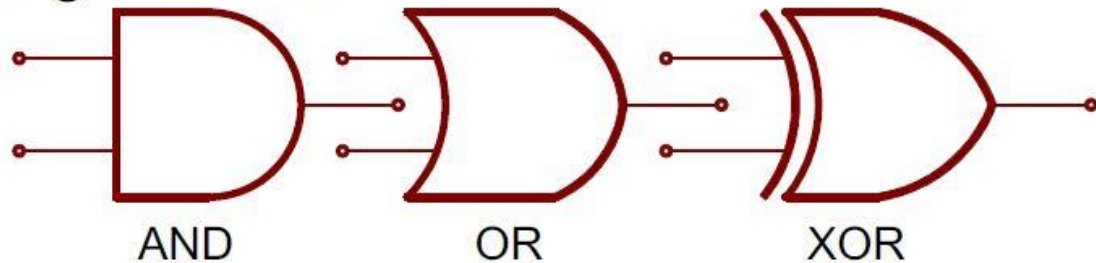


## Batteries

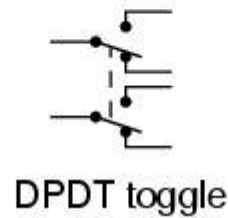
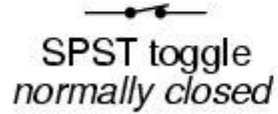
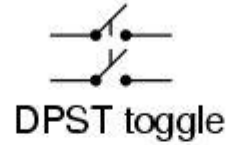


# Loogika- elemendid

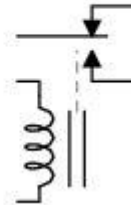
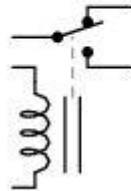
## Logic Gates



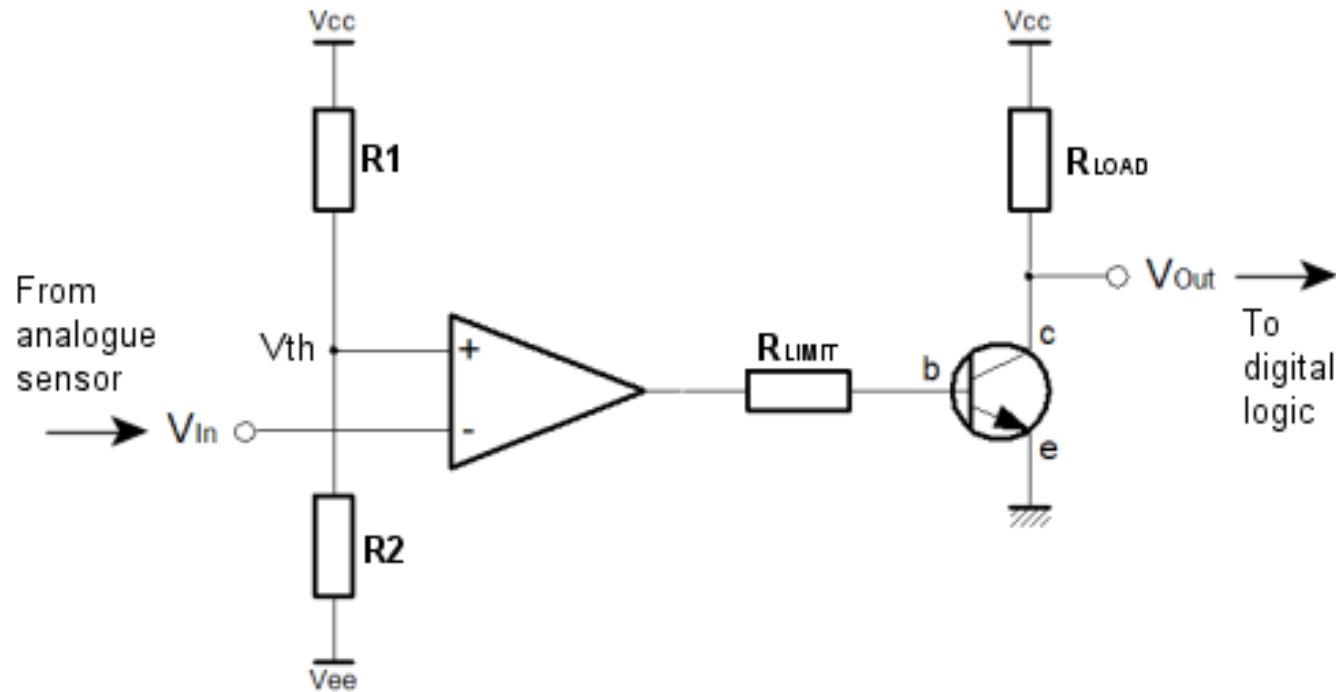
# Lülitid



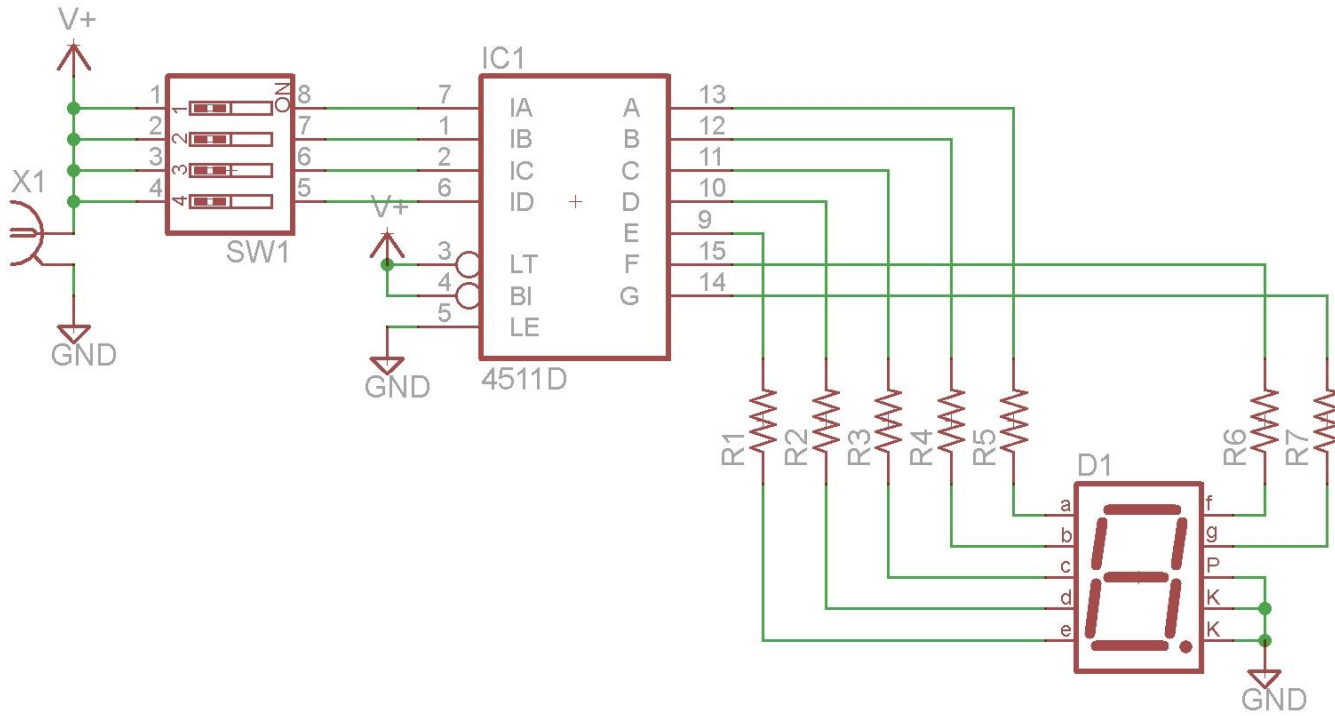
*Relays, electronic schematic notation style*



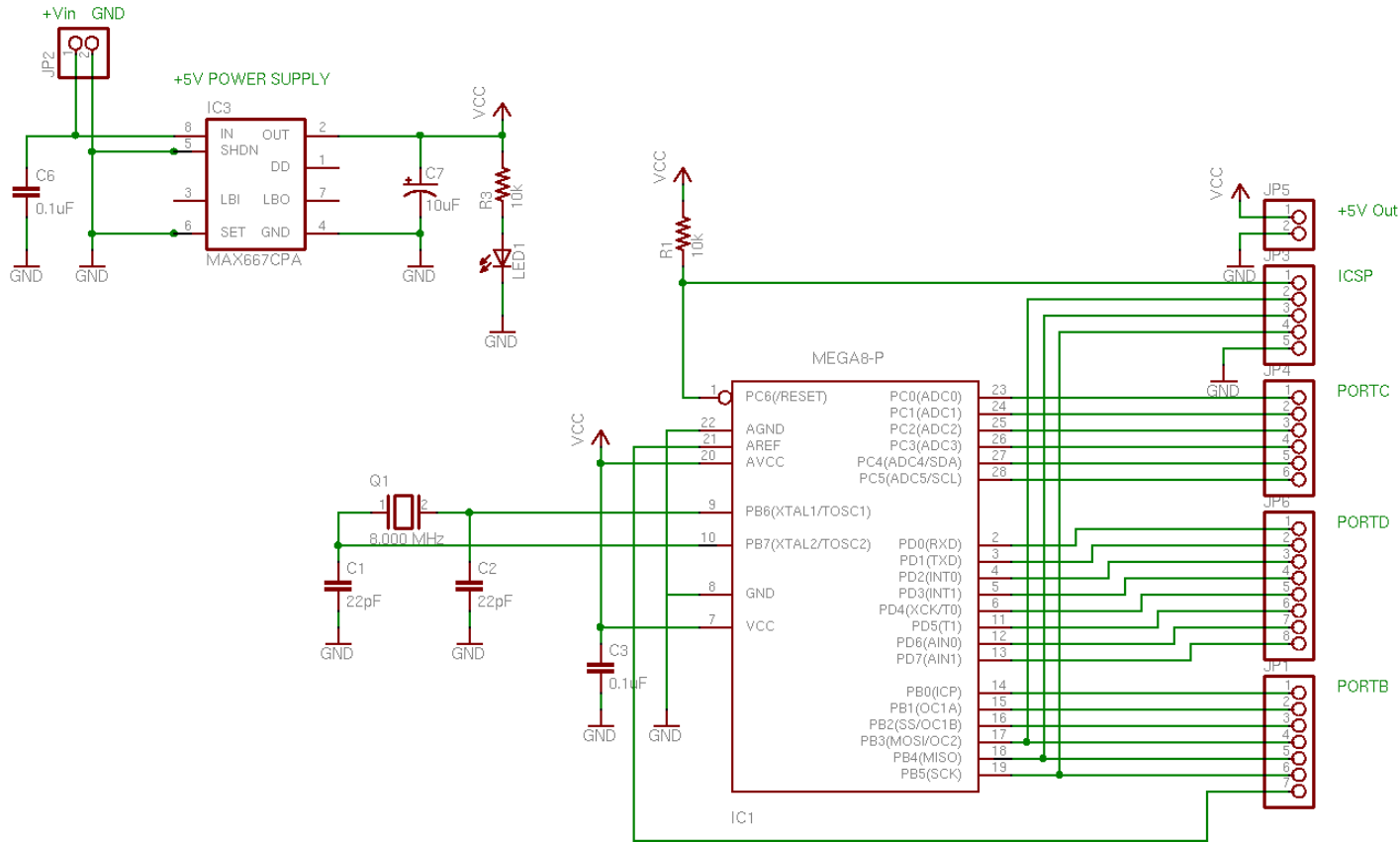
# Skeemid



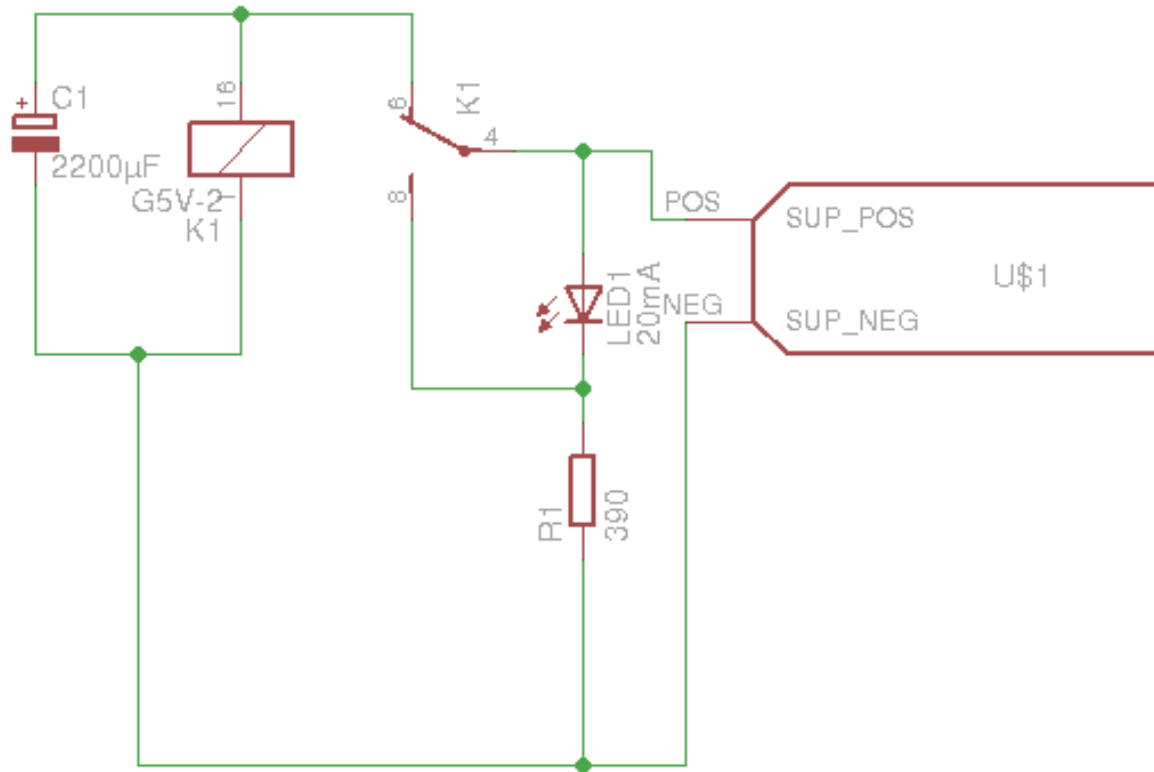
# Skeemid



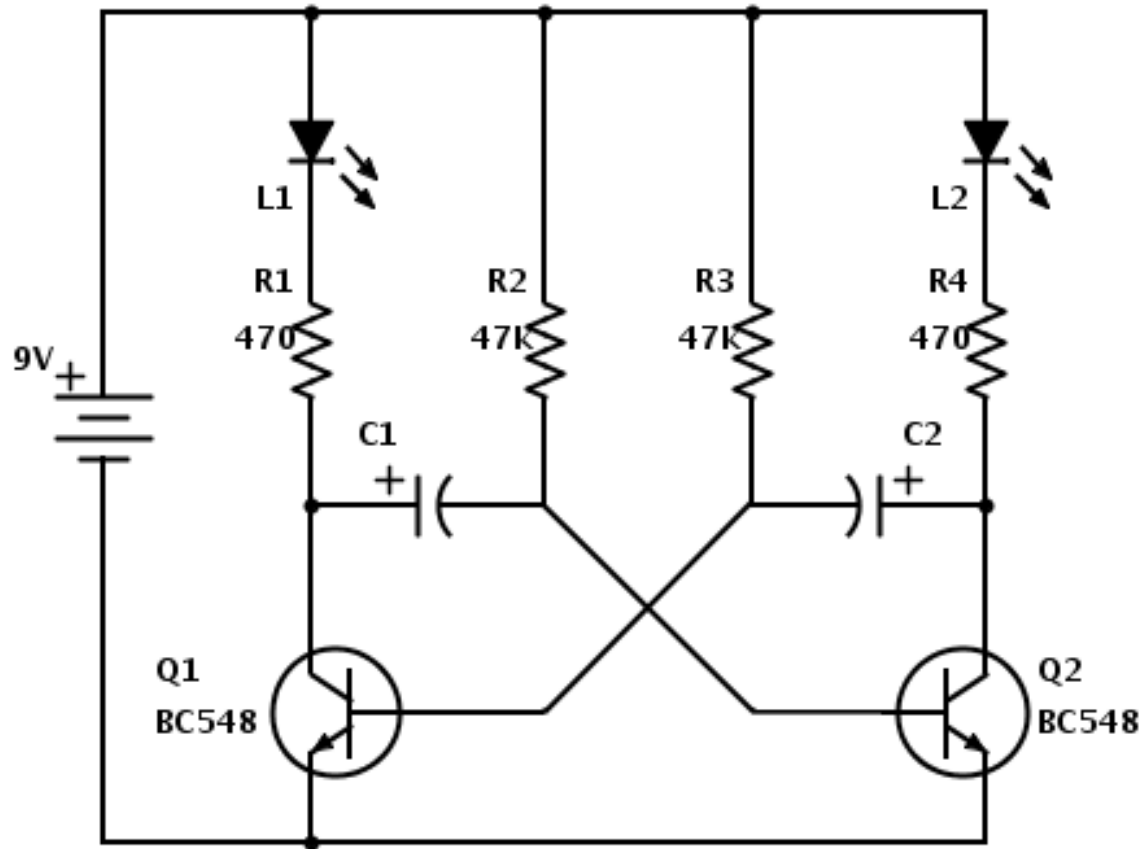
# Skeemid



# Skeemid

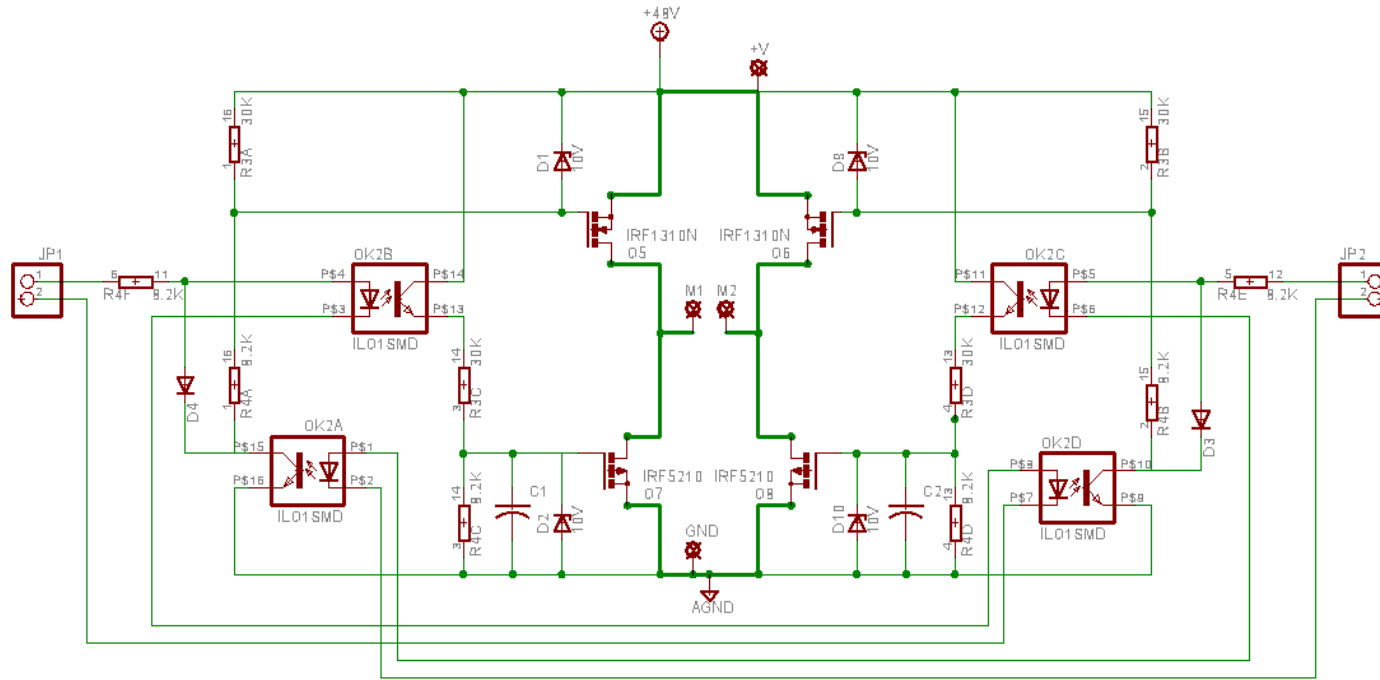


# Skeemid

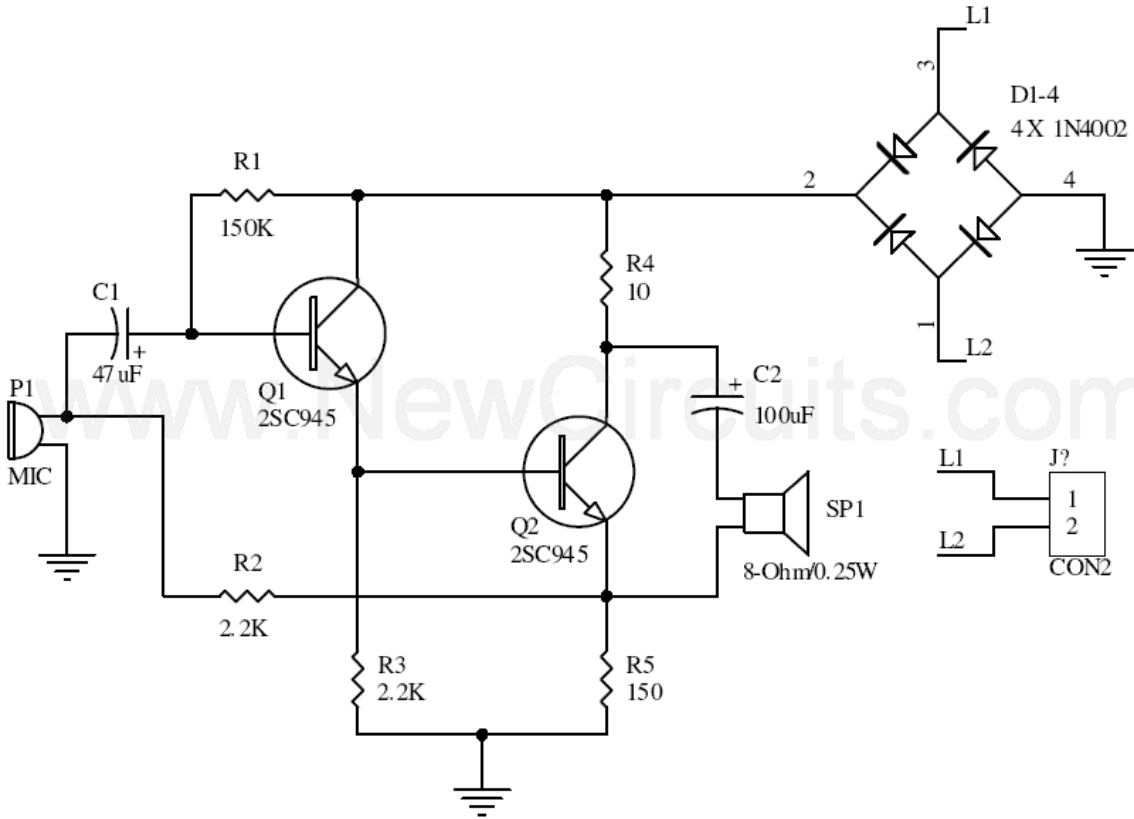




# Skeemid



# Skeemid





Eero Raav

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