

Elektroonikaskeemid

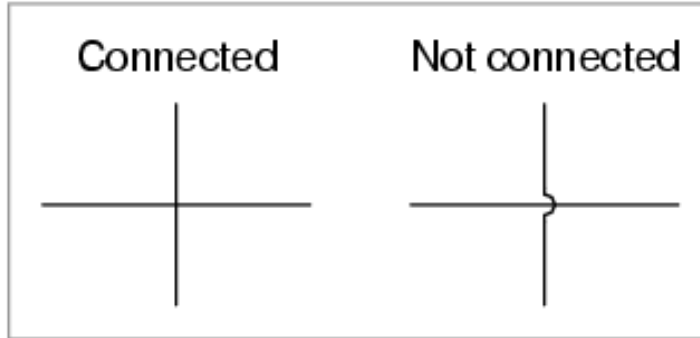
Robotite projekteerimise
algkursus 2016



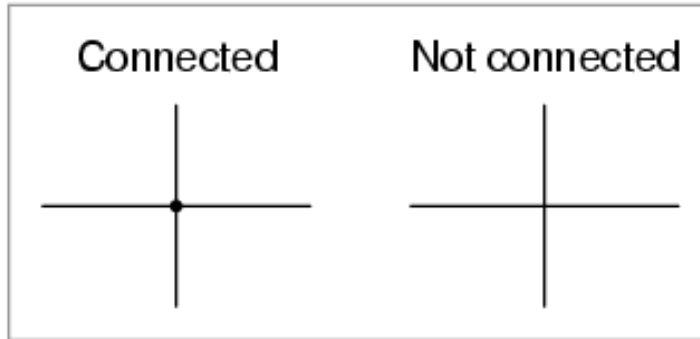
TTÜ Robotiklubi
Tallinn University of Technology Robotics Club

Juhtmete ühendus

Older convention



Newer convention



Takistid

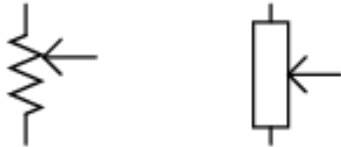
Fixed-value



Rheostat



Potentiometer



Tapped



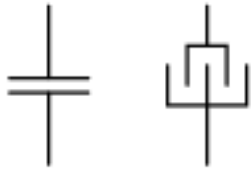
Thermistor



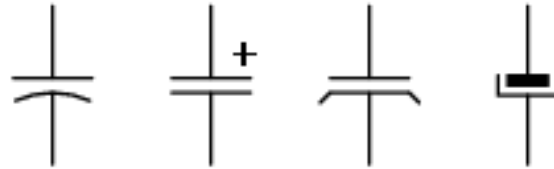
Photoresistor



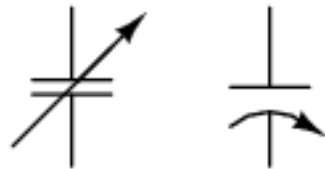
Non-polarized



Polarized (top positive)



Variable



Poolid

Fixed-value



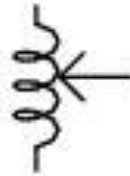
Iron core



Variable



Variac



Tapped

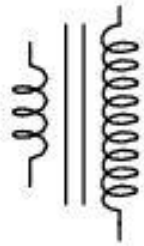


Trafod

Transformer



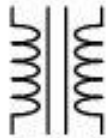
Step-up/step-down transformer



Variac



Transformer



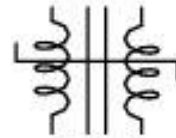
Transformer



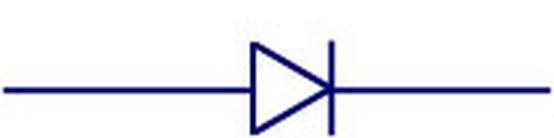
Transformer



Saturable reactor



Diodes



Diode Circuit Symbol



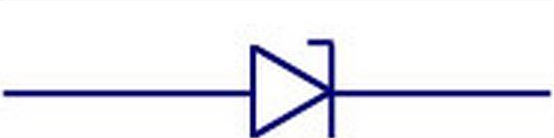
Photo Diode Circuit Symbol



LED Circuit Symbol



Tunnel Diode Circuit Symbol



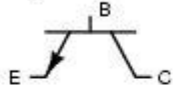
Zener Diode Circuit Symbol



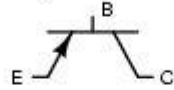
Schottky Diode Circuit Symbol

Transistorid

Bipolar NPN



Bipolar PNP



... with case

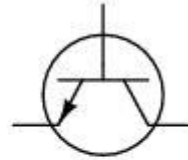
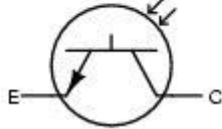
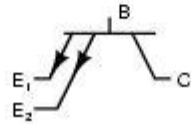


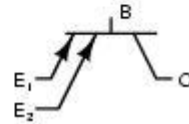
Photo-



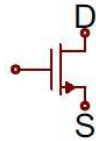
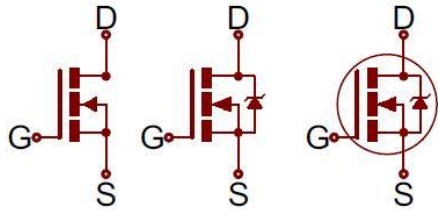
Dual-emitter NPN



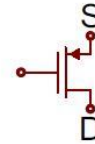
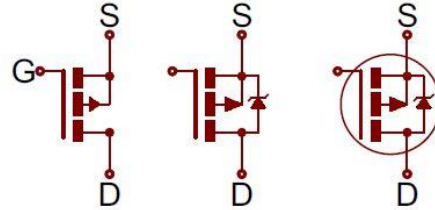
Dual-emitter PNP



n-Channel MOSFETs

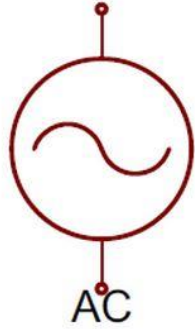
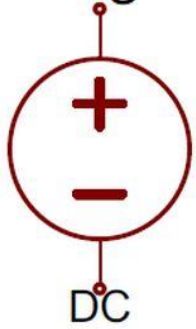


p-Channel MOSFETs



Toide, maa

Voltage Sources

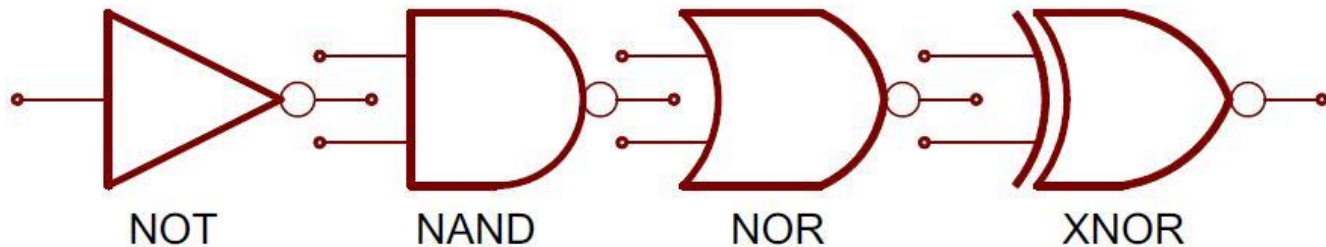
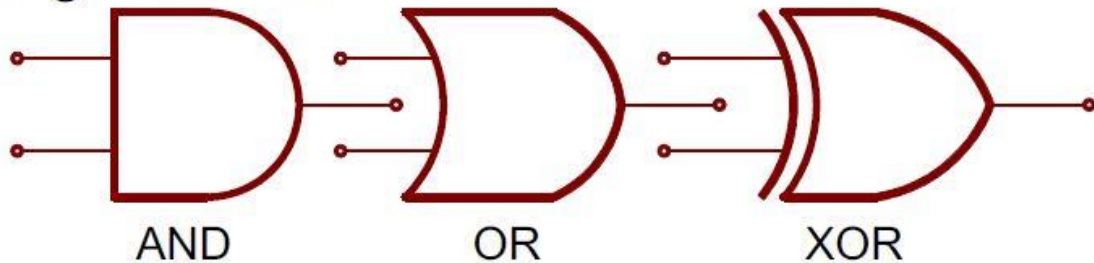


Batteries

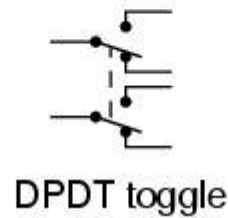
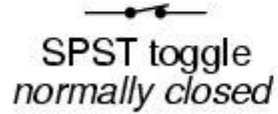
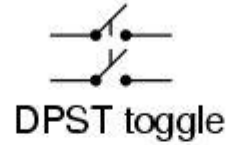
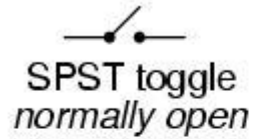


Loogika- elemendid

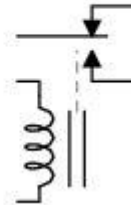
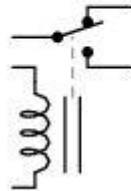
Logic Gates



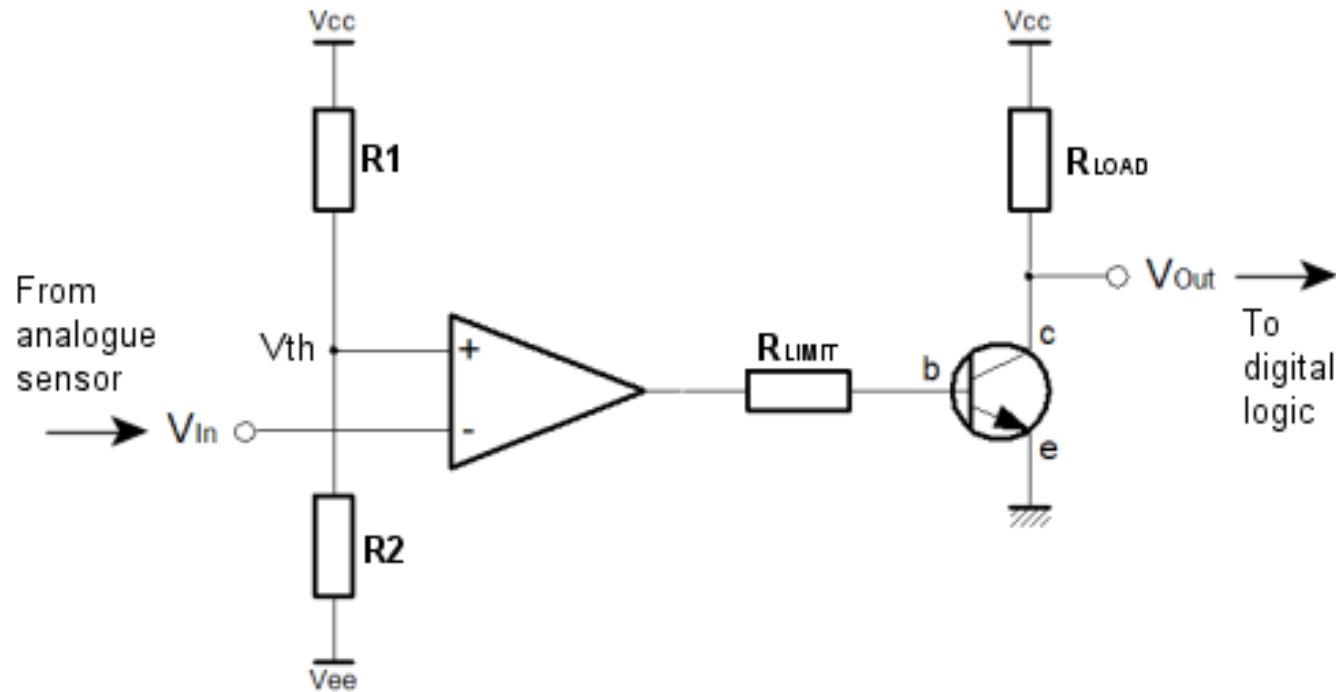
Lülitid



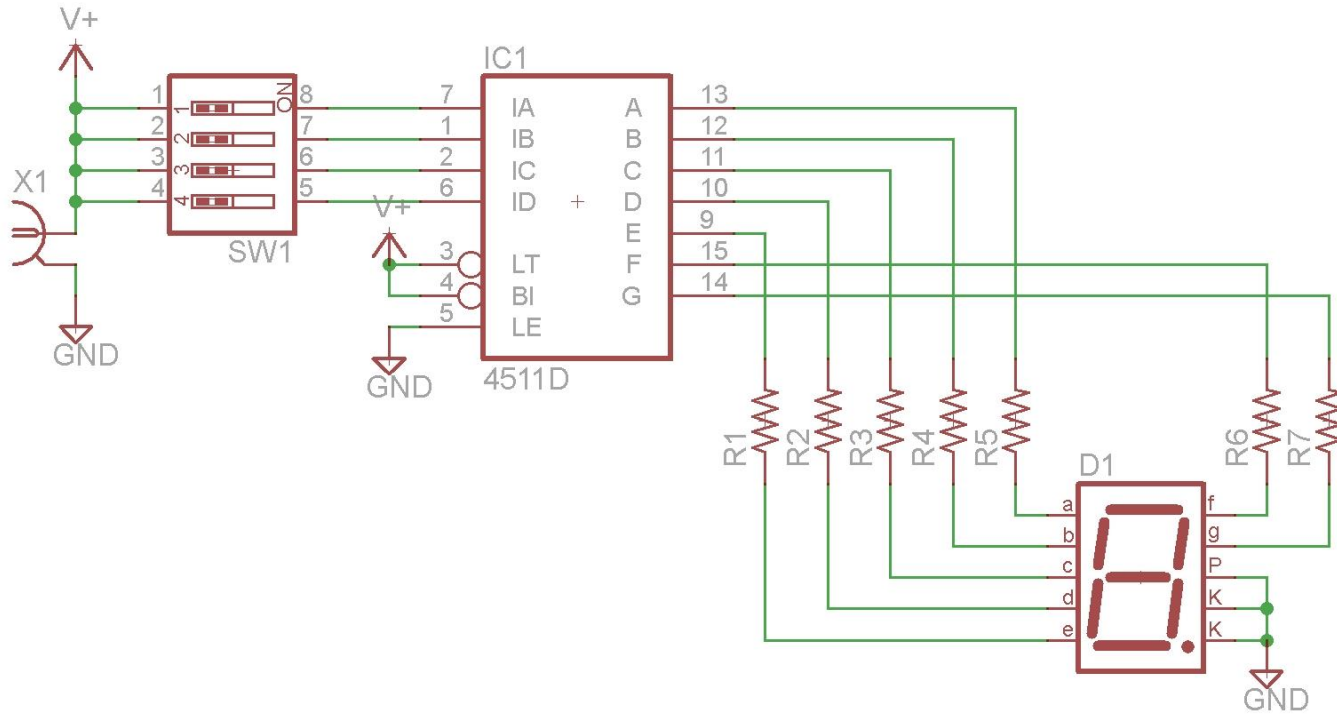
Relays, electronic schematic notation style



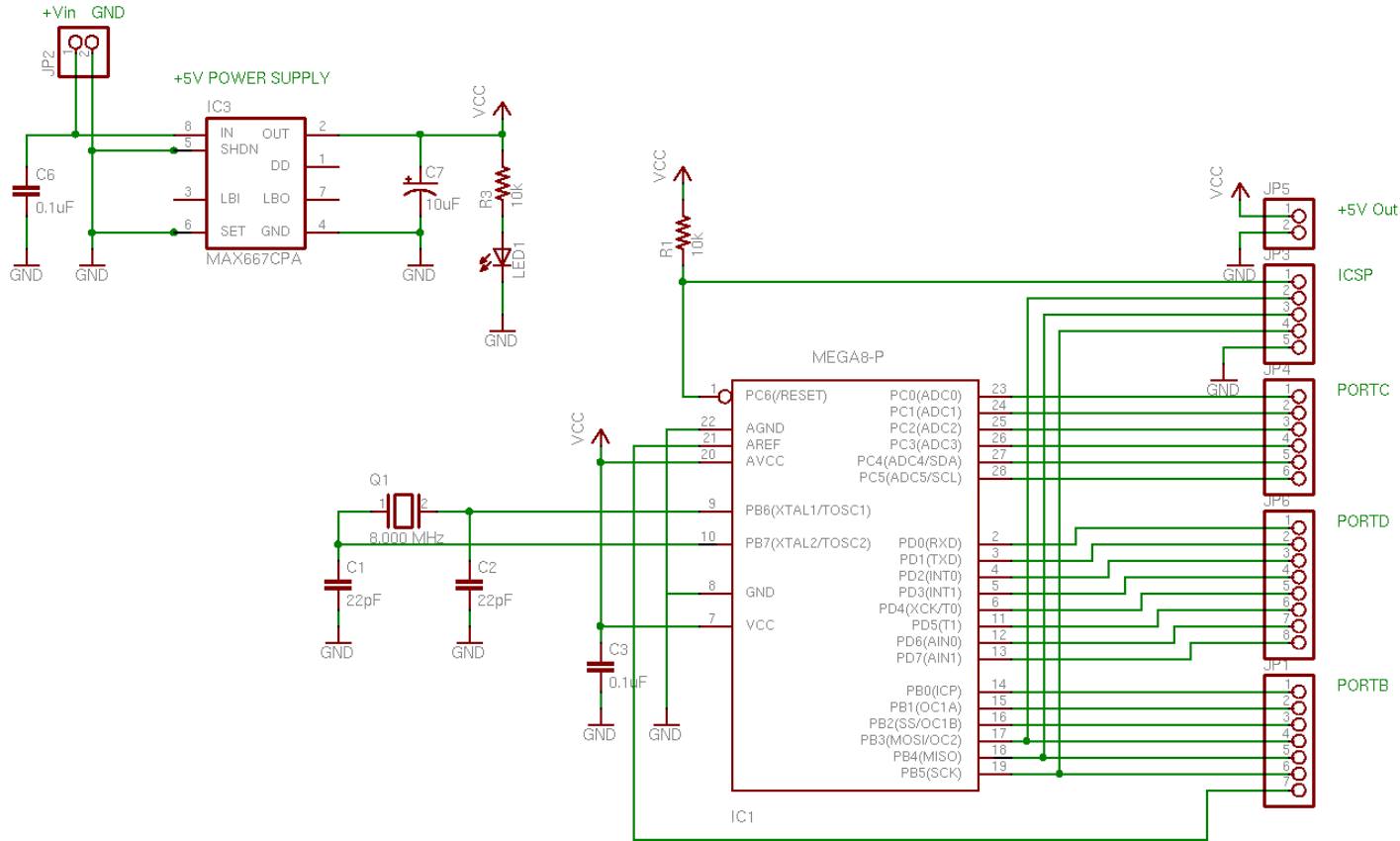
Skeemid



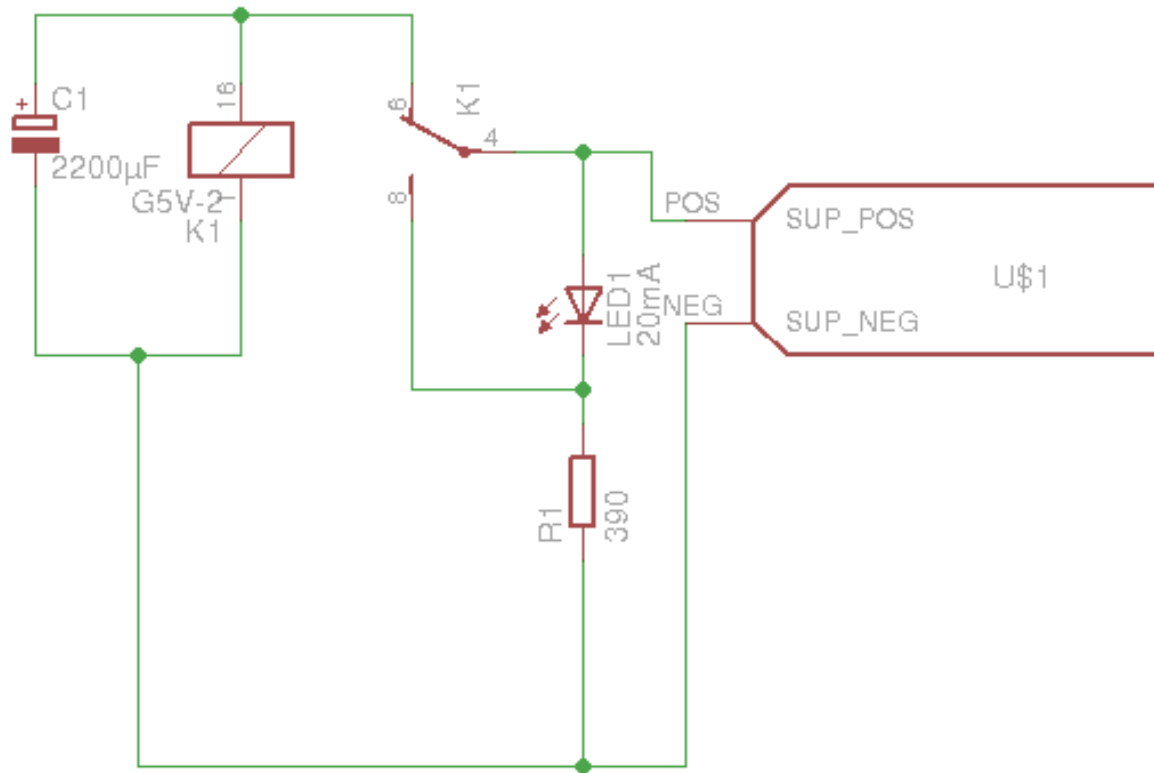
Skeemid



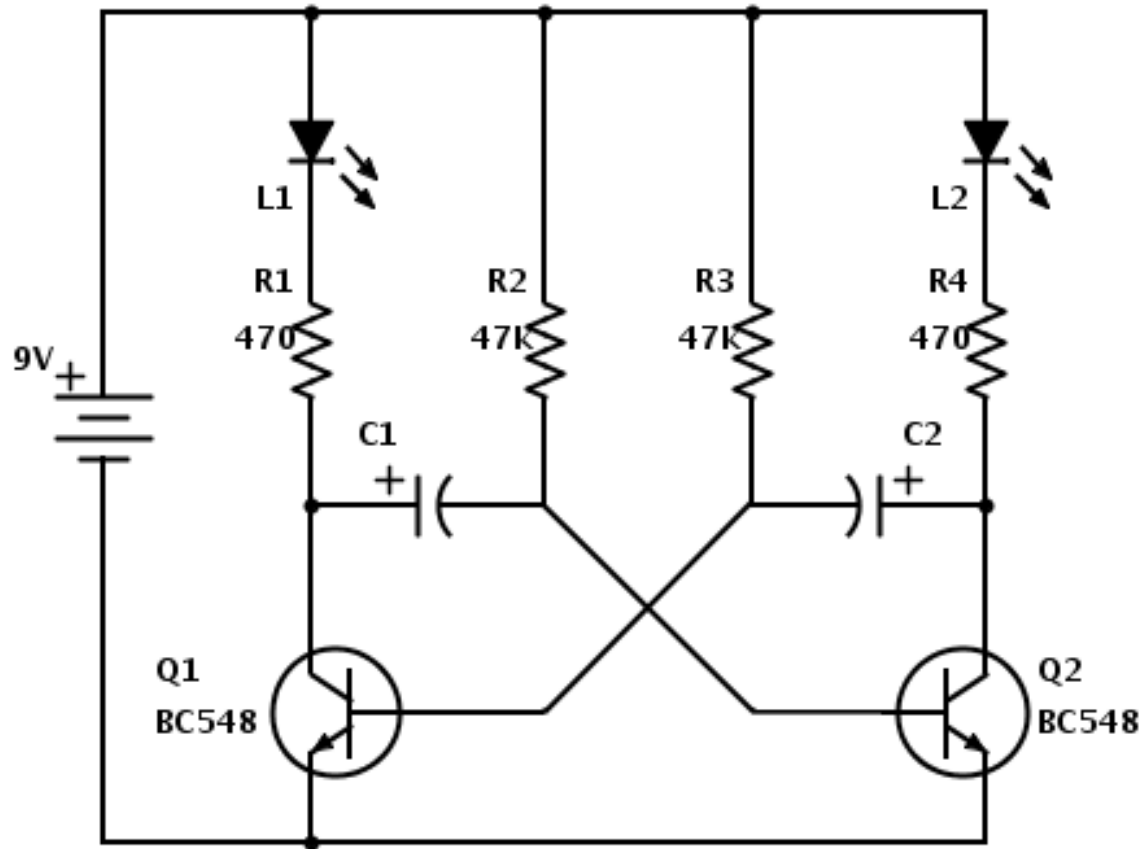
Skeemid



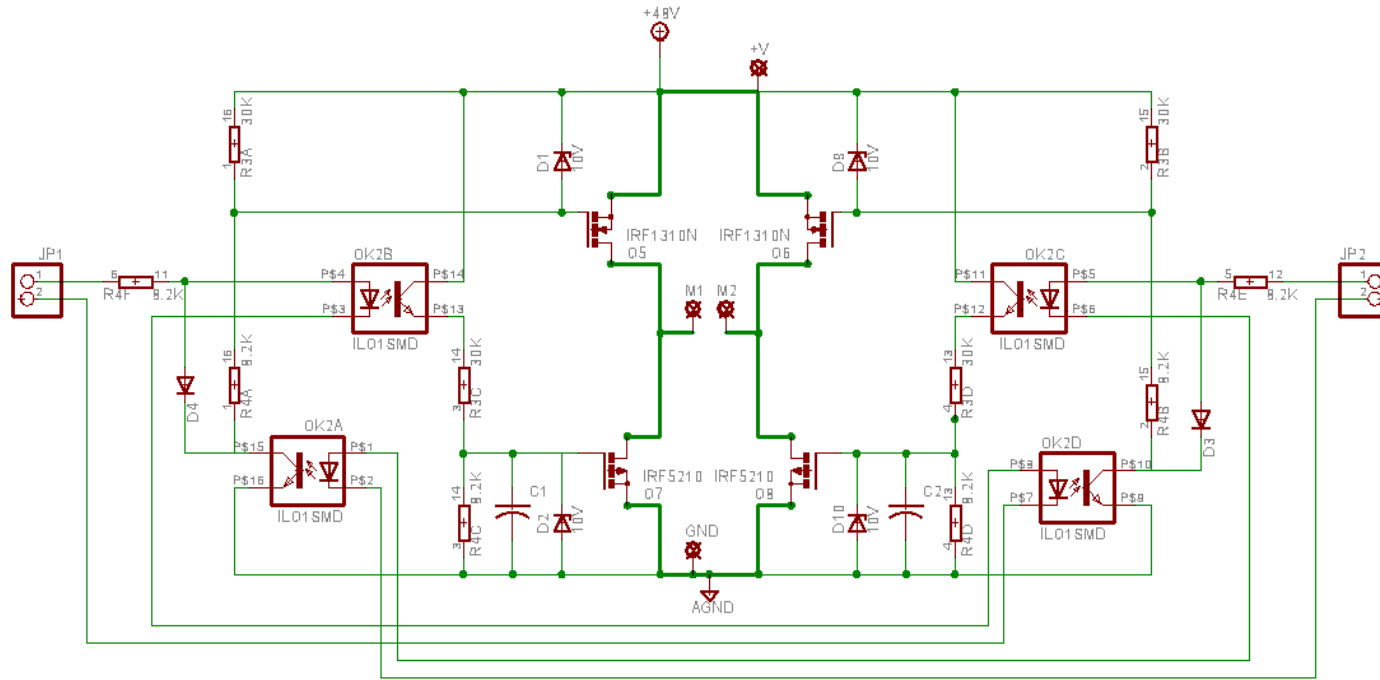
Skeemid



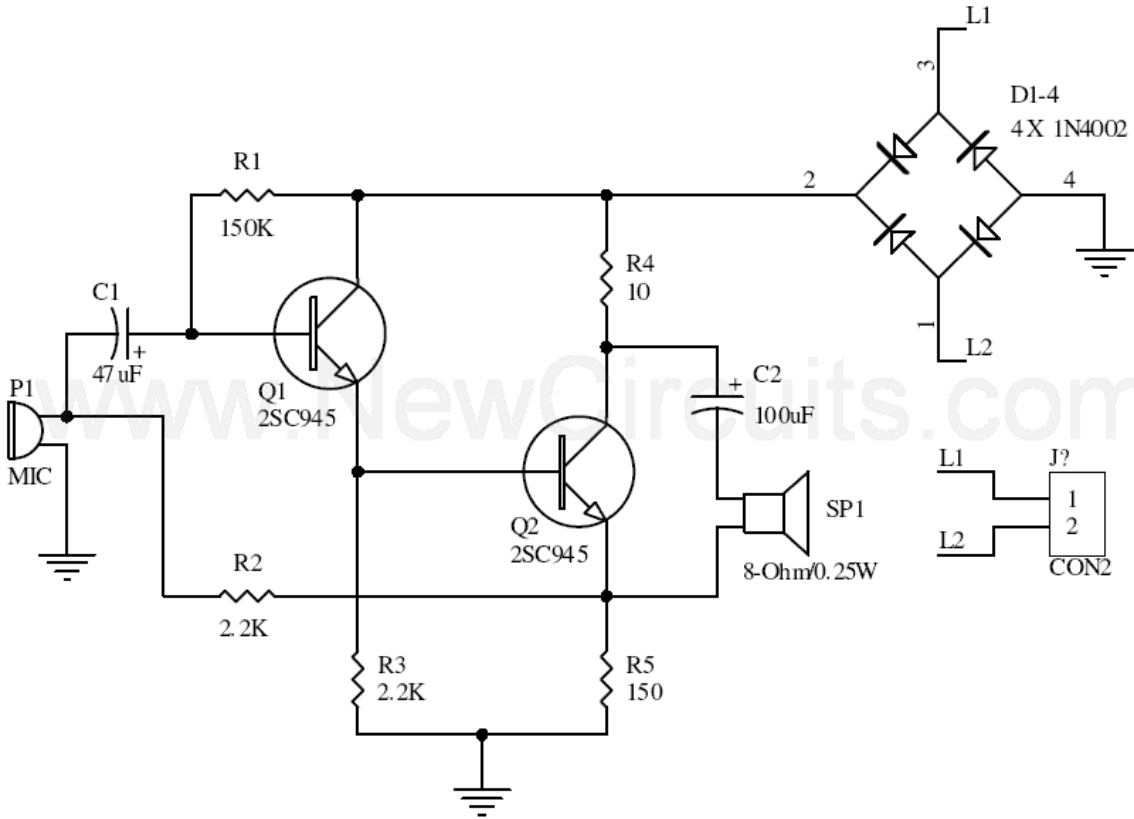
Skeemid



Skeemid



Skeemid





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tel. NONE