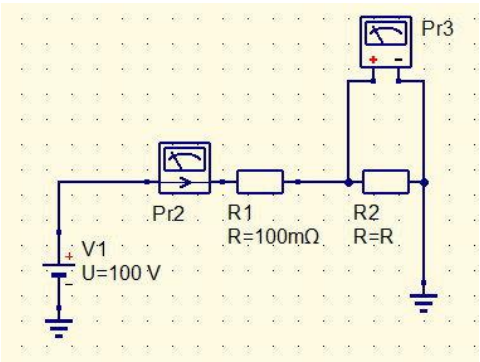
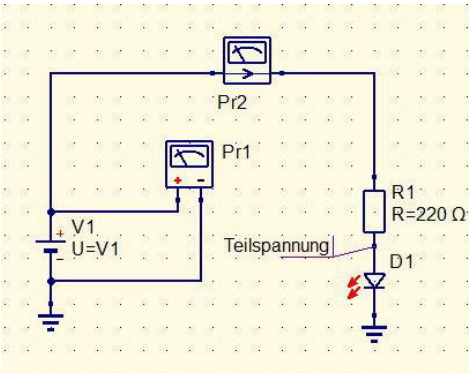
Qucs-Studio: Übungen

Einfacher Stromkreis; Spannungsteiler; Leistung

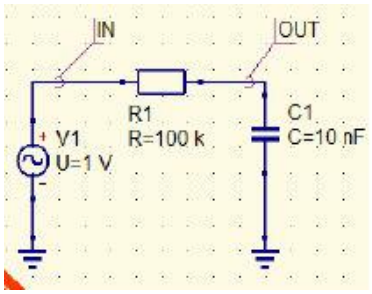


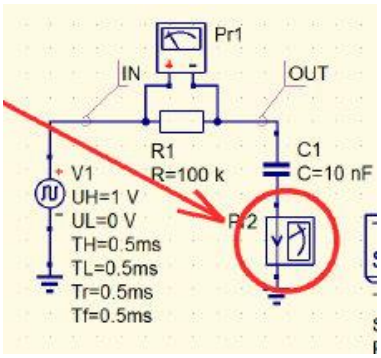
DC-Simulation; Parametersweep R2; Leistungsermittlung; Tabellendarstellung



DC-Simulation; Parametersweep V1; Leistungsermittlung; Tabellendarstellung

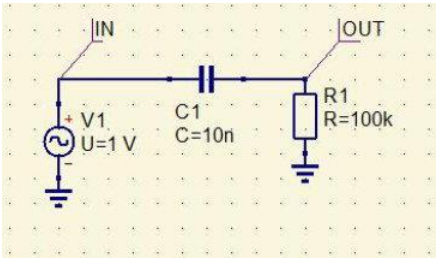
Tiefpass





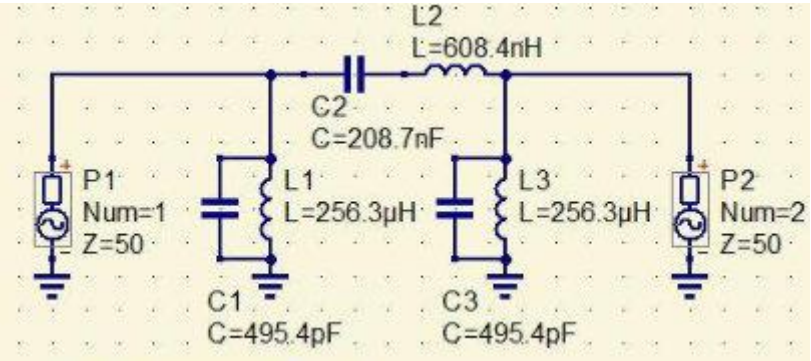
Speisung mit unterschiedlichen Signalen (Sinus, Rechteck, Dreieck);
Strom und Spannungsmessungen; AC- und Transientensimulation; Darstellung V(t); V(f); dB; FFT;

Hochpass



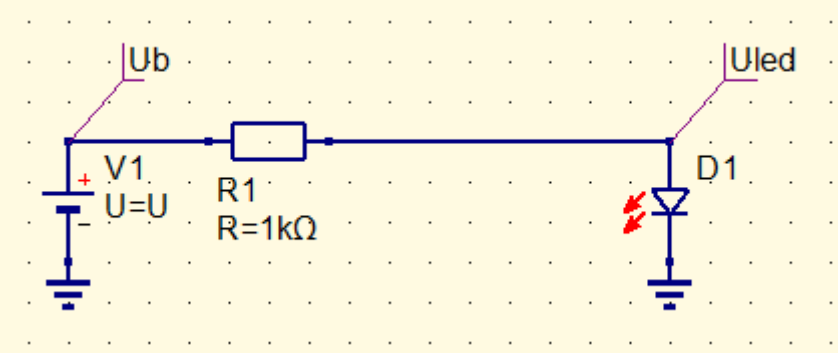
AC- und Transientensimulation; Darstellung V(t); V(f); dB; FFT;

Bandpass



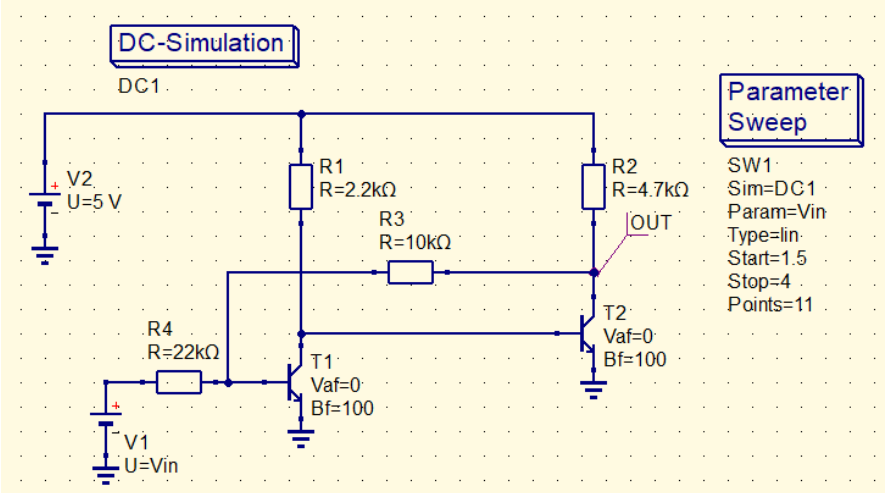
AC- und Transientensimulation, S-Parameter Simulation

Spannungsbegrenzung mit LED

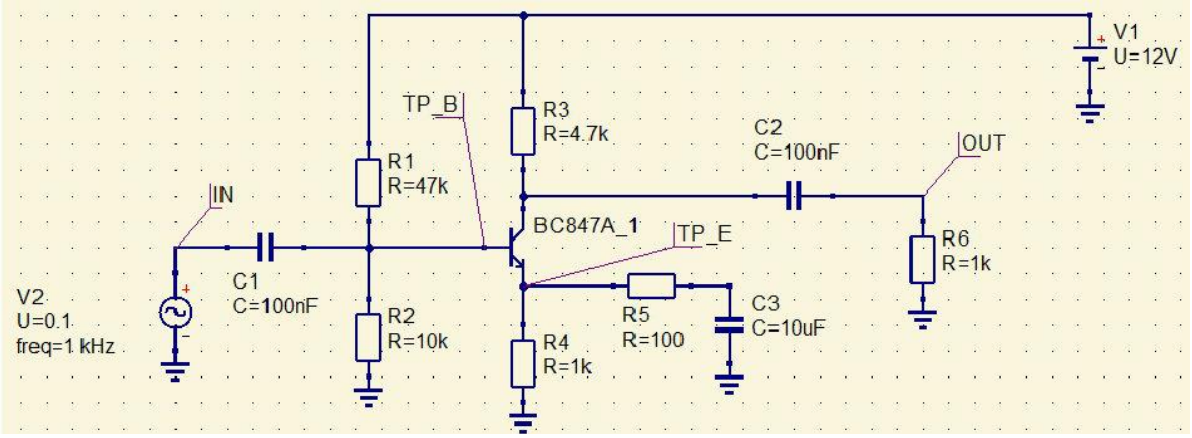


DC-Simulation (Uled); Parametersweep 0-12V; Diagramm; Tabelle

Schmitt-Trigger:

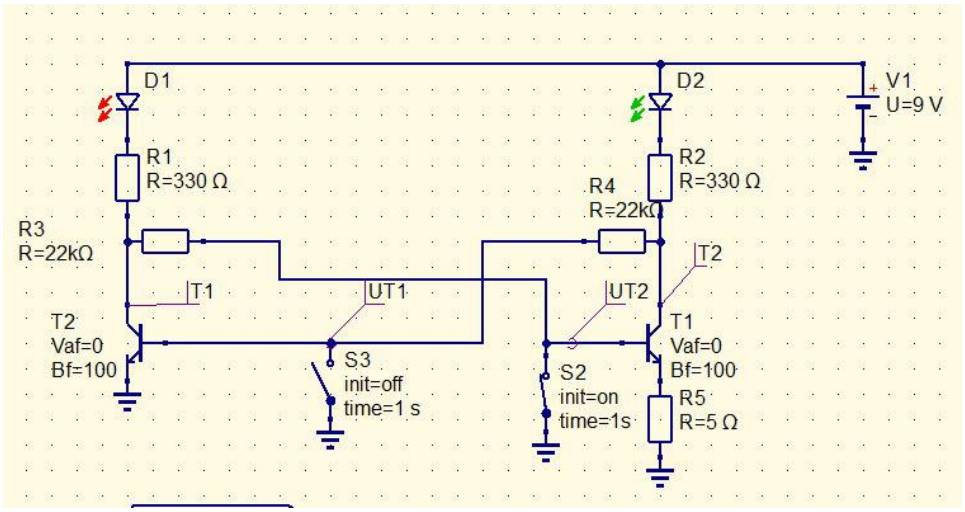


Transistor-Verstärkerschaltungen



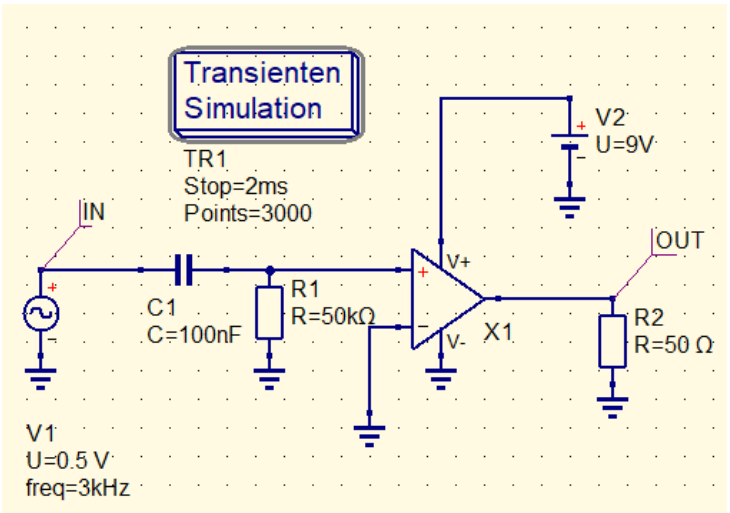
AC- und Transientensimulation ; Darstellung Uein; Uout; Testpunkte; Frequenzgang (dB); FFT;

Transistor als Schalter

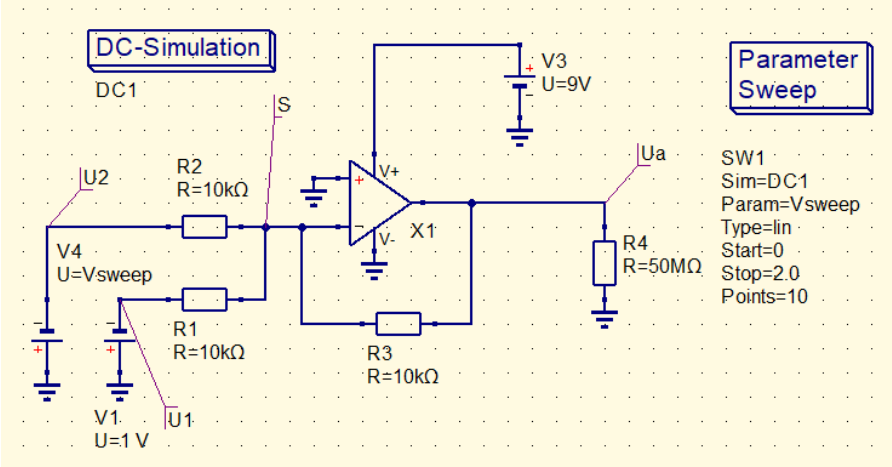


OPV-Schaltungen:

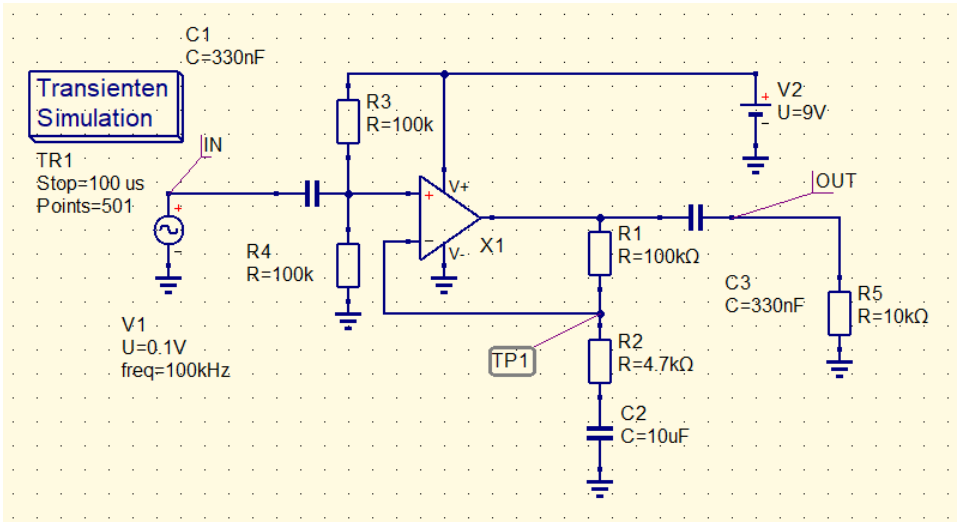
Anwendung des Komparators als Rechteckformer



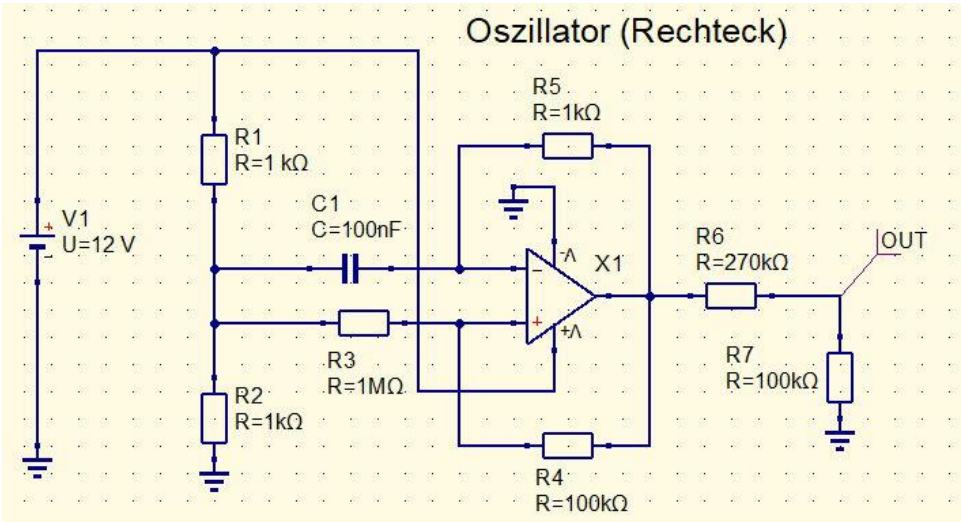
OPV als Addierer:



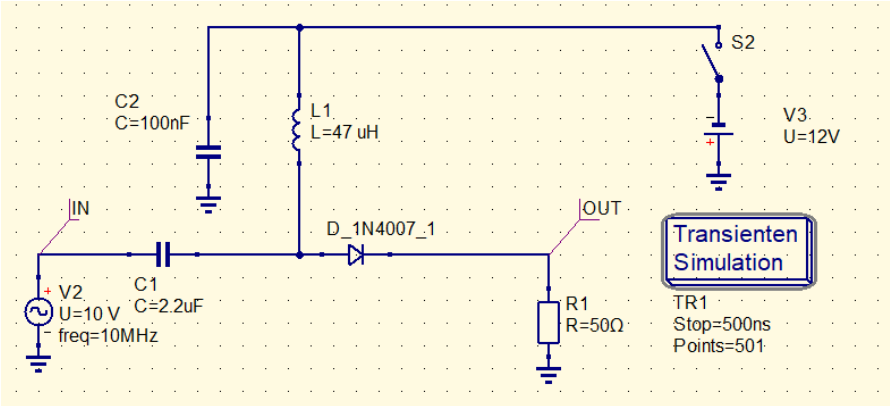
OPV-Verstärker LM358:



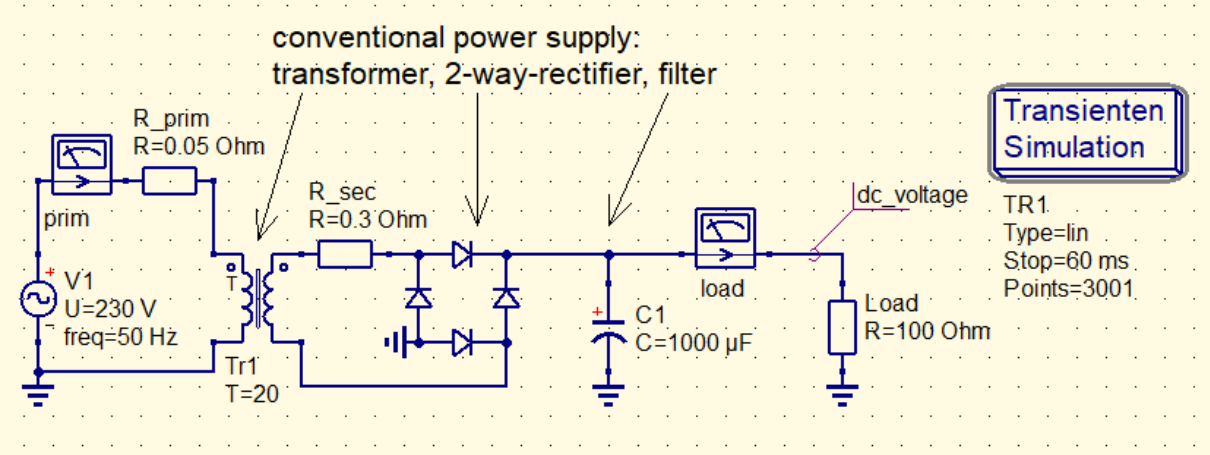
OPV Rechteckoszillator:



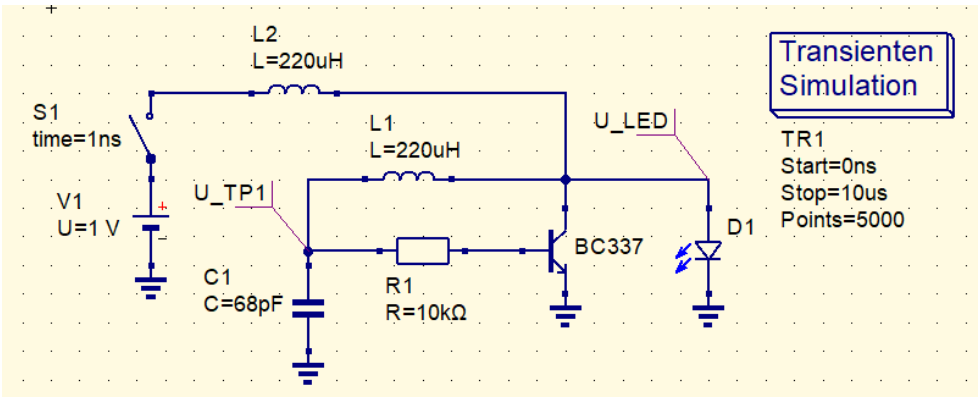
Funktion einer PIN-Diode:



Netzteil mit Gleichrichter:



AS332:



Tutorials:

http://www.gunthard-kraus.de/qucsstudio/Tutorial_Qucsstudio_V1-7_M%C3%A4rz%202019.pdf

https://www.darc.de/fileadmin/_migrated/content_uploads/QucsStudio4.pdf