*Day 1: 23.03.2018*

**Normalization test circuit and choosing first components**

After trying out different LTSpice models for different op-amps we have decided to take the LM4562 for the normalization.

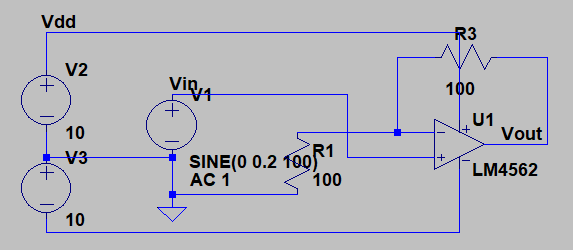
* Low noise (to not limit the AD conversion)
* In the range of -2.5V to 2.5V
* Audio specific (according to the description)

And a digital potmeter AD5222BRZ10 was chosen to

* Support negative and positive voltages (dual-rail)
* Simple interface (up/down-interface)
* Supports multiple resistance levels (128 levels)
* Frequency response is ok?
* From 0 to 10 kOhm

A converter (LCQT-SOIC14) for SOIC to DOP was also bought

* Prevent shortcircuits
* Improve prototyping capabilities (remove/add wires easily)
* 14-SOIC to 14-DIP



*Day 2: 26.03.2018*

VHDL code for operating the digital potmeter

See the code