

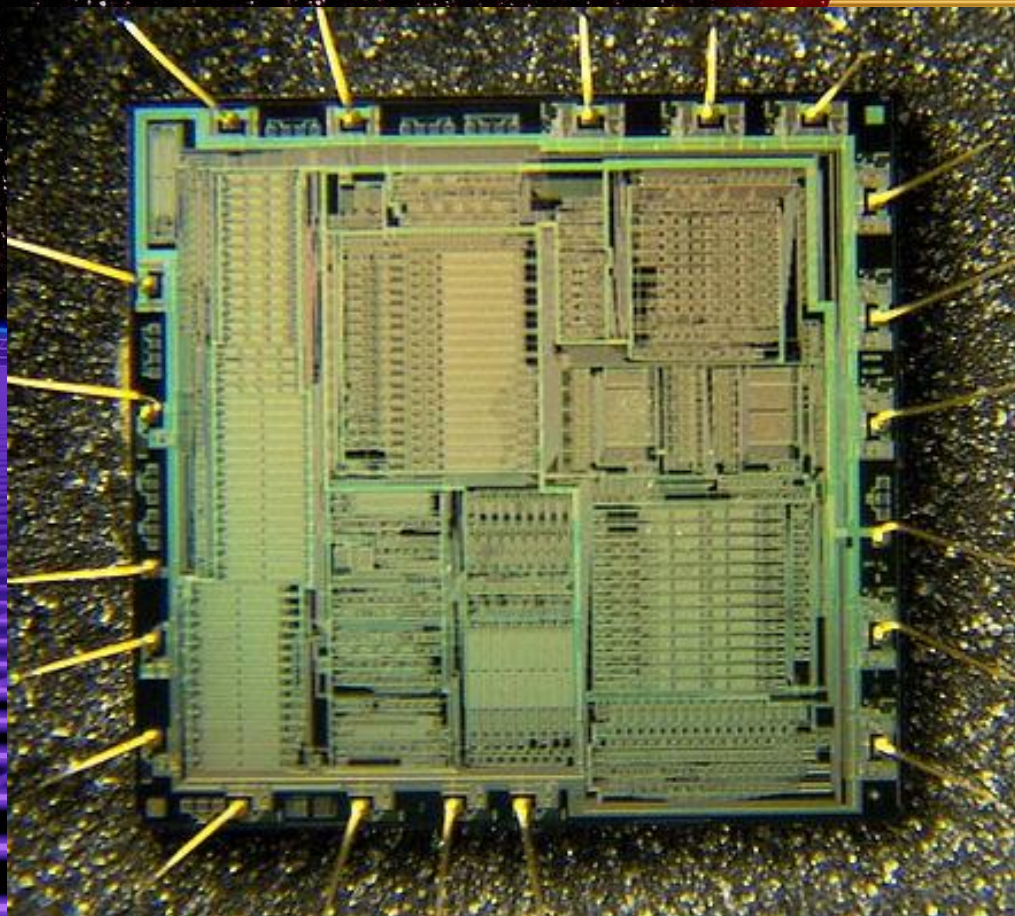


# Sound Synthese

Oder wie unsere Soundkarte funktioniert



# Bekannte Soundchips

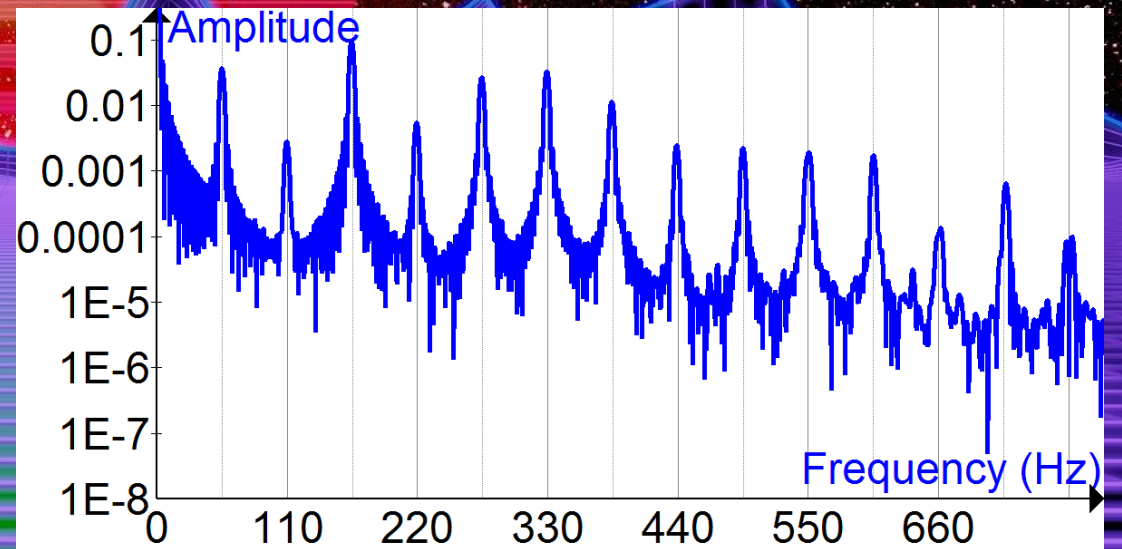
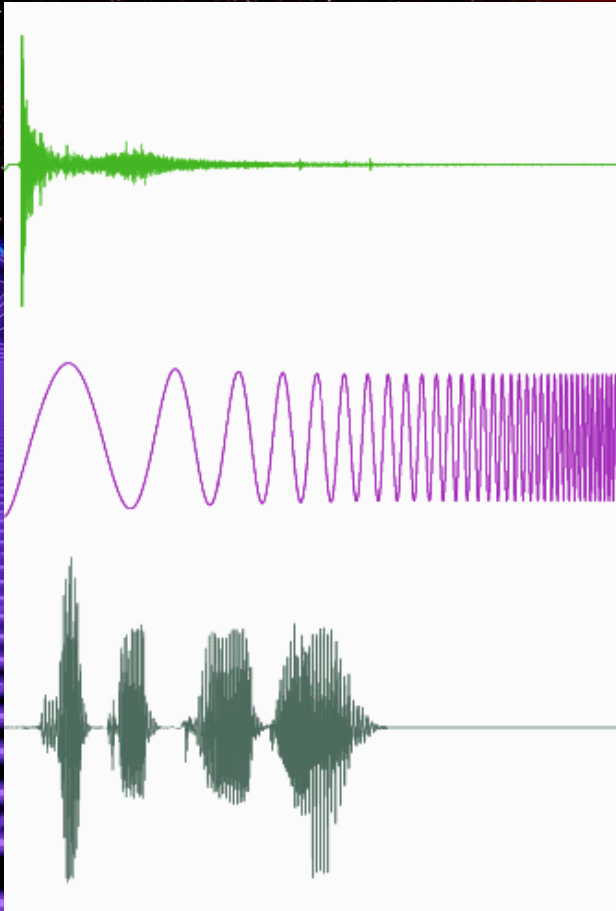


- Yamaha YM3812  
(Soundblaster, AdLib)
- AY-3-8910 (Atari ST,  
Arcade Automaten)
- MOS Technology SID (C64)



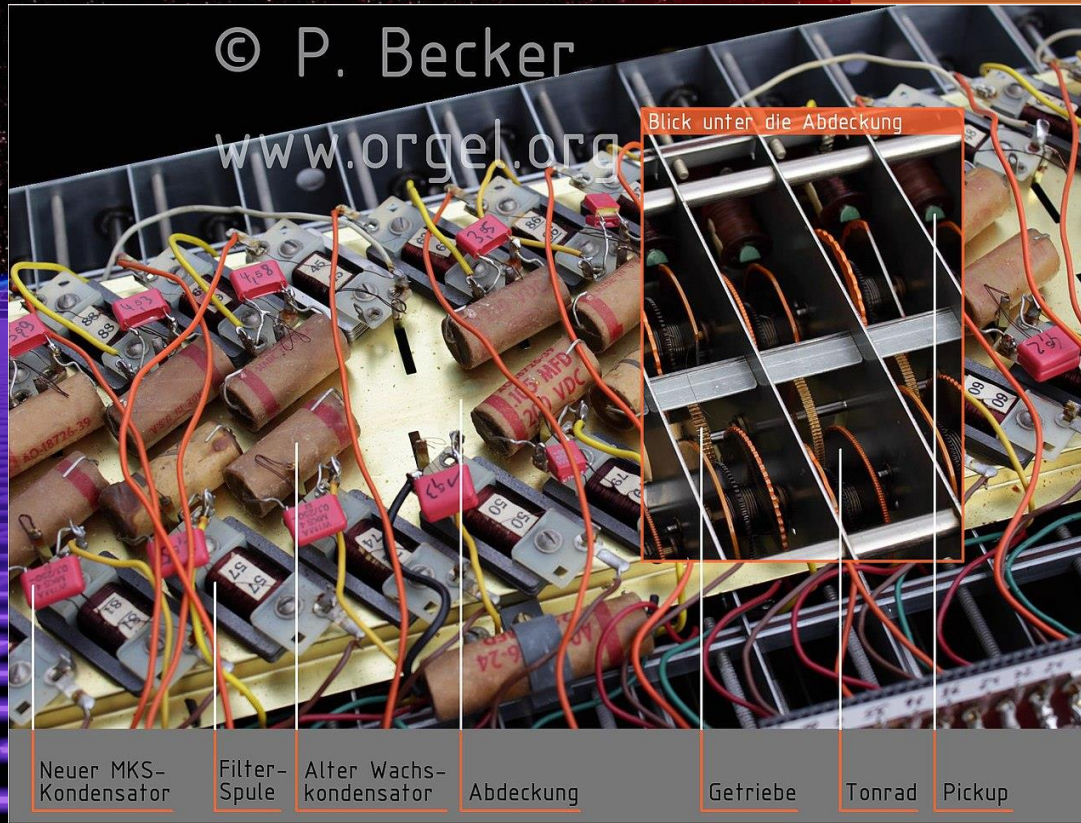


# Schall und Töne:



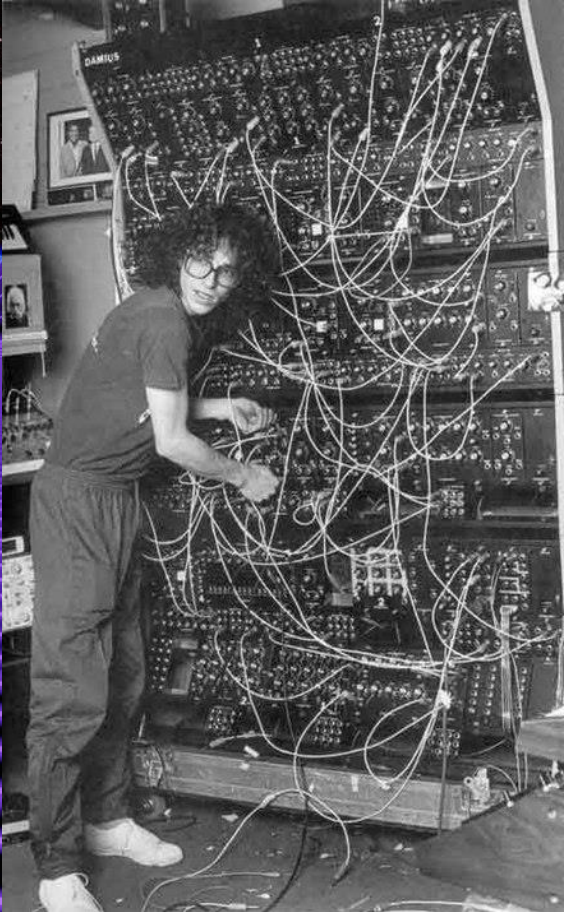


# Hammond Orgel





# Analog Synthesizer

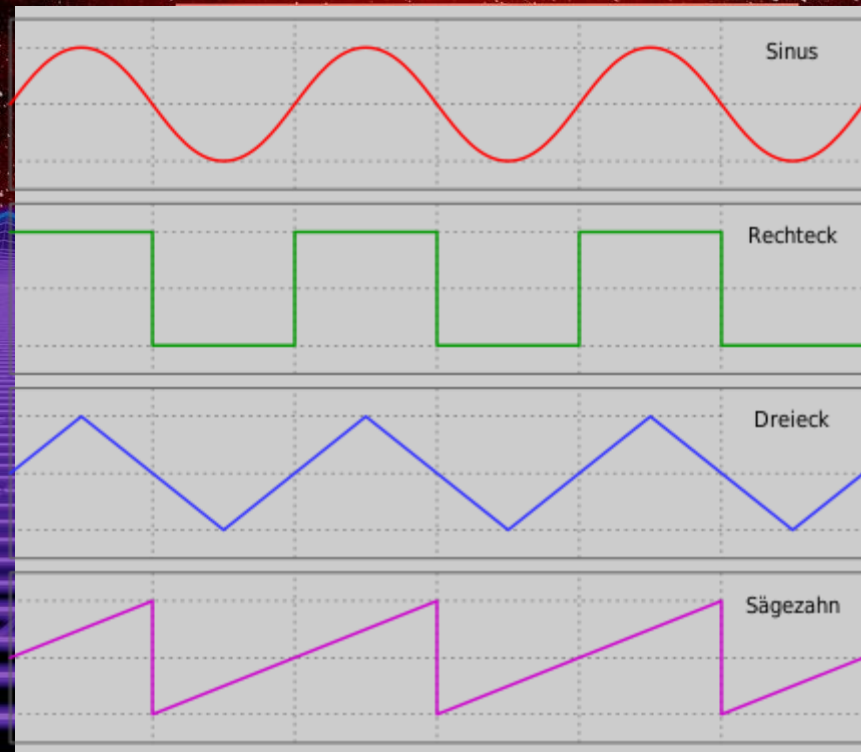


Komponenten:

- VCO
- Noise Generator NG
- VCF
- VCA
- ADSR
- LFO
- ...



# Voltage Controlled Oscillator VCO





# Voltage Controlled Filter

The background of the slide is a digital landscape. The foreground is a purple grid that recedes into the distance. In the middle ground, there are several jagged, blue wireframe mountains. In the background, a large, multi-colored sphere (yellow, orange, red, pink) is centered, resembling a sunset or sunrise. The sky is dark with many small white stars.

- Hochpass
- Tiefpass
- Notch
- Band



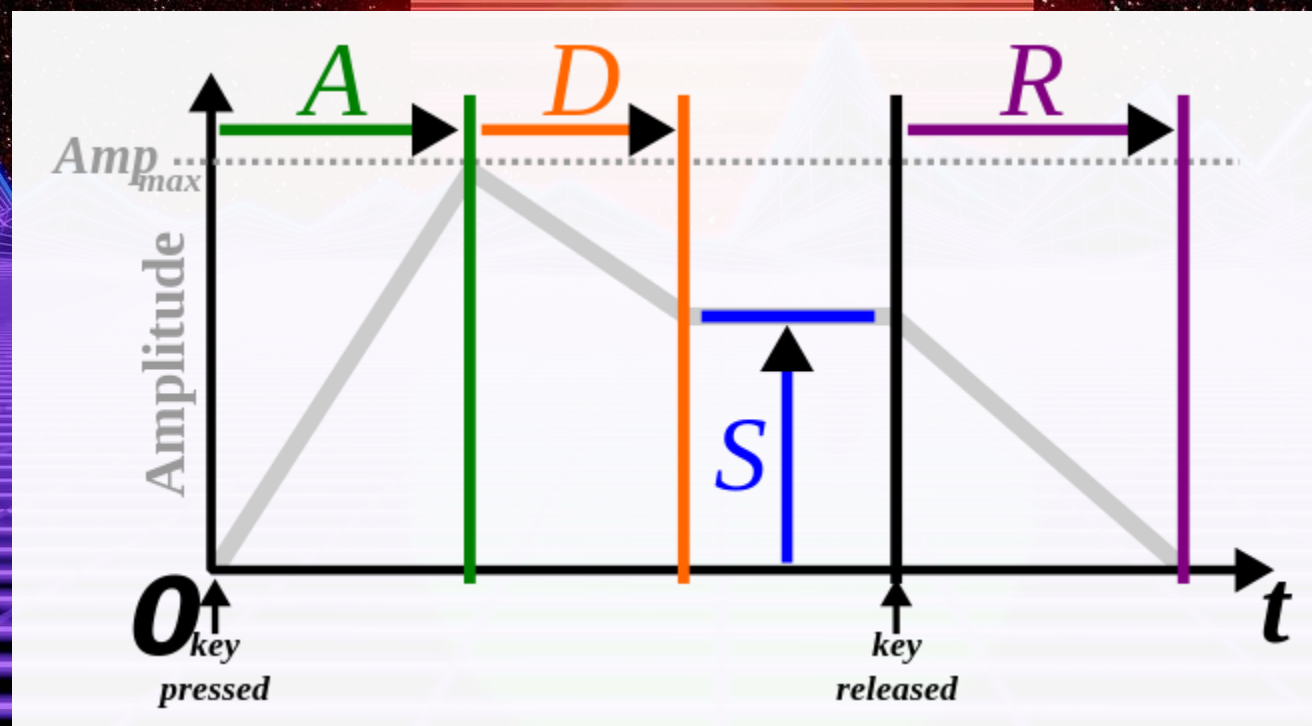
# Voltage Controlled Amplifier VCA



- Tremolo
- Kompressor
- Multipliziere
- Lautstärke
- ADSR

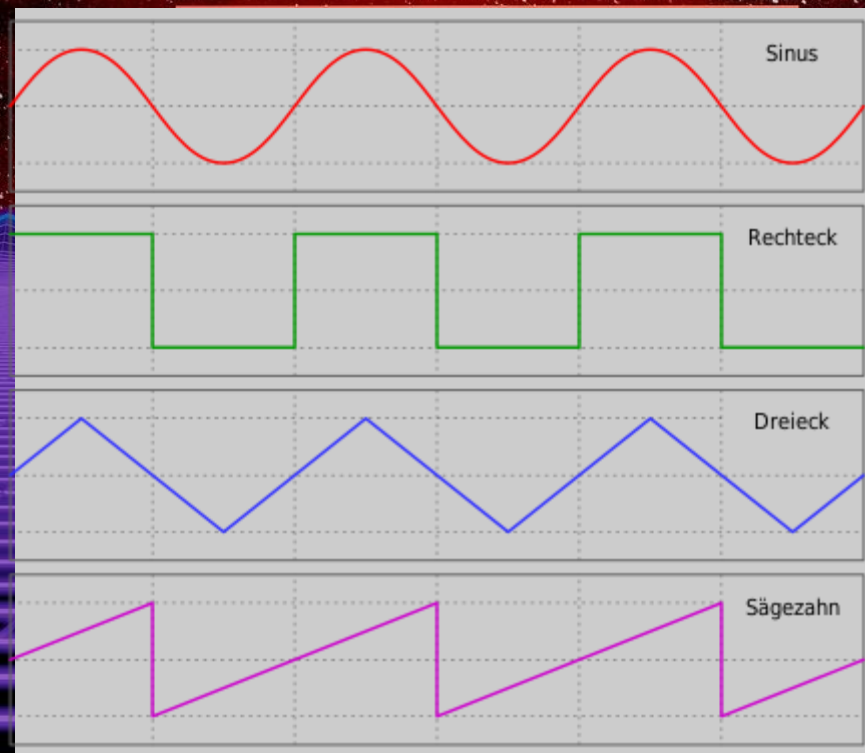


# Attack Decay Sustain Release ADSR





# Low Frequency Oscillator LFO



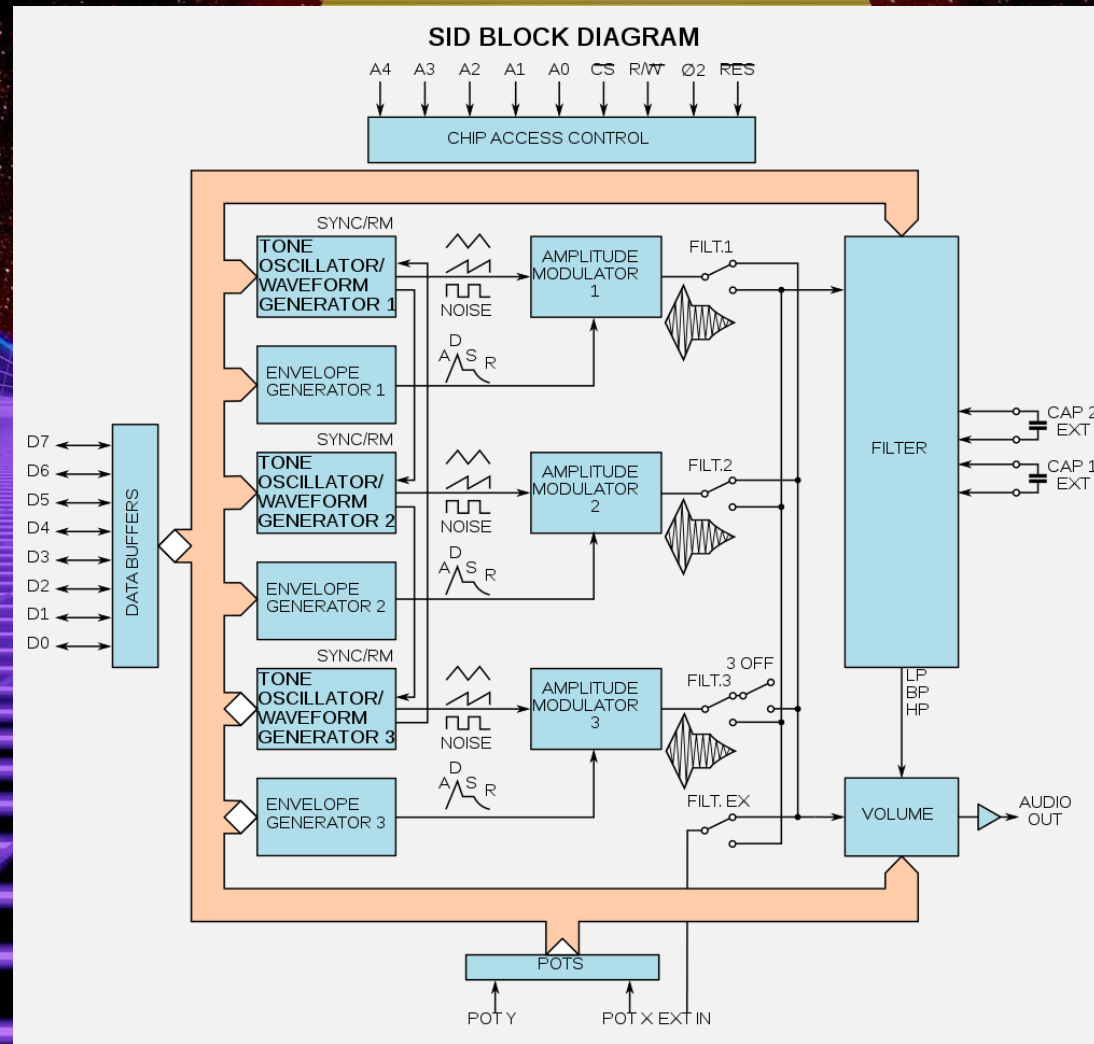


# DEMO mit Helm



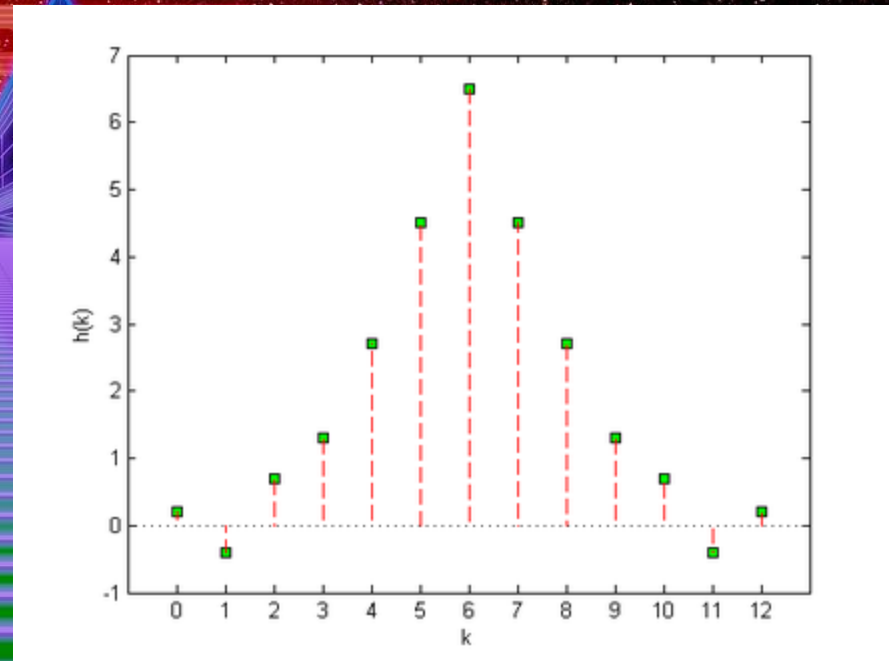
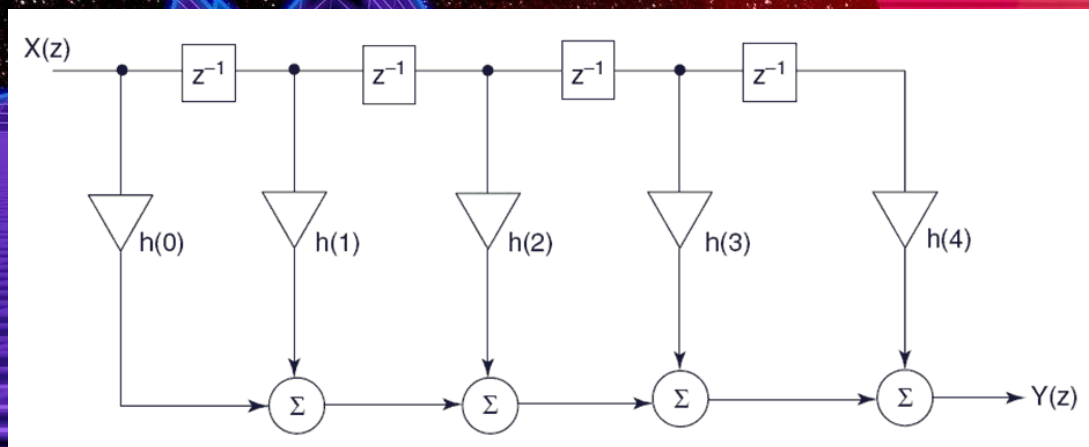


# Digital Sound Syntheses



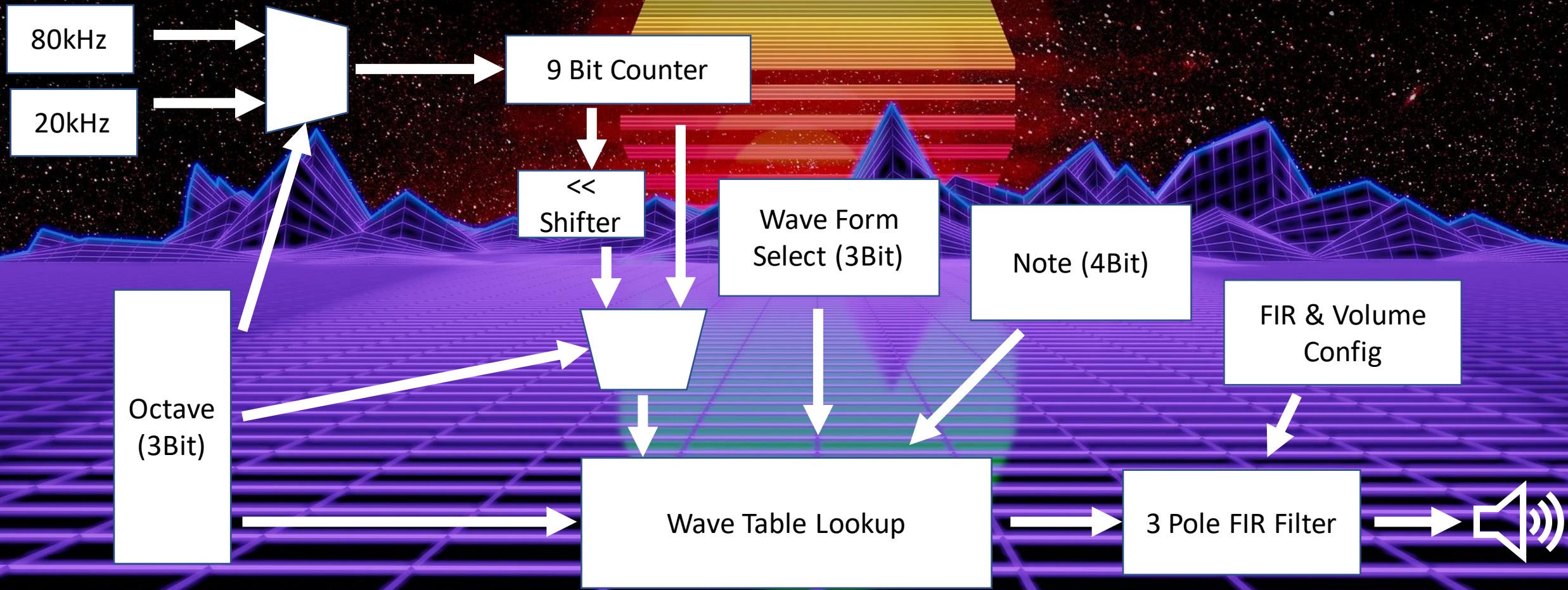


# FIR Filter



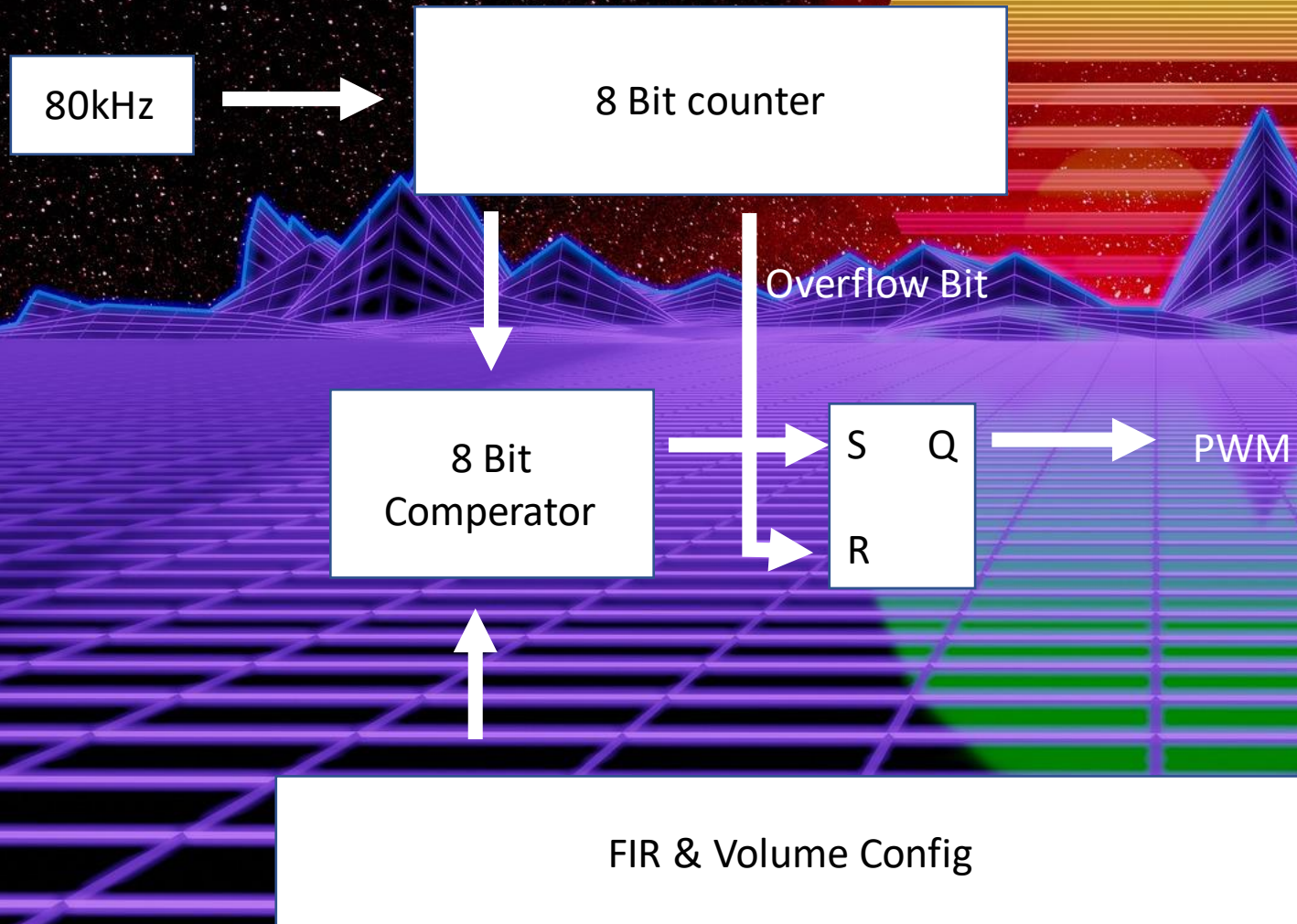


# Unser Design



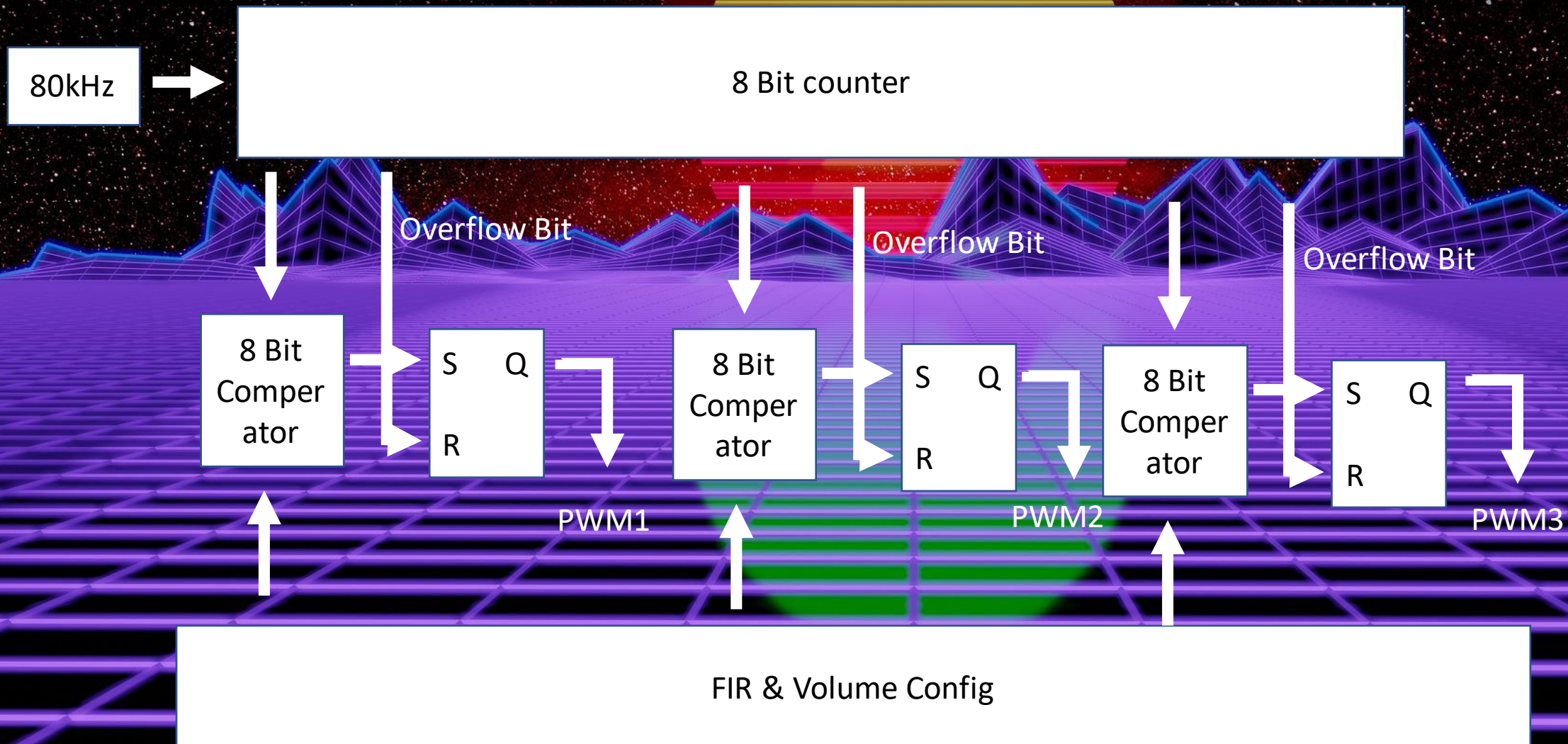


# FIR & Lautstärke



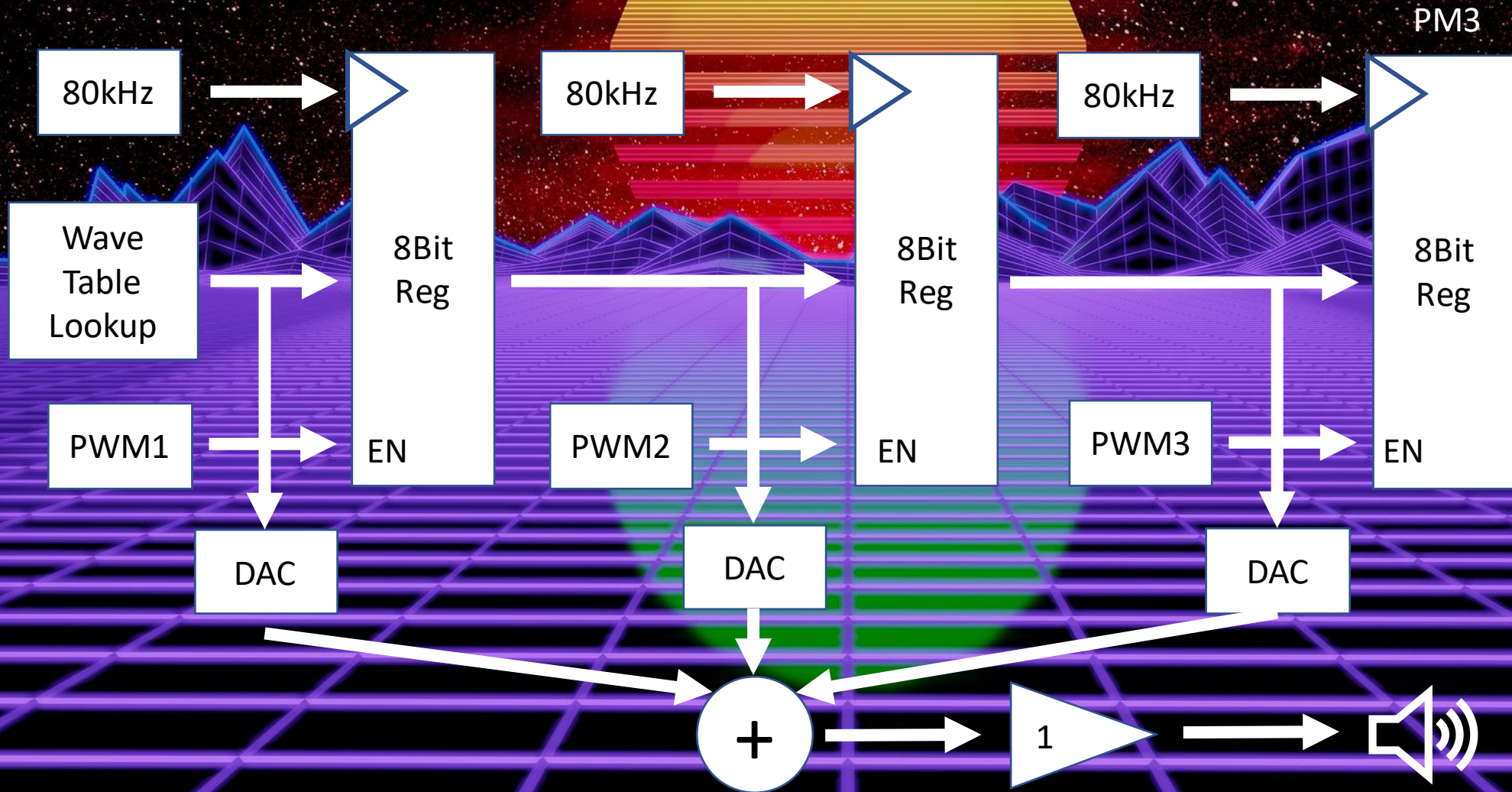


# FIR & Lautstärke





# FIR & Lautstärke





# LFOs, ADSR, Voice Mixing und MIDI



Nothing the Software Team  
can't fix

*Totally Harmless*

