

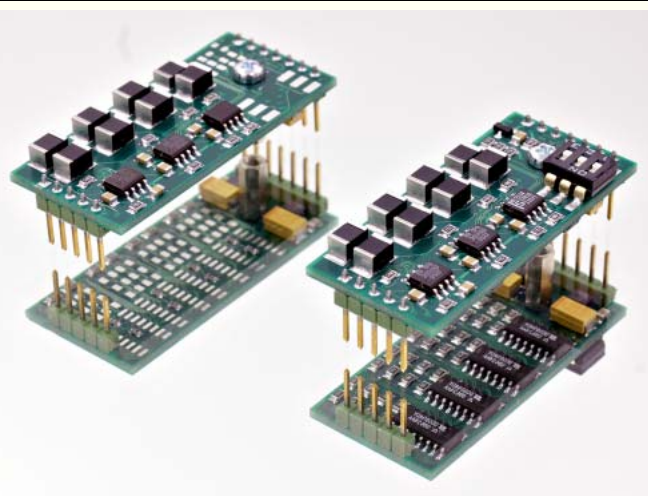
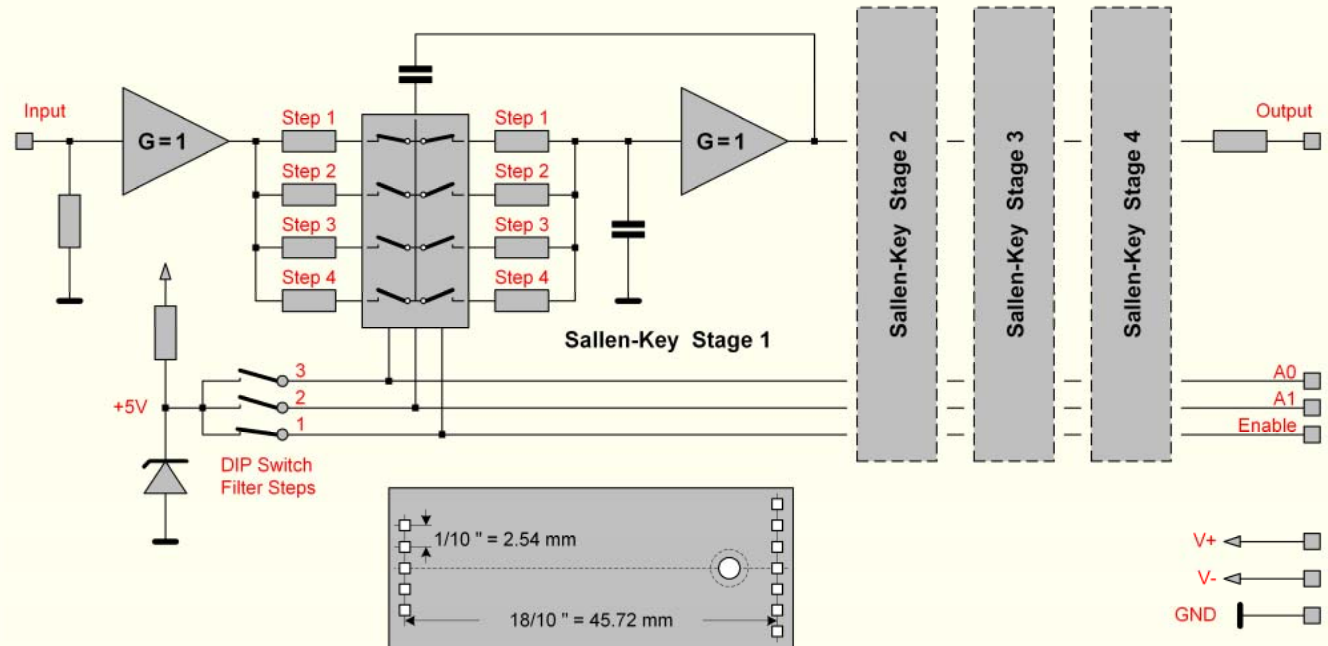
# pure analogue: Active Filters AF08

analogdesign

by EIGNER MESSTECHNIK®

## 8<sup>th</sup> - Order Sallen - Key Low - Pass Design

- preferred application: Anti-Aliasing Filters
- available filter responses
  - Butterworth
  - Bessel
- two designs available:
  - A - single, fixed frequency
  - B - switchable filter steps
- standard configuration
  - filter response: Butterworth
  - steps: 100.-.200.-.500.-.1000 Hz (-3 dB)
  - stage order: low noise improvement others on request
- remote control of filter steps (TTL / CMOS)
- power supply +/- 5...15 VDC, approx. 0.75 W depending on optimisation alternative
- size of modules 22 x 48 mm<sup>2</sup>, grid of connectors in inches (2.54 mm) for easy mounting on main boards



A - single frequency

B - switchable steps

## Custom-designed alternatives and potential for optimisation

- assembled with 2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup> or 8<sup>th</sup> order single frequency and / or 2, 3 or 4 switchable filter steps
- realisable frequency span at switchable filters approx. 1 : 10 (e.g. 100 Hz - 1 kHz)
- assembled with film caps (best performance) or ceramic caps (COG, high frequencies only)
- stage order designed for low noise improvement (stage with the highest Q first) or high signal level improvement (stage with the highest Q last)
- optimised for best AC performance - "audio" OpAmps for low noise and low harmonic distortions (e.g. for sound measurement)
- optimised for best DC performance - low offset / low drift OpAmps for high requirements on DC accuracy such as offset voltage, temperature drift etc. (e.g. for strain gauge amplification)
- optimised for low power consumption - low power OpAmps for battery-powered equipment

