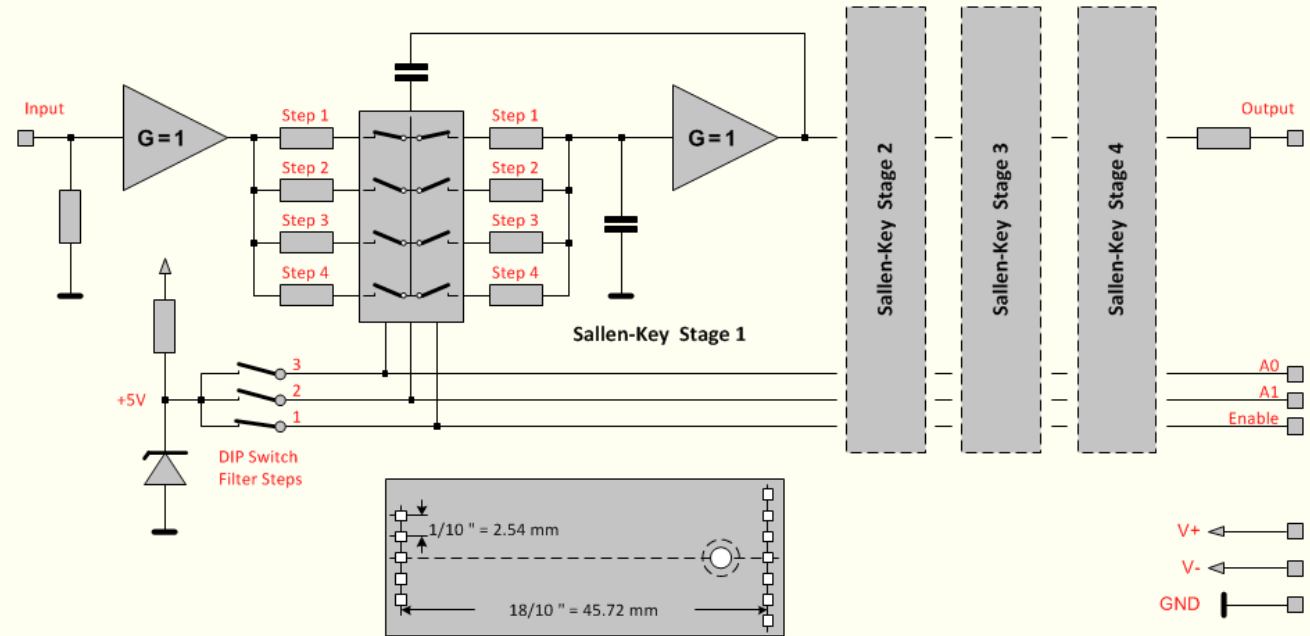


# Pure analogue: ACTIVE FILTERS AF08

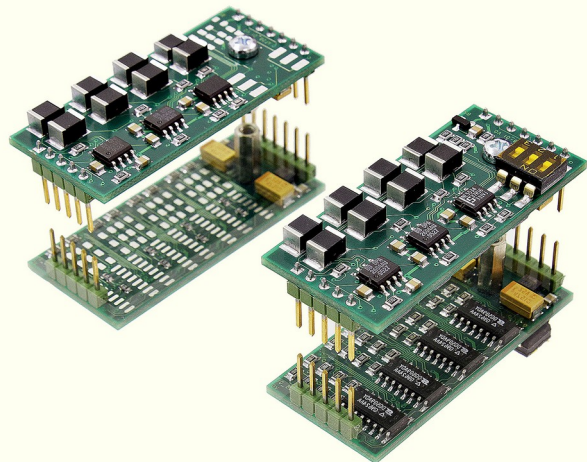
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## 8<sup>th</sup> Order Sallen-Key Low-Pass Design

- Preferred application: Anti Aliasing Filters
- Available filter responses:
  - Butterworth
  - Bessel
- 2 designs available:
  - A: single fixed frequency only
  - B: 4 switchable filter steps
- Standard configuration:
  - Filter response: Butterworth
  - Steps: 100 – 200 – 500 – 1000 [Hz]
  - Stage order: High overload immunity (others on request)
- Remote control of filter steps: TTL/CMOS comp.
- Power supply:  $\pm 5$  to  $\pm 15$  VDC. Approx 0.75 W depending on optimisation alternatives
- Size of modules: 22 x 48 [mm<sup>2</sup>]  
Grid of connectors in 1/10" (2.54 mm) for easy mounting on main boards



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A: single fixed frequency      B: switchable filter 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 filteres approx. 1 to 10 (e.g. 100 Hz to 1 kHz).
- Assembled with film caps (best AC performanche) or ceramic caps (COG, for higher frequencies only).
- Stage order designed for low noise improvement (stage with highest Q first or high signal level improvement (stage with highest Q last – default configuration).
- Optimised for best AC performance – "Audio grade"-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.
- Main boards for 4 filter modules available. Installation of the main boards in housings plus suitable power supply as a service.