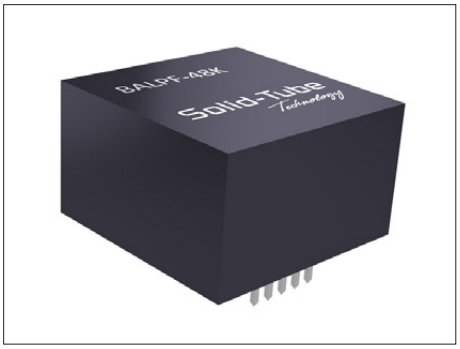
Solid-Tube Line Output Stage

STLPF-44K
STLPF-88K



The STLPF-xxK is an anti-aliasing filter to be used as an output line-level stage in typical DAC circuits. The module contains Birdland Audio's award winning Solid-Tube technology delivering a transparent and natural sound reproduction with a wide 3-dimensional sound-stage.

The STLPF has a 2nd order low pass transfer function ideal for Sigma-Delta DACs and is available with a corner frequency of 44KHz and 48KHz.

- Built-in supply LDO for improved SNR performance
- high input differential impedance input works with any V-out DAC
- Low impedance line level symmetrical or single-ended output
- Ultra-linear frequency response within pass band
- Linear-like phase avoids phase shifting near corner frequency

The STLPF anti-aliasing line output stage filter is a Hybrid module engineered with Birdland Audio's award winning Solid-Tube™ technology which combines bipolar and FET transistors working together to extract the most desirable linear characteristics of each technologies. The Solid-Tube technology produces ultra-linear transfer function analog stages even in open loop making it ideal for audio output stages. The result is an exceptional audio rendition, capable of maintaining every detail with a fantastic level of neutrality.

Combined with a carefully selected 2nd order low-pass transfer function, the STLPF produces a near-linear phase when approaching the corner frequency. Because linear-phase shift is equivalent to a constant time delay, it does not contribute to modifying the timbre or spatial position of instruments in the final spatial stage. Furthermore, the STLPF does not use capacitive AC coupling and so offers full bandwidth all the way down to DC resulting in excellent bass response.

The STLPF also hosts an internal power filtering and regulation to help reject noise present in the supply, making it possible to achieve high SNR greater than 122dB, and greater channel separation between modules.

For more information, contact oem@birdland.com.

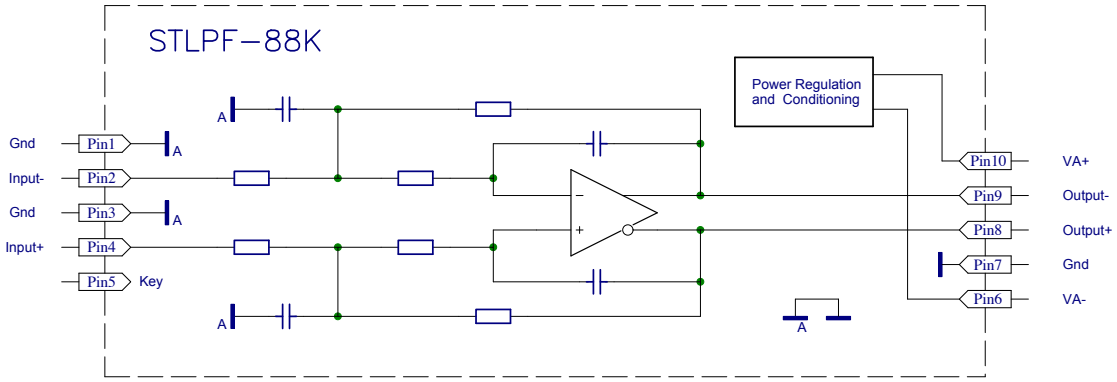


Figure 1: STLPF simplified schematic

Preliminary product information

This document contains high-level information about an OEM product.
Birdland Audio reserves the right to modify specifications without notice but to OEMs.