

# Sontia® SilverBack Audio Module

Sontia® *SilverBack* is a complete, high quality, audio 'system-on-module' designed to enable easy development of products incorporating the revolutionary Sontia SPT family of audio algorithms.

*SilverBack* is a fully integrated audio system-on-module combining audio, DSP and microcontroller functions in one device. It offers a powerful, flexible and cost-effective audio solution in a small form factor. The module includes Sontia SPT algorithms and microcontroller code, licensed and customised for the host product.

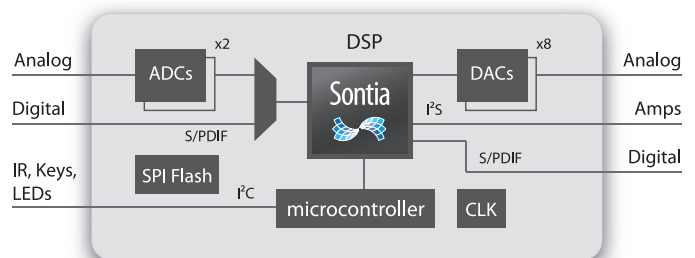
The Sontia SPT software suite includes: 2/3/5 channel Acoustic Imaging • Dynamic Bass Extension (3 types) • Speaker Optimisation • Linear-phase Digital Crossover • Central Channel Generator • Cabinet Resonance Control • Active Damper • U-Q Voicing • optional 3rd party decoders/licences.

## Applications

Sound bars • iPod docks • Radios • AV receivers • Active speakers (from mono to 7.1) • Car audio • Professional audio monitors • Multi-room systems, and more...

## Key Features & Benefits:

- easy integration of Sontia SPT into audio products
- high performance 32bit DSP capable of 300 mil MACS
- on-board 32bit RISC microcontroller, for system and peripheral control
- high quality internal upsampling
- fully differential, multi-channel audio in/out
- professional level 24 bit 192kHz A/D & D/A converters.



## Technical Details

configurable as a master or slave audio device

2 channels of analogue ADC input (3x stereo differential or 2x single-ended) with 10:2 MUX. 105dB DR, -98dB THD+N

8 channels of analogue DAC output (differential or single-ended). 105dB DR, -98dB THD+N (differential). (External output buffer may be required by some systems)

S/PDIF Rx and Tx integrated up to 192kHz

8 channels of I²S inputs, 4x stereo, 16/24-bit up to 192kHz Fs

I²S outputs: master or slave to the host system

S/PDIF v. I²S inputs: supports dual-domain Fs

Host control API via I²C or UART Interface: 5V tolerant

2 channels of microcontroller ADC, 10 bit – 3V3 only

8 configurable GPIOs. Inputs can be configured to provide an interrupt (for IR decode, Standby Button); GPIO 5V tolerant

1V8 PSU, 375mA; 3V3 PSU, 150mA. On-board voltage regulation, which can be provided to host if required

Low power mode: c.50mW

Dimensions: 67.60mm (L) x 31.75mm (W) x 3.8mm (D)

Package: low-cost, widely available SO-DIMM 200 pin