



# MP3 Player Dock Reference Design

Achieving spacious, deep, natural sound from small, table-top MP3 player docking stations has been highly challenging in the past. Sontia's impressive SPT linear phase audio solutions change all of that.

Sontia's MP3 Player Dock Reference Design completely redefines expectations of what is possible from this product category. The outstanding sonic performance of this design is derived from the incorporation of Sontia's clever, multi-patented, audiophile-grade SPT linear phase technologies. Sontia SPT delivers exceptionally clear, natural, life-like and expansive, 3-dimensional sound with deep, smooth bass performance that was previously unheard in such a small product form factor.

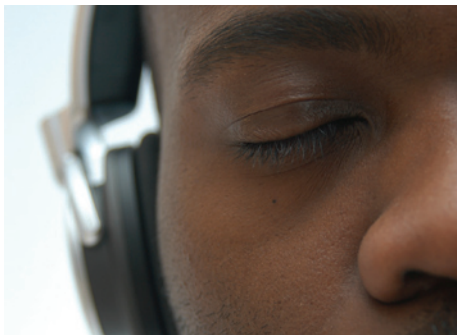
Sontia is pleased to offer its partners this high-quality electronics reference design package for tailoring to individual product requirements.

## Reference Design Includes:

- full electronics circuit diagrams and Bill of Materials
- software/firmware for DSP and microcontroller
- recommendations and sourcing for speaker drivers
- PCB Gerber files and assembly notes
- optional User Guide.

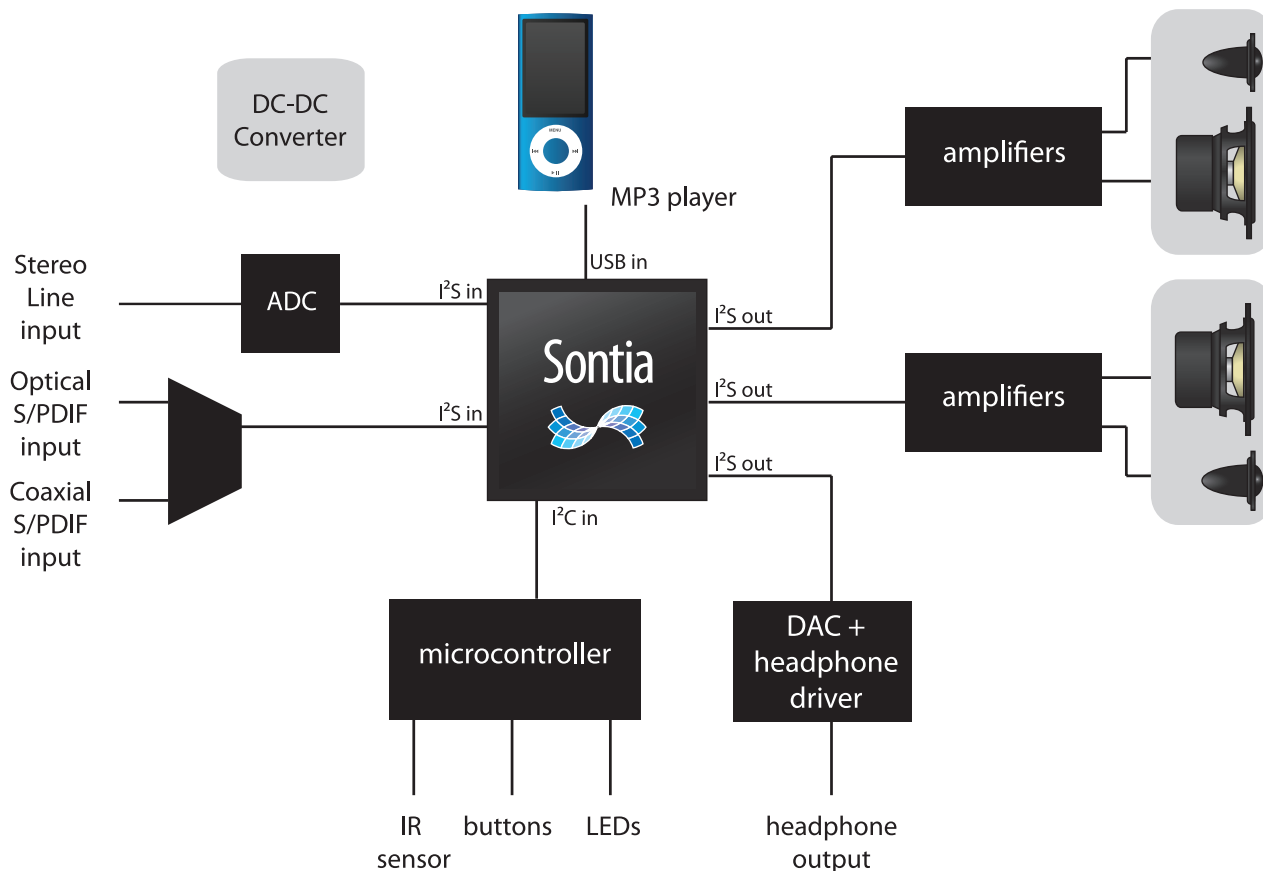
## Product Key Features:

- incorporates the innovative, stunning Sontia sound
- 4 amplifiers driving 80W to 4 speakers/2 channels
- Class D amplifiers
- multiple analog and digital inputs
- sub-woofer and headphone outputs
- remote control and front panel operation.



*"[with Sontia turned on] the sound changed entirely, making it more than simply '2.0' sound... it performed beautifully...bass portrayed huge resonance; sound seemed like a live performance"* (review in EE Times)

## Architecture



## Technical Data

Output Power: 80W into 2 channels (R/L); 4 loudspeaker amplifiers (L/mid, L/high,R/mid, R/high)

Class D amplifiers

THD: typically 0.05%

Dynamic Range: typically 105dB

Frequency Range (-3dB): 40Hz–25kHz

### External Inputs/Outputs:

S/PDIF Digital Audio Input (1x): switchable between 1xToslink or 1x RCA phono. 16/20/24-bit linear stereo PCM. Supported sample rates: 44.1kps and 48kps.

Stereo Line Level Audio Input (1x): 2x RCA phono. Up to 2V RMS. Input impedance: 50kΩ

Stereo Headphone Output (1x): 40mW into 32Ω, front-mounted

Sub-Woofer Line Level Output (1x): 2V RMS into 10kΩ

LED indicators: functions set in software; default functions: Standby/Activity, Mute and Source Select

Front panel buttons: 6x, functions set in software; default functions: power on/standby/mute, vol. up/down, source select, Sontia SPT on/off, night mode on/off

IR Sensor: Philips RC5 command set (Groups 16 and 17).

*All information is subject to change. Please check with Sontia for the most recent specifications and details.*