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STEVAL-CCA025V1

Class G capless headphone amplifier demonstration board based on the TS4621E

Data brief

Features

- Power supply range: 2.3 V to 4.8 V
- 0.6 mA/channel quiescent current
- 2.1 mA current consumption with 100 μ W/channel (10 dB crest factor)
- 0.006% typical THD+N at 1 kHz
- 100 dB typical PSRR at 217 Hz
- Zero pop and click
- I²C interface for volume control
- Digital volume control range: -60 dB to +4 dB
- 100 dB of SNR A-weighted at G = 0 dB
- Independent right and left channel enable control
- Integrated high-efficiency buck converter
- Low standby current: 5 μ A max
- No output coupling capacitors (thanks to the internal negative supply)
- Thermal shutdown and short-circuit protection
- RoHS compliant



Description

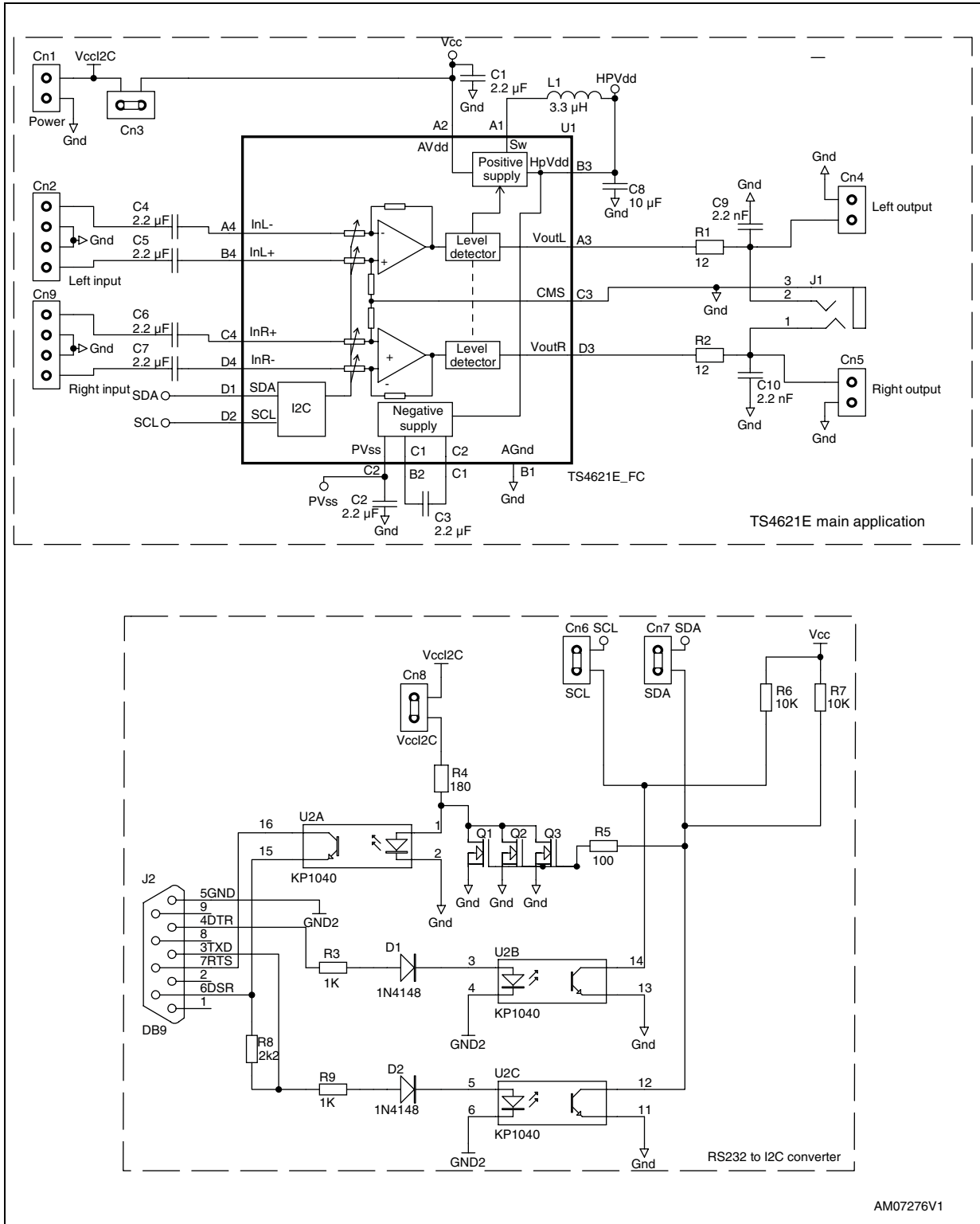
The STEVAL-CCA025V1 demonstration board is designed to aid in the evaluation of the TS4621E audio differential input stereo headphone amplifier. The TS4621E device is soldered on a four-layer PCB. An on-board RS-232 to I²C interface renders the board easy to control from a personal computer through a serial port.

The software provided with the board controls all features of the TS4621E, such as gain, mode, mute, standby and register status.

You can also use the connectors on the demonstration board to directly control the features through another I²C interface.

1 Schematic diagrams

Figure 1. Circuit schematics



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
23-Jun-2010	1	Initial release.
22-Sep-2011	2	The device under evaluation has been changed. Updated Figure 1: Circuit schematics .

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