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STMicroelectronics STEVAL-CCA025V1

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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 µW/channel (10 dB crest factor)
- 0.006% typical THD+N at 1 kHz
- 100 dB typical PSRR at 217 Hz
- Zero pop and click
- I<sup>2</sup>C 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 µA 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 I<sup>2</sup>C 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 I<sup>2</sup>C interface.



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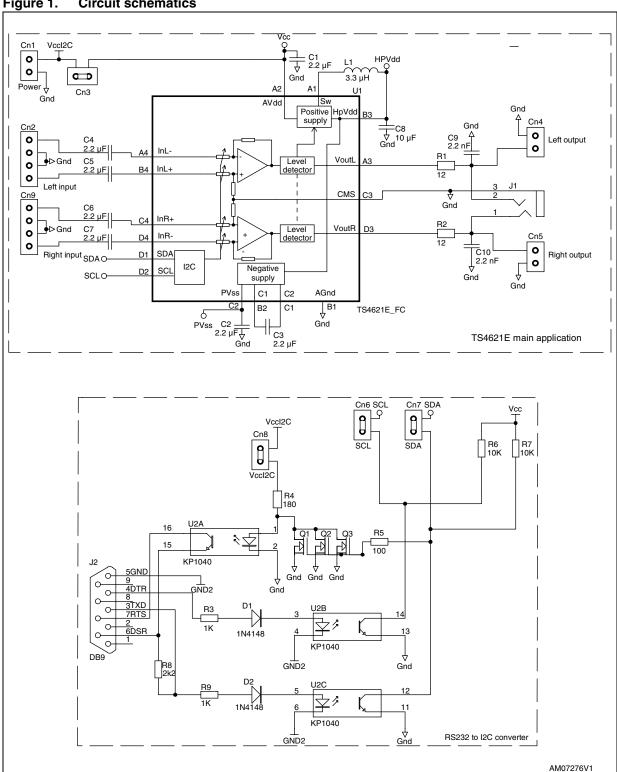


Schematic diagrams

STEVAL-CCA025V1

## **Schematic diagrams**

Figure 1. **Circuit schematics** 







STEVAL-CCA025V1 Revision history

## 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.





# Distributor of STMicroelectronics: Excellent Integrated System Limited Datasheet of STEVAL-CCA025V1 - BOARD DEMO HEADPHONE TS4621

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STEVAL-CCA025V1

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