



# STEVAL-CCA040V1

4X10 Watt dual/quad power amplifier demonstration board based on the STA540SAN

Data brief

## Features

- High output-power capability:
  - 4x10 W / 4  $\Omega$  at 17 V, 1 KHz, THD = 10%
  - 2x26 W / 4  $\Omega$  at 14.4 V, 1 KHz, THD = 10%
  - 2x15 W / 8  $\Omega$  at 16 V, 1 KHz, THD = 10%
  - 2x8 W / 4  $\Omega$  + 1x16 W/8  $\Omega$  at 16 V, 1 KHz, THD = 10%
- Minimum external component count:
  - No bootstrap capacitors
  - No Boucherot cells
  - Internally fixed gain of 20 dB
- Standby function (CMOS compatible)
- No audible pop during standby operations
- Diagnostic facilities:
  - Clip detector
  - Out to GND short-circuit
  - Out to Vs short-circuit
  - Thermal shutdown proximity
- Protection against:
  - Output AC/DC short-circuit
  - Soft short-circuit at turn-on
- RoHS compliant



## Description

The STEVAL-CCA040V1 demonstration board is designed using the STA540SAN dual/quad class AB power amplifier assembled in a Clipwatt 15 package.

Thanks to the high flexibility offered by the STA540SAN device, it is possible to configure the board to realize a stereo dual bridge (BTL) amplifier, a four channel single-ended (SE) amplifier or a 2.1 channel amplifier composed of a stereo BTL + mono BTL amplifier.

# 1 Circuit diagrams

Figure 1. STEVAL-CCA040V1 block diagram

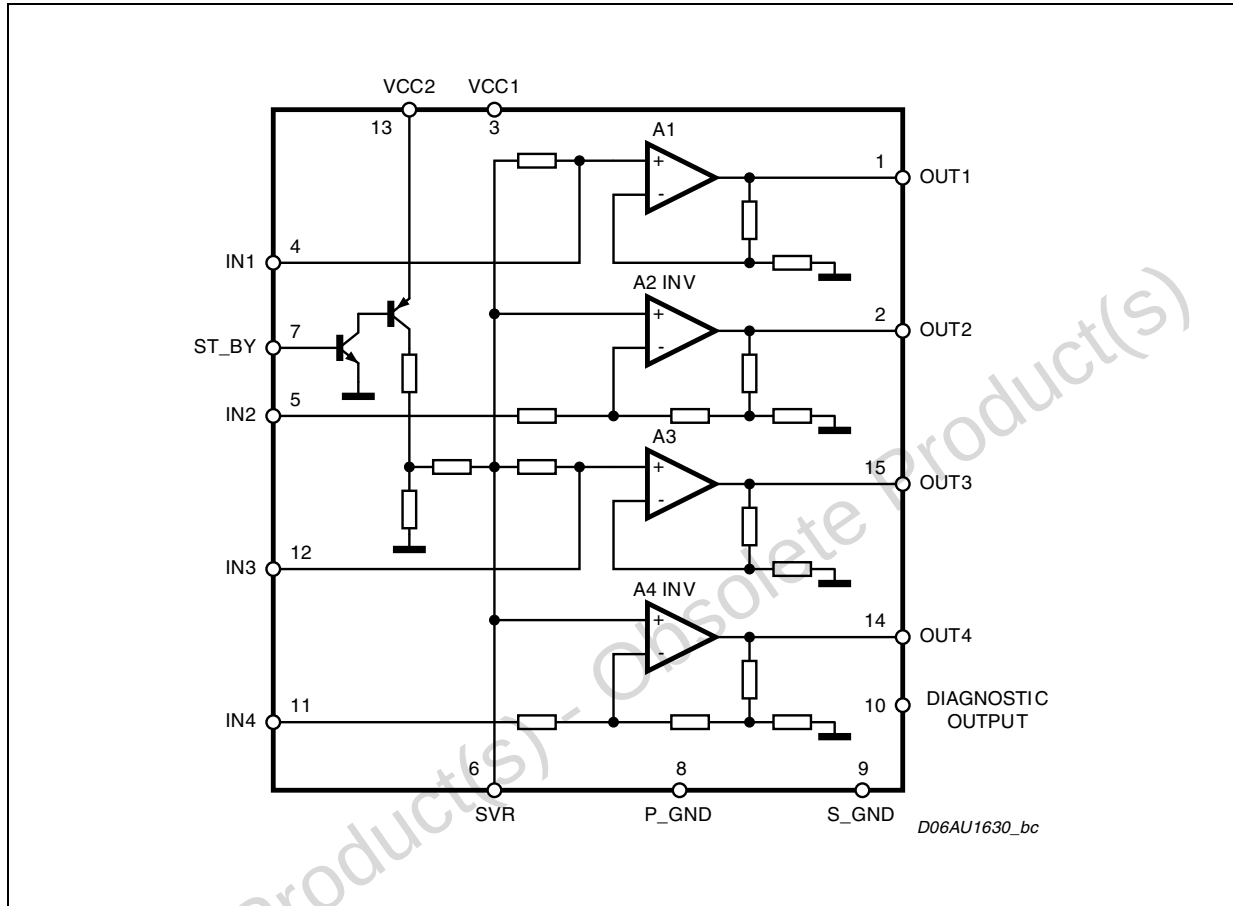
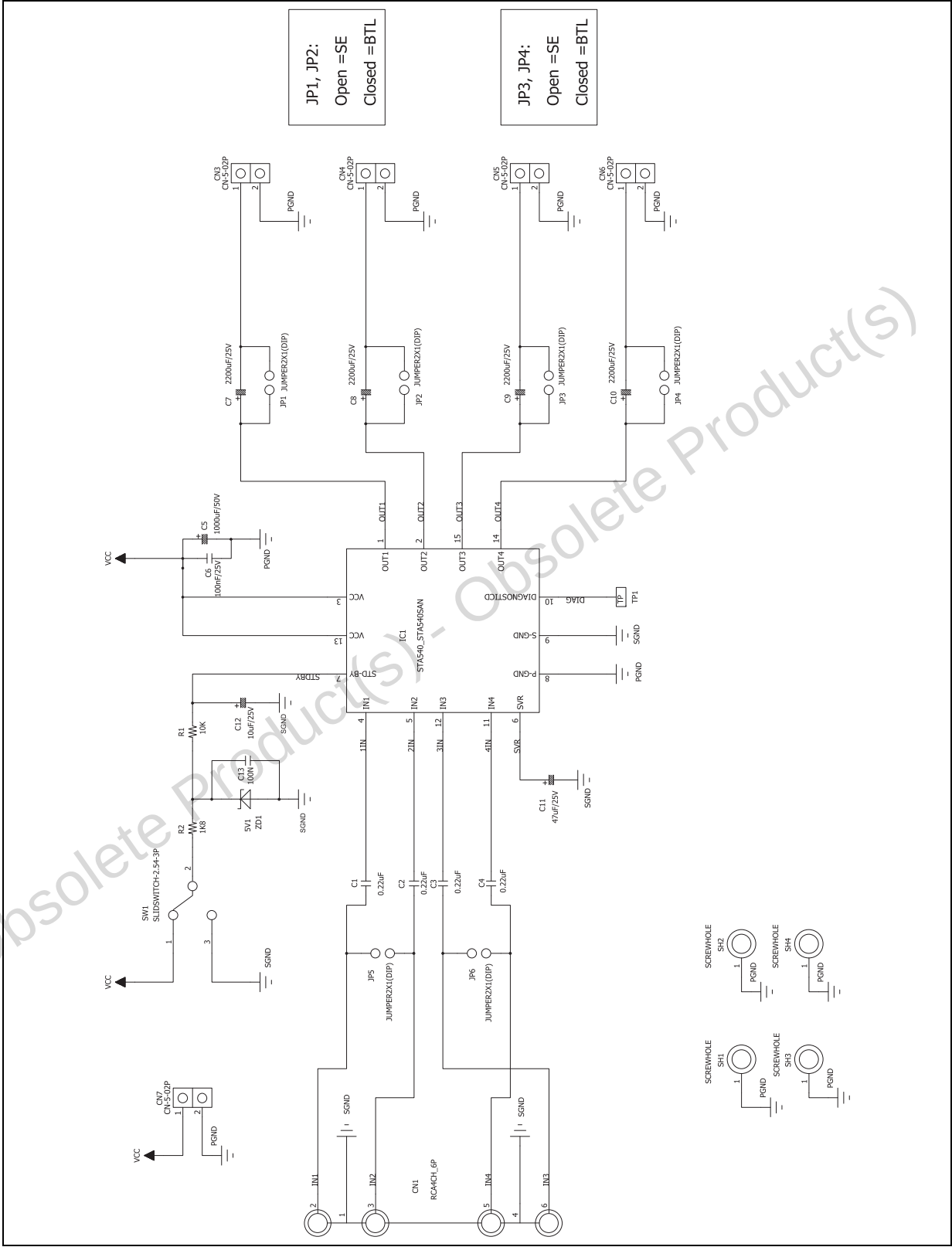


Figure 2. STEVAL-CCA040V1 schematic diagram



## 2 Revision history

**Table 1. Document revision history**

| Date        | Revision | Changes          |
|-------------|----------|------------------|
| 09-Jan-2013 | 1        | Initial release. |

Obsolete Product(s) - Obsolete Product(s)

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