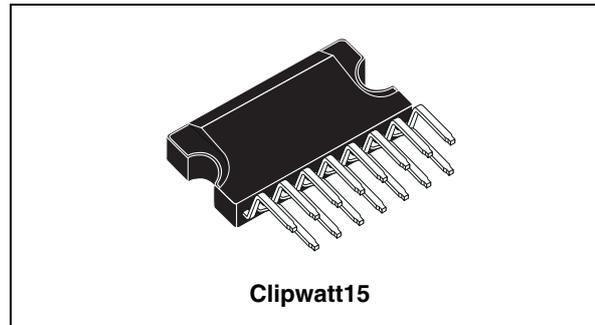


4 x 10-watt dual/quad power amplifier

Features

- High output-power capability:
 - 4 x 9 W / 2 Ω at 12 V, 1 kHz, 10%
 - 4 x 10 W / 4 Ω at 17 V, 1 kHz, 10%
 - 2 x 26 W / 4 Ω at 14.4 V, 1 kHz, 10%
 - 2 x 15 W / 8 Ω at 16 V, 1 kHz, 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
 - Soft short at turn-on
 - Thermal shutdown proximity
- Protection for
 - Output AC/DC short circuit
 - Soft short circuit at turn-on



- Thermal cut-off limiter to prevent chip from overheating
- High inductive loads
- ESD

Description

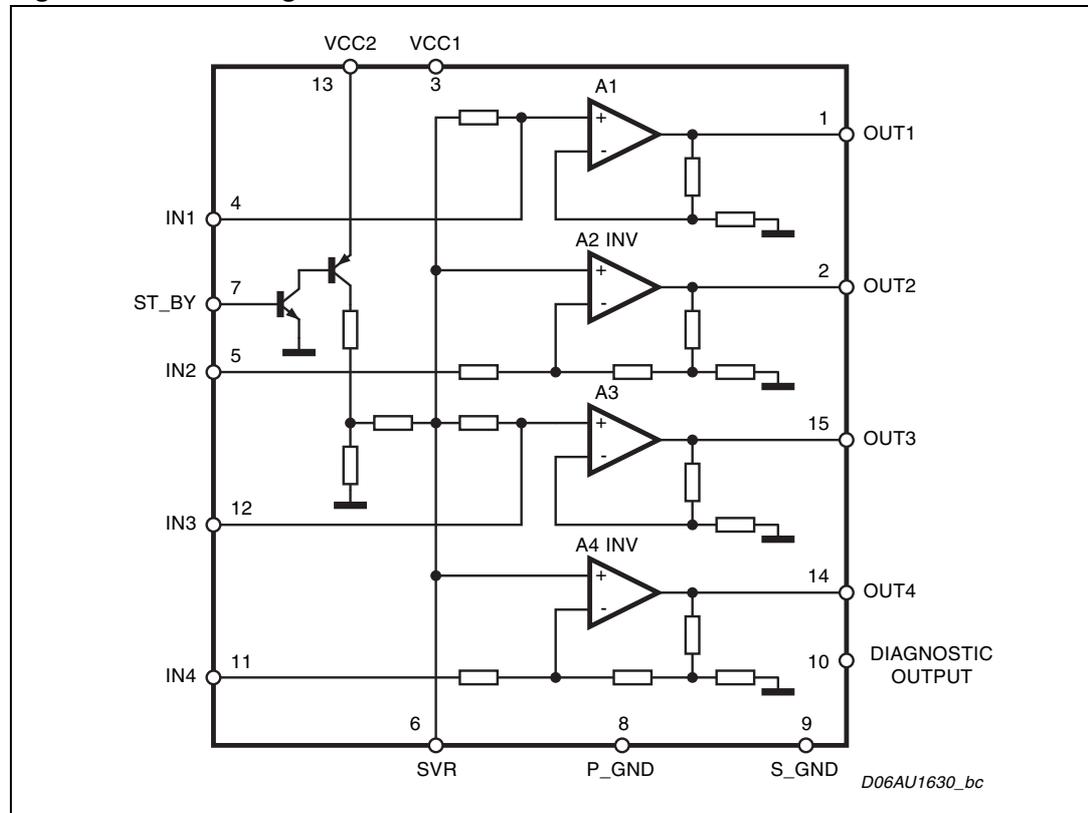
The STA540SAN contains four single-ended, class-AB audio amplifiers assembled in a Clipwatt15 package.

These amplifiers are used for high-quality sound applications. Each amplifier has integrated short-circuit and thermal protection and diagnostic functions. Two amplifiers can be paired up for applications requiring high power output.

Table 1. Device summary

Order code	Temperature range	Package	Packaging
STA540SAN	-40 to 150 °C	Clipwatt15	Tube

1 Block diagram

Figure 1. Block diagram

2 Pin description

Figure 2. Pin connection (top view)

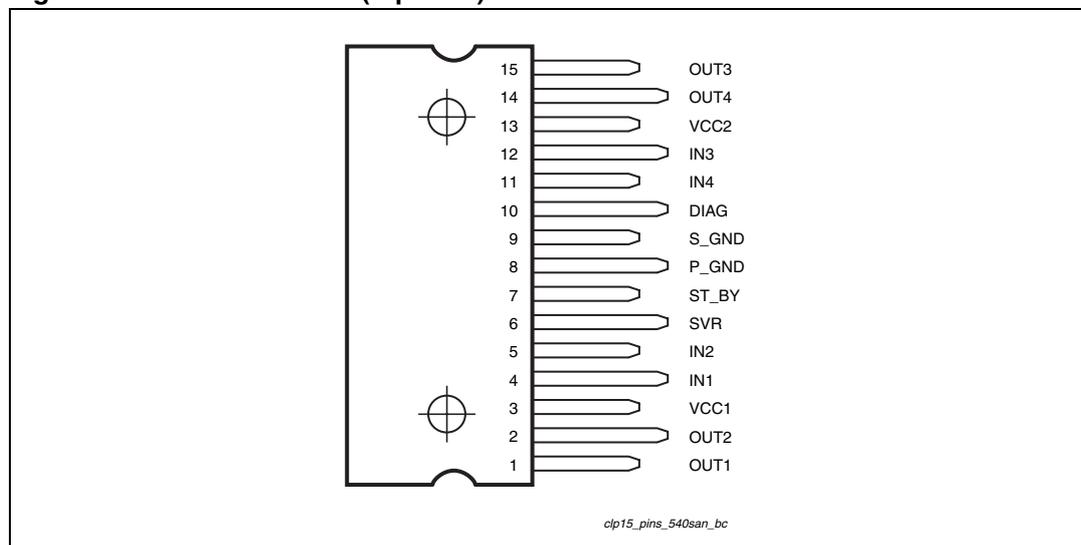


Table 2. Pin description

Pin	Name	Type	Function
1	OUT1	OUTPUT	Channel 1 output
2	OUT2	OUTPUT	Channel 2 output
3	VCC1	POWER	Power supply
4	IN1	INPUT	Channel 1 input
5	IN2	INPUT	Channel 2 input
6	SVR	INPUT	Supply voltage rejection
7	ST_BY	INPUT	Standby control pin
8	P_GND	POWER	Power ground
9	S_GND	POWER	Signal ground
10	DIAG	OUTPUT	Diagnostics
11	IN4	INPUT	Channel 4 input
12	IN3	INPUT	Channel 3 input
13	VCC2	POWER	Power supply
14	OUT4	OUTPUT	Channel 4 output
15	OUT3	OUTPUT	Channel 3 output