STA540

Audio Amp Speaker 1-CH Mono/2-CH Stereo/4-CH Stereo 34W Class-AB 15-Pin(15+Tab) MULTIWATT V Tube

Manufacturer:	STMicroelectronics, Inc
Package/Case:	ZIP15
Product Type:	Amplifier ICs
Lifecycle:	Active
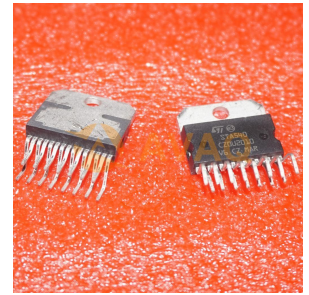
Images are for reference only

Inquiry

General Description

The STA540 is a 4-channel, class-AB audio amplifier designed for high quality sound applications. The amplifiers have single-ended outputs with integrated short-circuit protection, thermal protection and diagnostic functions. The chip is housed in the 15-pin Multiwatt ECOPACK®Pb-free package which is RoHS (2002/95/EC) compliant.

Key Features

High output power capability

2x 38 W into 4 Ω at 18 V, 1 kHz, 10% THD

2x 34 W into 8 Ω at 22 V, 1 kHz, 10% THD

2x 24W into 4Ω at 14.4 V, 1 kHz, 10% THD

2x 15 W into 8 Ω at 16 V, 1 kHz, 10% THD

4x 13 W into 2 Ω at 15 V, 1 kHz, 10% THD

4x 11 W into 4 Ω at 18 V, 1 kHz, 10% THD

4x 7 W into 4 Ω at 14.4 V, 1 kHz, 10% THD

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2x 34 W into 8 Ω at 22 V, 1 kHz, 10% THD

2x 24W into 4Ω at 14.4 V, 1 kHz, 10% THD

2x 15 W into 8 Ω at 16 V, 1 kHz, 10% THD

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4x 11 W into 4 Ω at 18 V, 1 kHz, 10% THD

4x 7 W into 4 Ω at 14.4 V, 1 kHz, 10% THD

Minimum external components count:

no bootstrap capacitors

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no Boucherot cells

internally fixed gain 20 dB

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Standby function (CMOS compatible)

No audible pop during standby operations

Diagnostic facilities:

clip detector

output to GND short-circuit detector

output to VS short-circuit detector

soft short-circuit check at turn-on

thermal shutdown warning

clip detector

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soft short-circuit check at turn-on

thermal shutdown warning

Protection

Output AC/DC short circuit

Soft short-circuit check at turn-on

Thermal cutoff/limiter to prevent chip from overheating
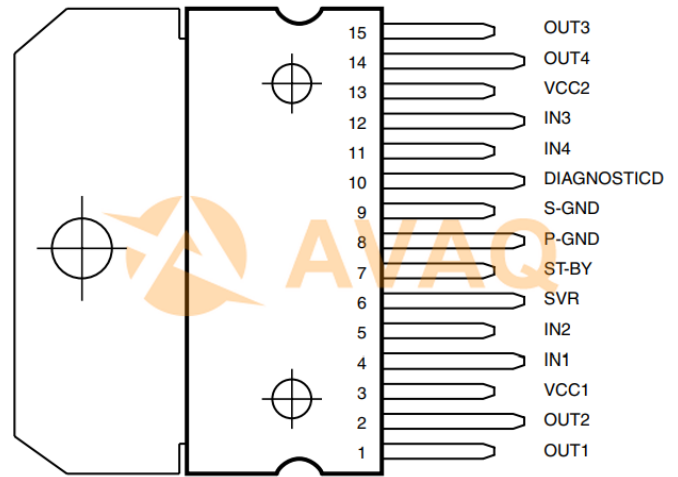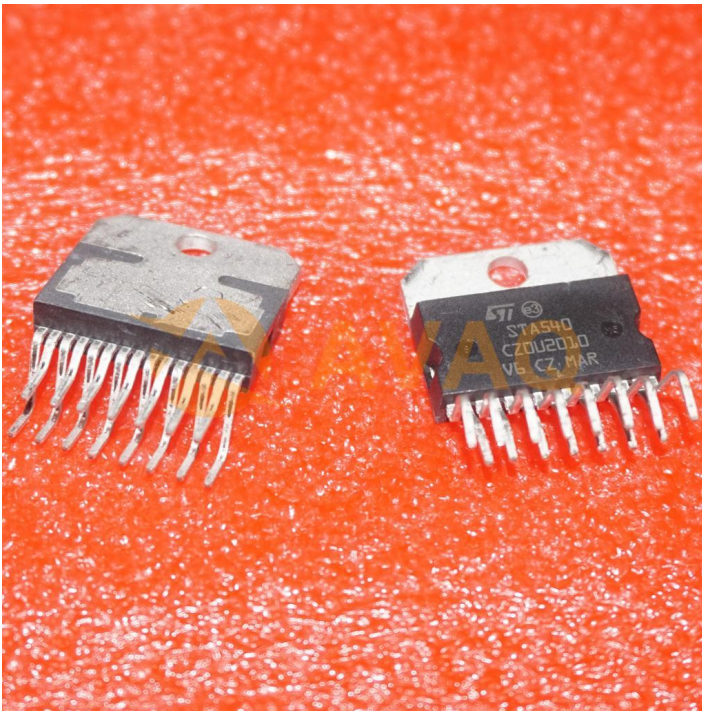
High inductive loads

ESD

Output AC/DC short circuit

Soft short-circuit check at turn-on

Thermal cutoff/limiter to prevent chip from overheating

High inductive loads

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Pin connection diagram:

Pin	Signal
15	OUT3
14	OUT4
13	VCC2
12	IN3
11	IN4
10	DIAGNOSTICD
9	S-GND
8	P-GND
7	ST-BY
6	SVR
5	IN2
4	IN1
3	VCC1
2	OUT2
1	OUT1

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Recommended For You

STA339BWTR

STMicroelectronics, Inc

SSOP36

STA559BW

STMicroelectronics, Inc

SSOP36

STPA003OD-4WX

STMicroelectronics, Inc

144-LQFP

STA309A13TR

STMicroelectronics, Inc

QFP64

STA120D

STMicroelectronics, Inc

SOP28

STA308

STMicroelectronics, Inc

QFP

STA333W

STMicroelectronics, Inc

SSOP36

STA516B13TR

STMicroelectronics, Inc

HSSOP36

STABP01D

STMicroelectronics, Inc

SOP20

STA333ML

STMicroelectronics, Inc

SSOP36

STA333BW

STMicroelectronics, Inc

SSOP36

STA321

STMicroelectronics, Inc

TQFP64

STA304A

STMicroelectronics, Inc

QFP

STA333IS

STMicroelectronics, Inc

CSP-30

STABP01

STMicroelectronics, Inc

DIP