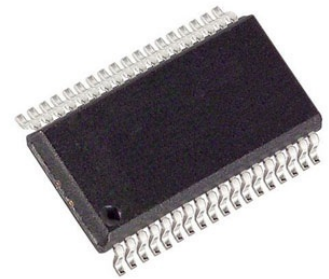


2-channel high-efficiency digital audio system

Images are for reference only

[Inquiry](#)

Manufacturer:	STMicroelectronics, Inc
Package/Case:	SSOP36
Product Type:	Embedded Processors & Controllers
Lifecycle:	Obsolete

General Description

The STA333W is an integrated circuit comprising digital audio processing, digital amplifier control and DDX® power output stage to create a high-power, single-chip DDX® solution for all-digital amplification with high quality and high efficiency. The STA333W power section consists of four independent half-bridges stages. These can be configured via digital control to operate in different modes. 2 channels can be provided by two full bridges, providing up to 20 W + 20 W of power. Also provided in the STA333W are new advanced AM radio interference reduction modes. The serial audio data input interface accepts all possible formats, including the popular I2S format. Three channels of DDX® processing are provided. The STA333W is part of the Sound Terminal™ family that provides full digital audio streaming to the speaker offering cost effectiveness, low power dissipation and sound enrichment.

Key Features

Wide supply-voltage range (4.5 V - 20 V)

2 power output configurations

2 channels of binary PWM (stereo mode)

2 channels of ternary PWM (stereo mode)

2 channels of binary PWM (stereo mode)

2 channels of ternary PWM (stereo mode)

PowerSSO-36 with exposed pad down

2 channels of 24-bit DDX®

100-dB SNR and dynamic range

Selectable 32- to 192-kHz input sample rates

I2C control with selectable device address

Digital gain -80 dB to +48 dB in 0.5-dB steps

Software volume update

Individual channel and master gain/attenuation

Individual channel and master software and hardware mute

Independent channel volume bypass

Automatic zero-detect mute

Automatic invalid input detect mute

2-channel I2S input data Interface

Selectable clock input ratio

Input channel mapping

Automatic volume control for limiting maximum power

96-kHz internal processing sample rate, 24-bit precision

Advanced AM interference frequency switching and noise suppression modes

Thermal-overload and short-circuit protection embedded

Video application: 576 * fSinput mode support

Recommended For You

STA540

STMicroelectronics, Inc

ZIP15

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

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