

# Solid State System SSS1603 Usound Controller

## USB Speaker Controller

### Overview

The SSS1603 is a highly integrated single chip Class-D audio amplifier for USB speaker application. SSS1603 features stereo 16bits class D amplifier with 1W per channel output, external EEPROM for USB VID/PID customization, and is compliant with USB audio class V1.0. SSS1603 is designed with capacitor less and filter less architecture, which minimize external component of a USB speaker system. No driver is required for all major OS. Anti-pop solution was also embedded for general pop noise elimination.

Moreover, SSS1603 can bundle 3S USB Audio software with 3S 3D EQ functions, which supports 10 band Equalizer, 3D effect, and Environment sound effects, and makes SSS1603 an audio enhanced PC multi-media speaker.

### Features

- Single chip Stereo Class-D audio amplifier for USB speaker application
- Embedded 16 bit 1 watt per channel digital amplifier for 4 ohm speaker driving
- External EEPROM interface for USB VID, PID, product string, and serial number
- Compliant with USB audio device class specification v1.0
- Single 12MHz crystal input with on-chip PLL and embedded USB transceiver
- UI / USB HID for volume up, volume down, and mute while playback
- Maximum Gain selection (0/3.5/6 dB )
- Capacitor-less and filter-less design for speaker connection
- Anti-pop design
- 16bits 48KHz sampling rate
- Capacitor-less and filter-less speaker connection with anti-pop feature
- Win 2000 / Win XP / Vista / Win7 and Mac OS/Linux ready
- True plug-n-play application, no driver required
- 3S 3D EQ sound
  - 10 band EQ / Environment effects / 3D effect
- Embedded 5V to 3.3V and 3.3V to 1.8V regulators for single 5V operation
- LQFP48, COB



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### Highlights

- USB Class D Speaker
- External EEPROM I/F
- 16 bit Class D AMP
- 1W per Channel
- USB Audio Class v1.0
- USB HID :
  - Volume up/down
  - Mute
- Capacitor-less / Filter-less
- Anti-Pop
- Win 2000 / Win XP / Vista / Win7 and Mac OS/Linux ready
- 3S 3D EQ sound software
- Single 5V power supply
- Single 12Mhz crystal

