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.

3system.com.tw

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
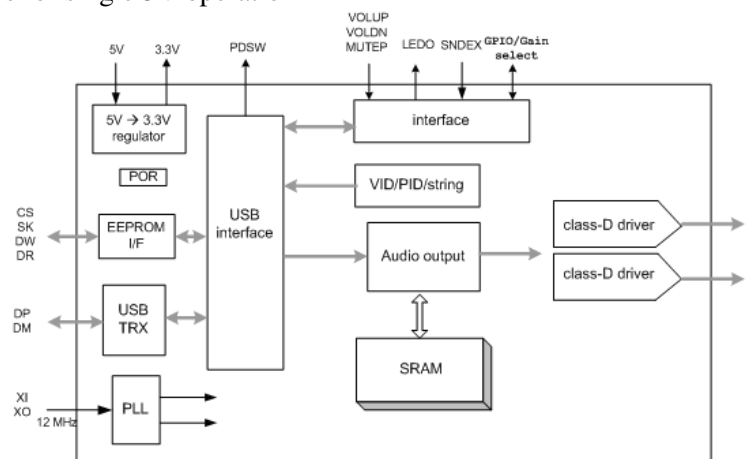- Single 12Mhz crystal

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