



FSA2000

Auto-Selecting HS-USB Switch with Cap-Free Headphone Audio Amplifier

Features

Switch Type	USB + Headphone Amplifier
Switch Mechanism	Auto (USB with V_{BUS})
USB Detection	YES
USB	USB 2.0 High Speed & Full-Speed Compliant
Audio Amplifier	Class AB
Amplifier Output Power	40mW _{RMS} (32Ω)
Amplifier Gain	0dB
THD+N	0.1%
SNR	-90dB
PSRR	-95dB
V_{CC}	2.7 to 4.3V
I_{CC} (Audio)	3mA
I_{CC} (USB)	6μA
Package	16- Lead UMLP 1.80 x 2.60 x 0.55mm, 0.40mm pitch
Ordering Information	FSA2000UMX

Description

The FSA2000 is a low-cost integrated HS-USB and audio switch that incorporates an audio headphone amplifier. This solution eliminates many of the discrete parts currently used in stereo headset applications. It provides stereo headphone drivers designed to operate with a ground-centered output signal. This allows for the removal of large and expensive DC blocking capacitors. The headphone drivers are capable of driving up to 40mW_{RMS} per channel.

Related Resources

- [FSA2000 Demonstration Board](#)
- [FSA2000 Evaluation Board](#)
- [FDB323 — FSA2000 Demonstration Board User Guide](#)
- [FEB322 — FSA2000 Evaluation Board User Guide](#)
- [AN-8032 — Demonstration Board Quick-Start Guide](#)
- [AN-8031 — Utilizing the FSA2000 MUTE Function to Reduce Audio “Click” and “Pop”](#)
- For samples, questions, or board requests; please contact: Analog.Switch@fairchildsemi.com.

Applications

- MP3 Portable Media Players
- Cellular Phones, Smartphones

Typical Application

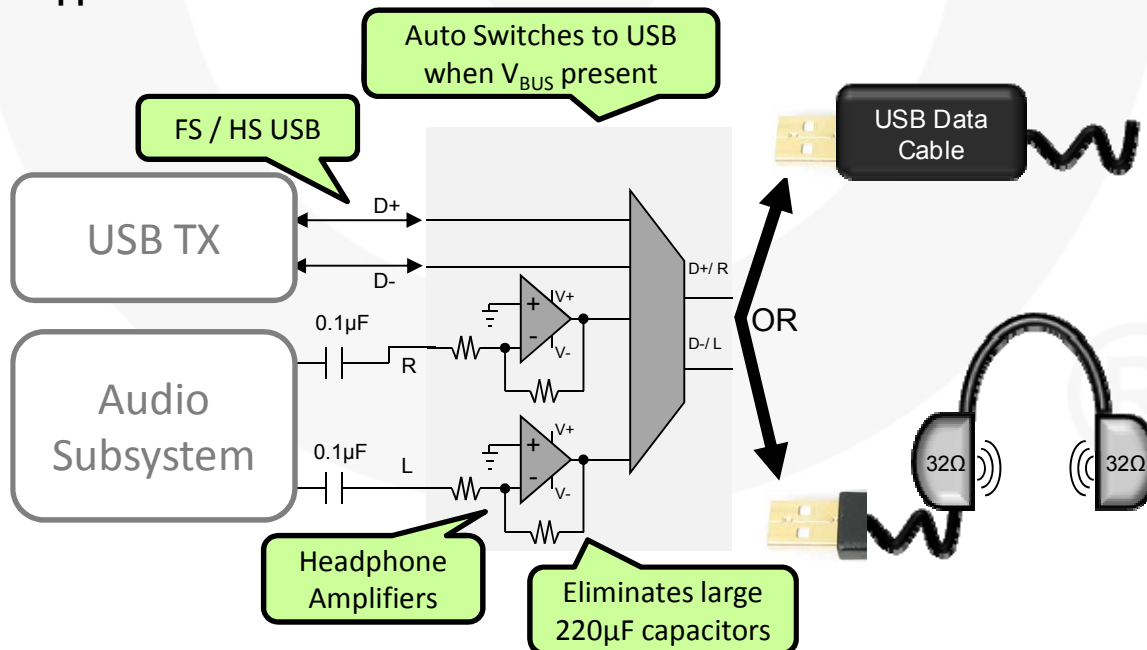




Figure 1. Mobile Phone Example







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