



ESS Technology, Inc.

ES9016 Ultra 32-bit 8-Channel Audio DAC Product Brief

OVERVIEW

The **ES9016 SABRE³² Ultra DAC** is a high-performance 32-bit, 8-channel audio D/A converter targeted for consumer applications such as Blu-ray player, audio pre-amplifier, A/V receiver and professional applications such as recording systems, mixer consoles and digital audio workstations.

With ESS patented 32-bit Hyperstream™ DAC architecture and Time Domain Jitter Eliminator, the **ES9016 SABRE³² Ultra DAC** delivers a DNR of up to 128dB and THD+N of -110dB, a performance level that will satisfy the most demanding audio enthusiasts.

The **ES9016 SABRE³² Ultra DAC**'s 32-bit Hyperstream™ architecture can handle up to 32-bit PCM data via I2S input, as well as DSD or SPDIF data. The **ES9016 SABRE³² Ultra DAC** supports up to 500kHz input sampling rates and consumes less than 100mW.

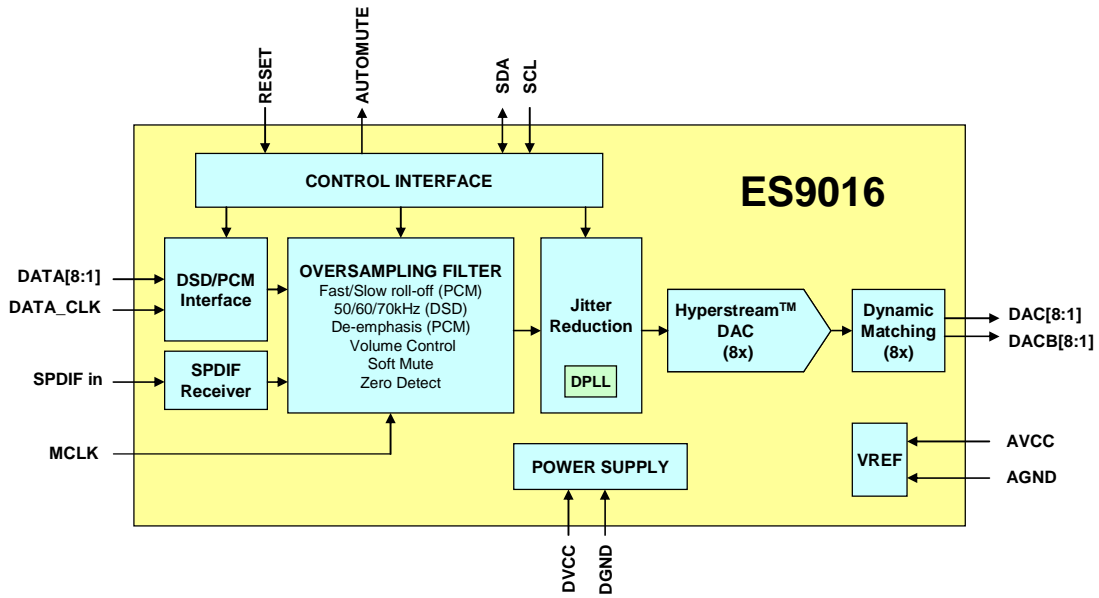
KEY FEATURES

Feature	Description
DAC Resolution	○ 32-bit Patented Hyperstream™ DAC
Input Resolution	○ 32-bit
Jitter Elimination	○ Patented Time Domain Jitter Eliminator
DNR	○ 128dB (stereo mode) ○ 124dB (8-channel mode)
THD+N	○ -110dB
Input Modes	○ SPDIF with 8-input MUX ○ PCM (I2S, MSB/LSB) ○ DSD ○ External 8x Digital Filter
Digital Filter	○ 32-bit architecture ○ Selectable rolloff frequency ○ Per-channel user customizable
DSP Functions	○ Click-free soft mute and volume control ○ Programmable Zero detect ○ De-emphasis for 32, 44.1 and 48kHz sampling
Package	○ 48-LQFP
Power	○ 100mW

APPLICATIONS

- Blu-ray / SACD / DVD-Audio player
- Audio preamplifier and receiver
- A/V processor
- Professional audio recording systems and mixing consoles
- Digital audio workstation

FUNCTIONAL BLOCK DIAGRAM



APPLICATION DIAGRAM

