



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 124dB and THD+N of −110dB, a performance level that will satisfy the most demanding audio enthusiasts.

The *ES9016 SABRE*³² *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 SABRE*³² *Ultra DAC* supports up to 384kHz PCM data via I²S as well as DSD-11.2MHz data and consumes less than 100mW.

The **SABRE³² Ultra DAC** sets a new standard for high quality audio performance, **SABRE SOUND[™]**, in a cost effective, easy-to-use form factor for today's most demanding digital audio applications.

FEATURE	BENEFIT
DAC Resolution	 o 32-bit Patented Hyperstream[™] DAC
Input Resolution	o 32-bit
Jitter Elimination	 Patented Time Domain Jitter Eliminator
64-bit accumulator and 32-bit processing	 Distortion free signal processing
DNR	o +124dB
THD+N	o −110dB
Input Modes	 SPDIF with 8-input MUX
	 PCM (l²S, MSB/LSB)
	o DSD
	 External 8x Digital Filter
Digital Filter	o 32-bit architecture
	 Selectable roll-off frequency
	 Per-channel user customizable
DSP Functions	 Click-free soft mute and volume control
	 Programmable Zero detect
	 De-emphasis for 32kHz, 44.1kHz, and 48kHz sampling

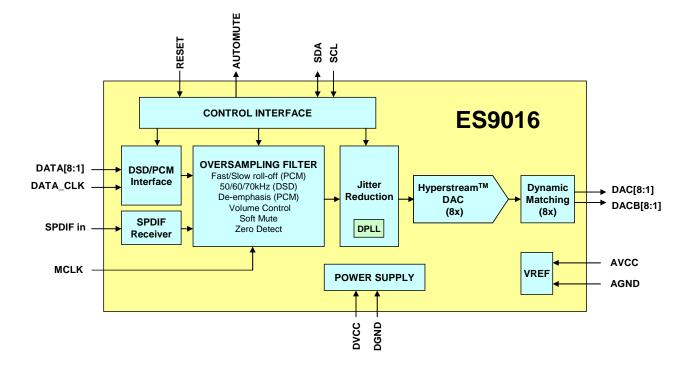
APPLICATIONS

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

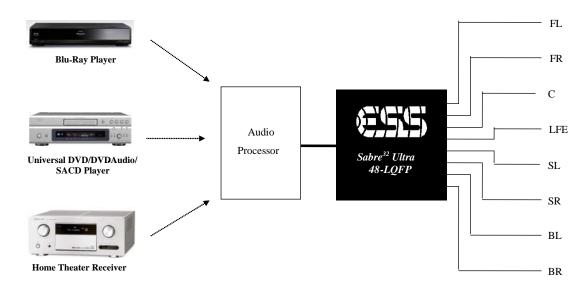


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FUNCTIONAL BLOCK DIAGRAM



APPLICATION DIAGRAM



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