



ES9008 Reference 8-Channel Audio DAC Product Brief

OVERVIEW

The Sabre Reference (ES9008) Highest Performance Audio DAC is the world's first 8-channel audio DAC to bring true professional digital audio to the consumer home entertainment market.

Using ESS' patented HyperStream® architecture and patent-pending Time Domain Jitter Eliminator, the Sabre Reference Audio DAC outperforms the best audiophile equipment with unprecedented 134dB DNR and -118dB THD+N, delivering true studio quality audio to digital audio applications such as Blu-ray, SACD, DVD-Audio, DVD, CD, home theatre, set top boxes and digital TV.

The Sabre Reference's flexible input architecture accepts SPDIF or PCM data from 16-24 bits up to a 192 kHz sampling rate, and also accepts 1-bit DSD data supporting native SACD audio.

The Sabre Reference sets a new standard for high quality audio performance in a cost effective, compact, easy to use form factor for today's most demanding digital audio applications.

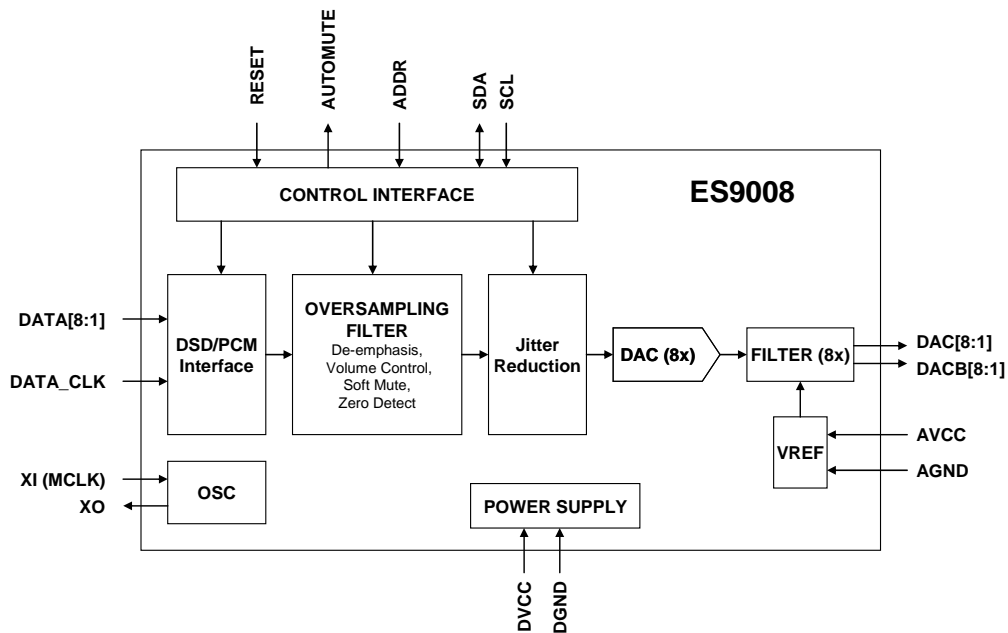
FEATURE	BENEFIT
<i>Patented</i> HyperStream® Architecture <ul style="list-style-type: none"> ○ DNR: +134dB (mono mode) ○ DNR: +128dB (8-channel mode) ○ THD+N: -118dB 	Unprecedented dynamic range and low distortion allowing true reproduction of audio as it is mastered at recording studio
<i>Patent-pending</i> Time Domain Jitter Reduction	Unmatched audio clarity free from input clock jitter allowing simple system design and layout
48-bit accumulator and 28-bit processing	Distortion free signal processing
Auto-detect PCM / DSD converter	Universal (e.g. DVD / SACD) audio playback
8-channel DAC in 64-LQFP	Reduces PCB footprint and simplifies board layout
Low power (100mW for 8 channels)	Simplifies power supply design
Customizable output configuration	Mono, stereo, 4 or 8-channel output in current or voltage mode based on performance criterion
Universal digital input	All-digital SPDIF, PCM (I ² S, MSB / LSB justified 16-, 20- or 24-bit) or DSD input
Integrated DSP functions	Click-free soft mute and volume control Programmable filter characteristics for PCM / DSD Programmable Zero detect De-emphasis for 32kHz, 44.1kHz, and 48kHz sampling

APPLICATIONS

- Blu-ray players
- SACD / DVD-Audio players
- Audio receivers
- Home theater receivers
- Professional audio equipment



FUNCTIONAL BLOCK DIAGRAM



No part of this publication may be reproduced, stored in a retrieval system, transmitted, or translated in any form or by any means, electronic, mechanical, manual, optical, or otherwise, without the prior written permission of ESS Technology, Inc. ESS Technology, Inc. makes no representations or warranties regarding the content of this document. All specifications are subject to change without prior notice. ESS Technology, Inc. assumes no responsibility for any errors contained herein. U.S. patents pending.