

SABRE³²

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

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 200kHz input sampling rates and consumes less than 100mW.

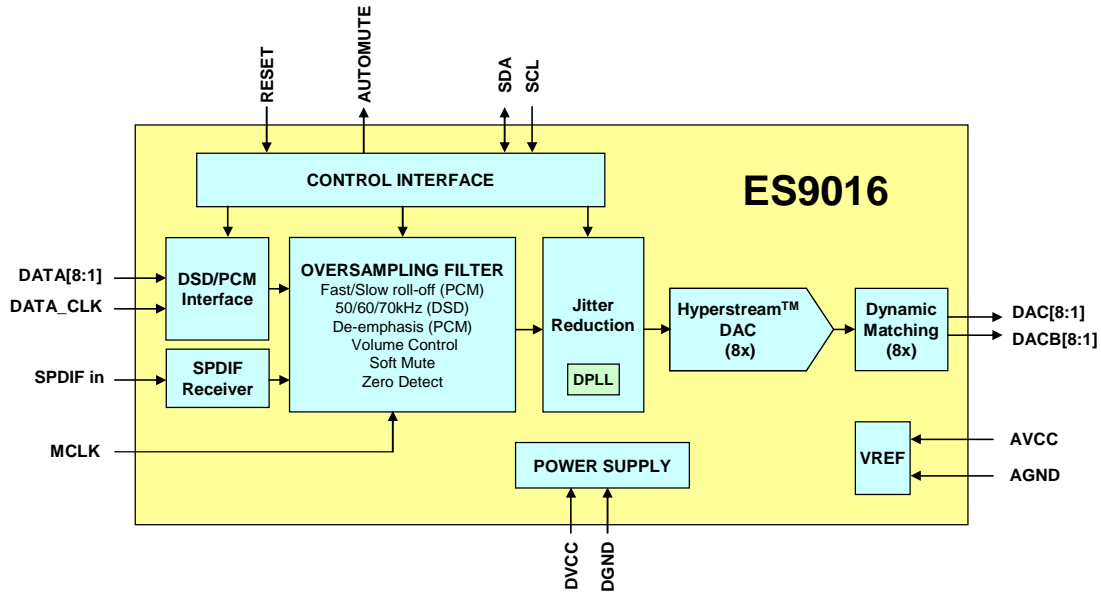
| FEATURE | DESCRIPTION |
|--|--|
| DAC Resolution | ○ 32-bit Patented Hyperstream™ DAC |
| Input Resolution | ○ 32-bit |
| Jitter Elimination | ○ Patented Time Domain Jitter Eliminator |
| 64-bit accumulator and 32-bit processing | ○ Distortion free signal processing |
| DNR | ○ 128dB (stereo mode) ○ 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

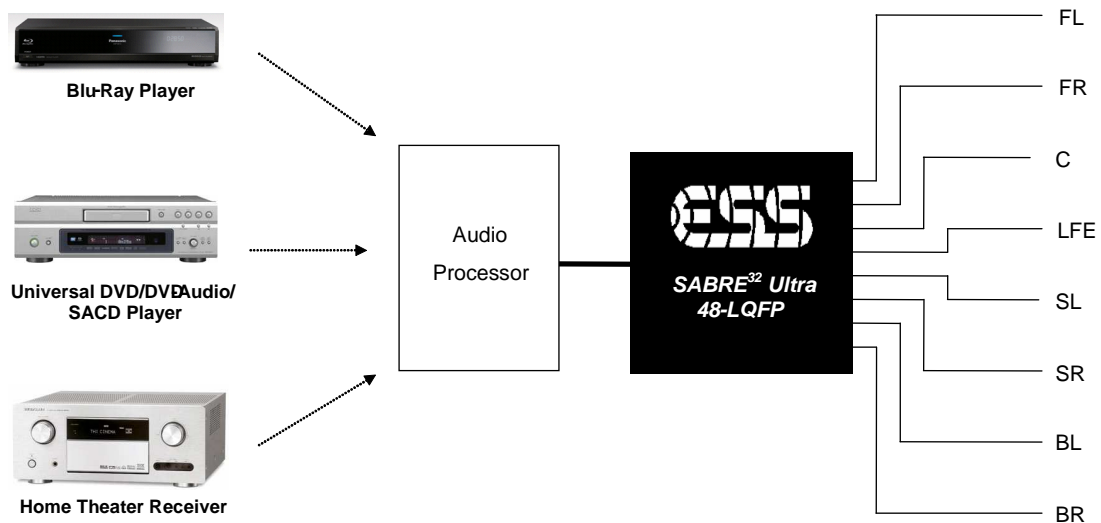
- Blu-ray / SACD / DVD-Audio player
- Audio preamplifier and receiver
- A/V processor
- Professional audio recording systems and mixing consoles
- Digital audio workstation



FUNCTIONAL BLOCK DIAGRAM



APPLICATION DIAGRAM



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