



ES9018K2M

32-bit Stereo Mobile Audio DAC

Product Brief

The **ES9018K2M SABRE³² Reference DAC** is a high-performance 32-bit, 2-channel audio D/A converter targeted for audiophile-grade portable applications such as mobile phones and digital music players, consumer applications such as Blu-ray players, audio pre-amplifiers and A/V receivers, as well as professional applications such as recording systems, mixer consoles and digital audio workstations.

Using the critically acclaimed ESS patented 32-bit Hyperstream™ DAC architecture and Time Domain Jitter Eliminator, the **ES9018K2M SABRE³² Reference DAC** delivers a DNR of up to 127dB and THD+N of -120dB, a performance level that will satisfy the most demanding audio enthusiasts.

The **ES9018K2M SABRE³² Reference DAC**'s 32-bit Hyperstream™ architecture can handle up to 32-bit PCM data via I2S, 384kHz input sampling rates and mono mode for highest performance applications. Both synchronous and ASRC (asynchronous sample rate conversion) modes are supported.

The **ES9018K2M SABRE³² Reference DAC** comes in 28-QFN package and consumes less than 40mW in normal operation mode (<1mW in standby mode).

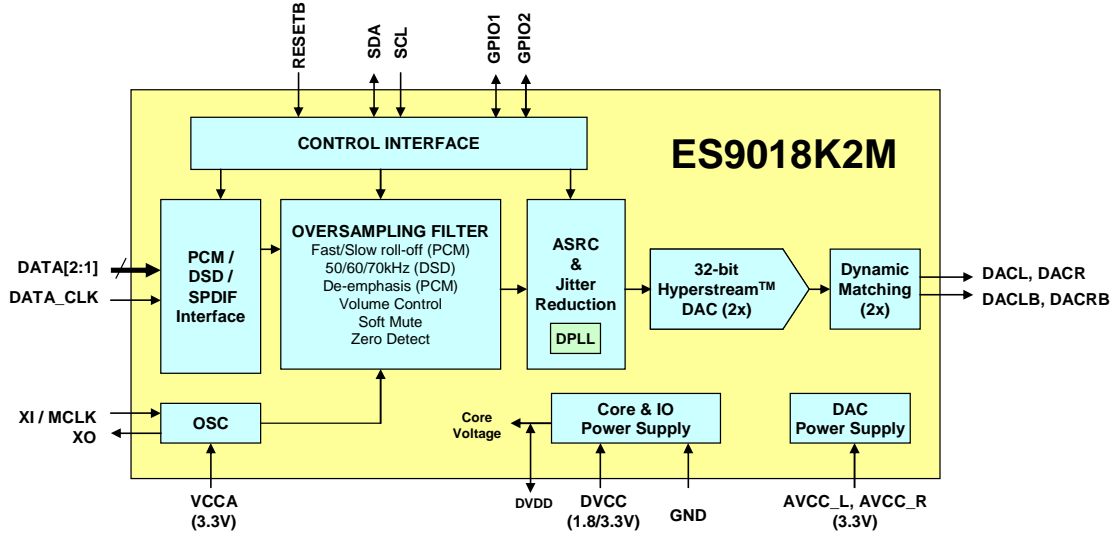
FEATURE	DESCRIPTION
Patented 32-bit Hyperstream™ DAC <ul style="list-style-type: none"> 127dB DNR -120dB THD+N 	<ul style="list-style-type: none"> Industry's highest performance 32-bit mobile audio DAC with unprecedented dynamic range and ultra low distortion Supports both synchronous and ASRC (asynchronous sample rate converter) modes
Patented Time Domain Jitter Eliminator	<ul style="list-style-type: none"> Unmatched audio clarity free from input clock jitter
64-bit accumulator and 32-bit processing	<ul style="list-style-type: none"> Distortion free signal processing
Integrated DSP Functions	<ul style="list-style-type: none"> Click-free soft mute and volume control Programmable Zero detect De-emphasis for 32, 44.1 and 48kHz sampling
Customizable output configuration	<ul style="list-style-type: none"> Mono or stereo output in current or voltage mode based on performance criterion
I2C control	<ul style="list-style-type: none"> Allows software control of DAC features
28-QFN (5mm x 5mm) package	<ul style="list-style-type: none"> Minimizes PCB footprint
<40mW operational power <1mW standby power	<ul style="list-style-type: none"> Maximizes battery life
Versatile digital input	<ul style="list-style-type: none"> Supports SPDIF, PCM (I2S, LJ 16-32-bit) or DSD input

APPLICATIONS

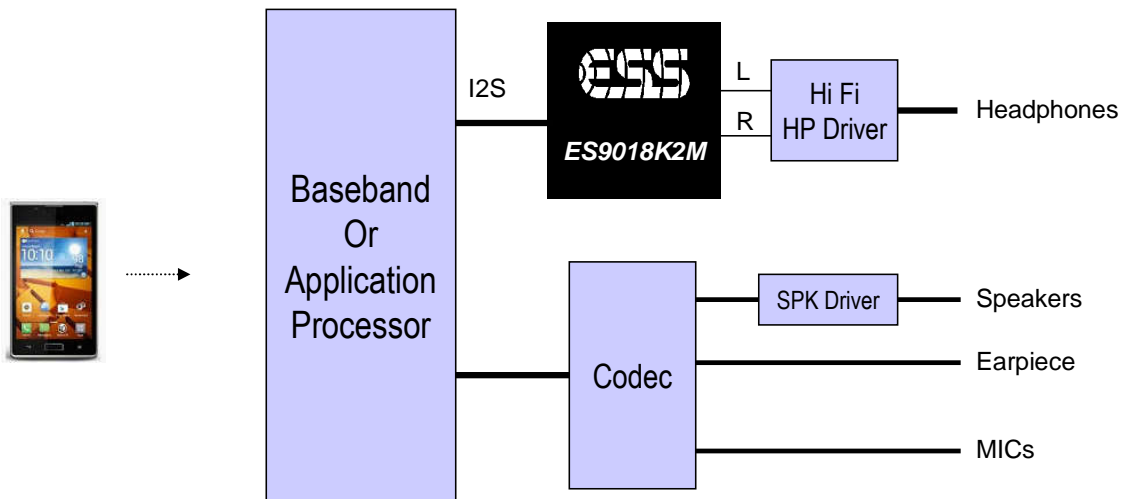
- Mobile phones / Tablets / Digital music players / Portable multimedia players
- Blu-ray / SACD / DVD-Audio player
- Audio preamplifier and A/V receiver,
- Professional audio recording systems / Mixing consoles / Digital audio workstation



FUNCTIONAL BLOCK DIAGRAM



TYPICAL MOBILE APPLICATION DIAGRAM



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