



SABRE9018Q2C 32-bit Stereo Mobile DAC with Headphone Amplifier and Output Switch

The **SABRE9018Q2C SABRE³² Reference DAC** is a high-performance 32-bit, 2-channel audio D/A converter with headphone amplifier and output switch. The SOC is designed 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 **SABRE9018Q2C SABRE³² Reference DAC** delivers a DNR of up to 121dB and THD+N of -115dB, a performance level that will satisfy the most demanding audio enthusiasts.

The **SABRE9018Q2C SABRE³² Reference DAC**'s 32-bit Hyperstream™ architecture can handle up to 32-bit 384kHz PCM data via I²S, DSD-11.2MHz data as well as mono mode for highest performance applications. Both synchronous and ASRC (asynchronous sample rate conversion) modes are supported.

The **SABRE9018Q2C SABRE³² Reference DAC** sets the standard for HD audio performance, **SABRE SOUND™**, in an easy-to-use 40-pin QFN for today's most demanding digital-audio applications.

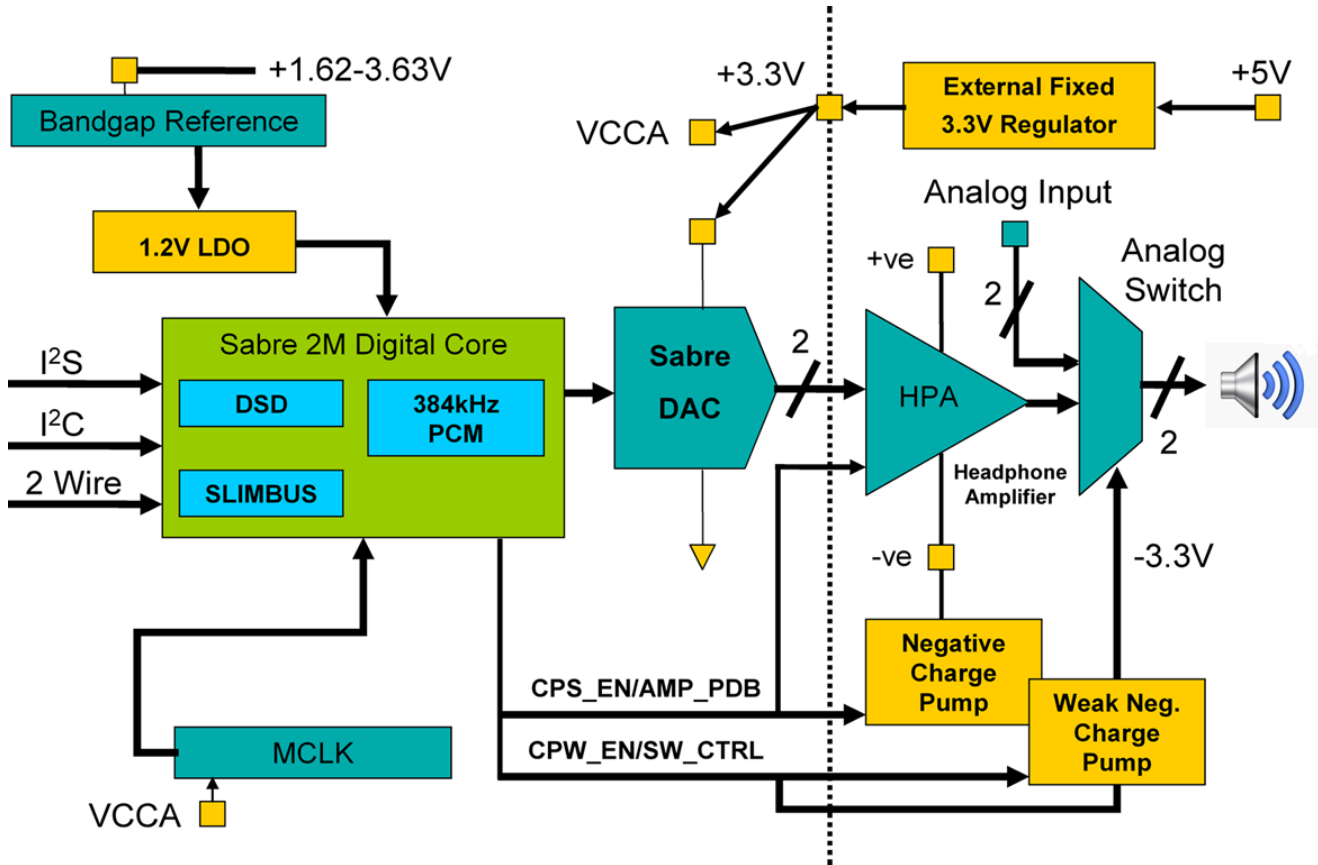
FEATURE	DESCRIPTION
Patented 32-bit Hyperstream™ DAC <ul style="list-style-type: none"> +121dB DNR -115dB THD+N, 2V_{rms} into 600Ω -100dB THD+N, 49mW into 32Ω 	<ul style="list-style-type: none"> Industry's highest performance 32-bit mobile audio DAC with unprecedented dynamic range and ultra low distortion 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 32kHz, 44.1kHz, and 48kHz sampling
Customizable output configuration	<ul style="list-style-type: none"> Mono or stereo output
I ² C, I ² S, or 2-Wire control	<ul style="list-style-type: none"> Allows software control of DAC features
40-pin QFN Package, 5mm x 5mm	<ul style="list-style-type: none"> Minimizes PCB footprint
< TBDmW 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
Customizable filter characteristics	<ul style="list-style-type: none"> User programmable filter allowing custom roll-off response Bypassable oversampling filter

APPLICATIONS

- Mobile phones / Tablets / Digital music players / Portable multimedia players
- Blu-ray / SACD / DVD-Audio player
- USB DAC Headphone Amplifier and A/V receiver
- Professional audio systems / Mixing consoles / Digital audio workstation



FUNCTIONAL BLOCK DIAGRAM



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