



CLASS D **CLOSED-LOOP DAC**

PREMIUM QUALITY SOUND, IMPROVED BATTERY LIFE

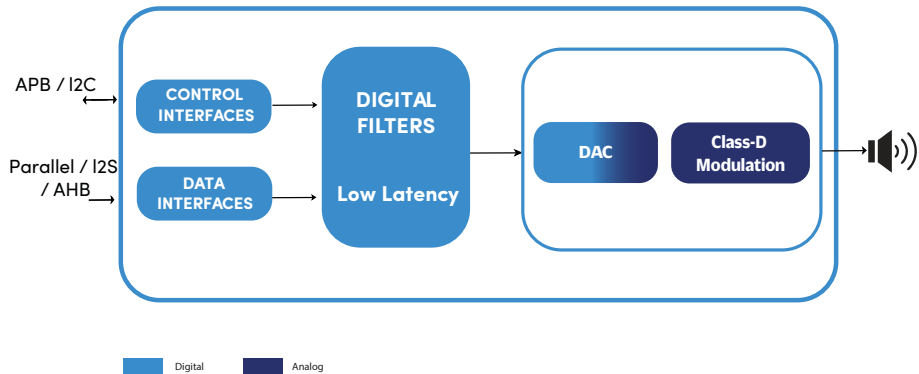
Experience superior sound with Dolphin Semiconductor's Closed-Loop Class D DAC, designed for unmatched performance and ultra-low power consumption.

This advanced IP delivers consistent, high-fidelity audio, even in the most demanding applications. Along with our low-power continuous-time ADC, it unlocks new system possibilities, enabling superior audio solutions for next-generation designs. Proven in silicon down to 12nm, it ensures the best efficiency and a seamless integration, setting a new standard in audio innovation.

APPLICATIONS

- > Smart speakers
- > Wearables
- > AR/VR
- > IoT devices
- > Automotive
- > Audio smart detection

PDM CLOSED-LOOP CLASS D DAC



DAC PLAYBACK PERFORMANCES

Output noise level: -115 dBV /

1.78 uVrms A-Weighted

THD+N -95 dB

Low power: down to 125 μ A ADC

Low power consumption

1.9 mW at 0.1 mW output power,

16 ohm load

2.2 mW at 0.3 mW output power,

16 ohm load

KEY FEATURES

Capacitor-less / filter-less

class-Doutput driver

Pop noise reduction systems

Class-D multi-level PDM modulation

for ultra-low EMI

Power optimizer feature for power consumption reduction at low signal operation

Programmable digital filter with ultra low latency capability



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