



## BAT: AUDIO PLATFORM

35 years of experience

### WHAT IS BAT?

BAT is an advanced audio IP platform, providing high-fidelity audio IPs for battery powered SoC.

Dolphin Design portfolio brings unmatched quality, power consumption and Innovation. From the industry's best ADC to the exclusive class-D IP, our audio redefines value creation, when developing IPs in-house and drastically reduce time-to-market, costs and risk.

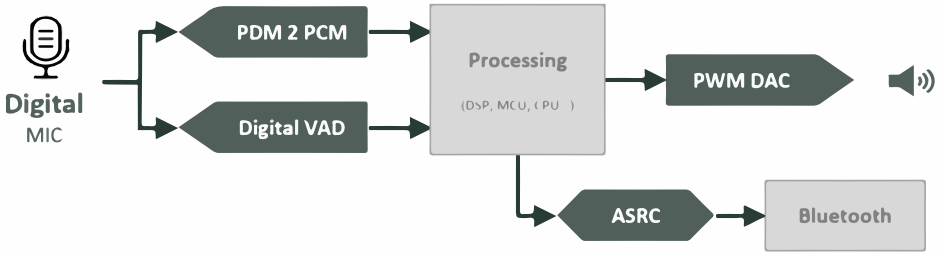
Our solutions promise not just extended battery life but optimization of trending use cases, like ANC, beamforming or voice user interface.

### APPLICATIONS

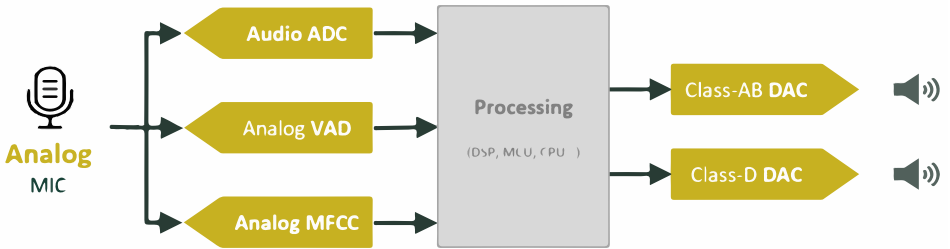
- Earbuds & headsets
- Smart Speaker
- Wearables
- AR/VR
- IoT devices
- Automotive
- Audio smart detection

# One-Stop-Shop Platform

Digital Audio IPs. Process agnostic



Analog Audio IPs. From 55 to 12 nm



## Key Performances

- High SNR: 120 dB DAC; 109 dB ADC
- Low latency: down to 2  $\mu$ S
- Low noise: down to 1.78  $\mu$ Vrms
- Low power: down to 125  $\mu$ A ADC
- Low gate count ASRC and PWM DAC
- 8  $\mu$ A Voice Activity Detection
- 4  $\mu$ A Analog feature extraction

## Key Features

- 0° Phase mismatch between channels
- Analog & Digital VAD
- Digital DAC
- PLL-less Audio codec
- Customizable audio codec



**DOLPHIN**  
DESIGN