





**CX20702 Features**  
**CODEC**

- 4-wire and 5-wire digital audio I/O (I<sup>2</sup>S/PCM/SPDIF), supporting full duplex independent sampling rates
- One 3-wire I<sup>2</sup>C or 4-wire SPI slave interface for external MCU
- USB 2.0 Compliant Audio Class Interface
- Integrated PWM output, re-taskable as differential line out
- Eight GPIO pins
- Spread Spectrum for filter-less, low EMI output
- Three single-ended line in (convertible to one stereo differential line in and one single-end)
- Two microphones interfaces with on-chip bias supply
- Integrated 50 mW headphone driver with jack sense
- Differential line out
- 24-bit DAC/ADC, SNR 102 dB, THD - 92 dB at 48 kHz 3.3 V
- Audio sample rate: 8, 11.025, 12, 16, 22.05, 24, 32, 44.1, 48, 64, 88.2, 96 kHz
- 90 dB dynamic range with 0.01percent THD+N at 4 Ω load
- 10-bit ADC multiplexed to support analog volume potentiometer and DC level detection

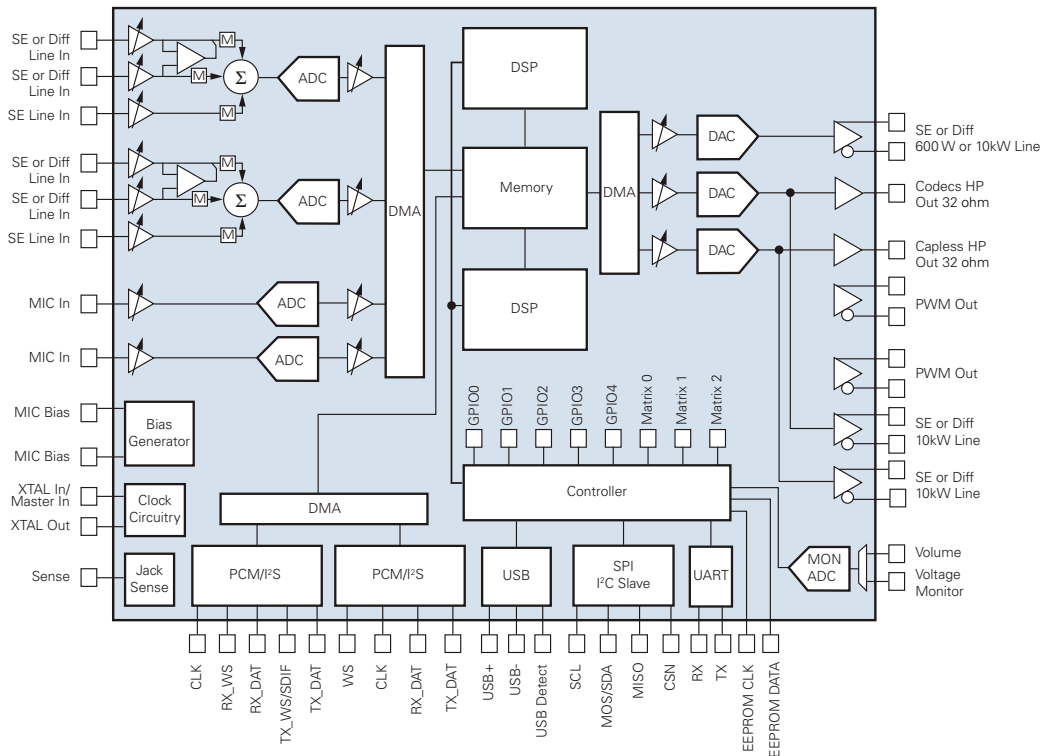
- Flexible power management
- Variable master clock rates
  - 7 mW stereo playback (1.8V supply)
  - 14 mW record and playback (1.8V supply)

**DSP**

- Subband acoustic echo suppression and cancellation
- Array mic beam-forming
- Noise reduction
- Dynamic loudness adaptor
- Mic auto gain control
- Digital parametric equalizer (10 bands/channel)
- Dynamic range compression
- Digital Crossover
- 3D Expander (Phantom mode and Immersion mode)

**SPoC Configuration Toolbox**

- Fast configuration tool via USB-to-I<sup>2</sup>C from PC
- Device configuration and DSP parameter adjustment
- Output log for convenient MCU programming



**CX20702 Interface Diagram**  
The CX20702 is offered in a 76-pin QFN package

**Conexant Product Portfolio**

Conexant’s comprehensive product portfolio includes solutions for imaging, audio, video and embedded-modem applications.

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