

XCORE[®].AI MULTICHANNEL AUDIO PLATFORM



- **The XCORE.AI multichannel audio platform provides a scalable and flexible hardware and software solution for a wide range of consumer and professional audio products.** ➤

The multichannel audio platform is based on an XCORE.AI multicore controller; the XU316-1024-TQ128-C24, and includes a high-speed USB 2.0 PHY, flexible GPIO and 16 logical cores that deliver up to 2400 MIPS of deterministic processing power.

The guaranteed Hardware-Response[™] time of XCORE technology always ensures lowest latency bit perfect audio streaming to and from the USB host.

- The XMOS XTC development tools enable quick customisation for product differentiating features. ➤

FEATURE HIGHLIGHTS OF XCORE.AI

USB COMPLIANT

- High-speed USB 2.0 compliant device with low loopback latency.

BIT-PERFECT AUDIO TRANSFER

- USB Audio Class 2.0 compliant. High resolution audio playback delivered through PCM up to 192kHz, 32 bits. Flexible clocking architecture supports multiple synchronisation configurations and low jitter, high quality audio capture and playback.

RAPID DEVELOPMENT

- Source code reference software and integrated suite of development tools mean royalty-free deployment and a fast time to market.

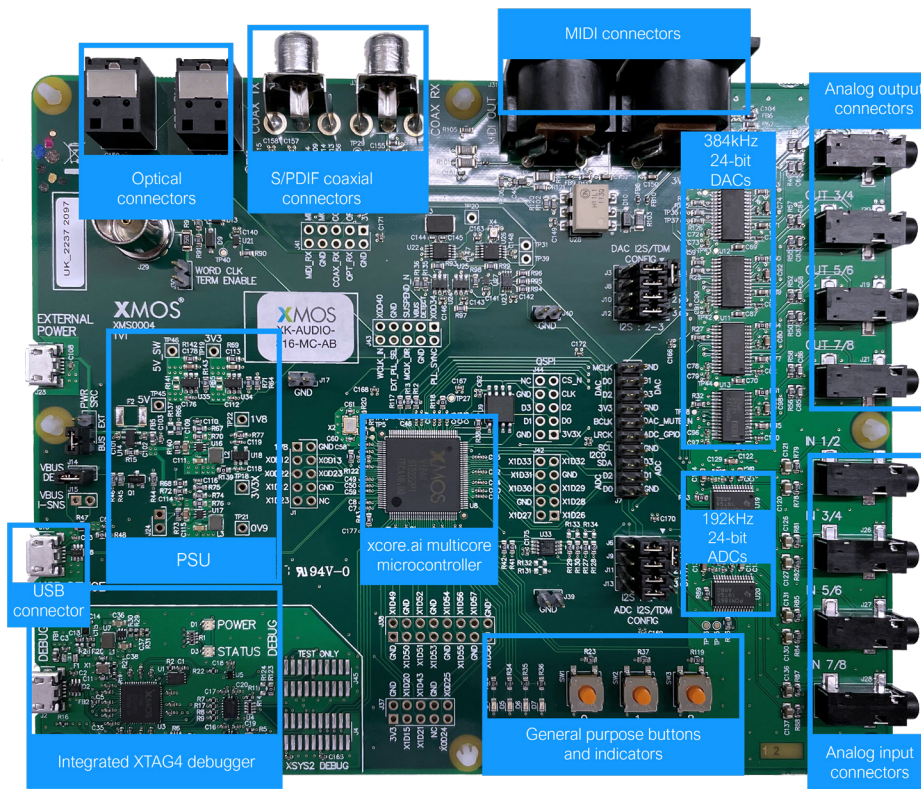
FLEXIBLE I/O

- Simultaneous multi-channel playback and record from host interface with support for over 8 channels.
- Flexible, deterministic and responsive processing power, easily customisable to meet specific product requirements.

XK-AUDIO-316-MC-AB

Supports MacOS, Android and Windows
Bus-powered or self-powered
PCM up to 192kHz at 16, 24 or 32 bits









UNDERSTANDING THE BOARD



XCORE.AI Multichannel Audio Platform Kit

Available with royalty-free source code, the reference software provides a fully featured production ready solution, including support for: full and high-speed USB operation, USB Audio Class 2.0 & 1.0, MIDI, HID & DFU classes.

The board integrates four Texas Instruments PCM5122 stereo audio DACs and two Texas Instruments PCM 1865 quad channel audio ADCs along with two IEC60958 consumer mode inputs and outputs for electrical (S/PDIF) and optical interfacing and supports MIDI In and Out ports. Integrated XTAG4 enables debug with JTAG and XSCOPE.

PRO AUDIO			CONSUMER/PROSUMER		
	Speakers	Amplifiers		Dj Controllers	Musical Instruments
					
	Mixing Consoles	Audio Interfaces		Headphone Amps	Audio Interfaces (Dac)

SILICON
XU316-1024-TQ128-C24

DEV KIT
XK-AUDIO-316-MC-AB