

xCORE-AUDIO Hi-Res 2

AFFORDABLE HI-RESOLUTION AUDIO PROCESSING FOR EVERYONE



FEATURES

- USB: 2 high resolution channels OUT
 - Up to 384 kHz (44.1, 48, 88.2, 96, 176.4, 192, 352.8, 384) sample rates
 - Asynchronous Isochronous transfers
- CODEC: I2S or DSD
 - o 16, 24, or 32 bit PCM
 - O DoP64 and DoP128
- Optional S/PDIF output
 - O Up to 192 kHz, 16/24 bit resolution
- Flexible integration and control
 - o 8 GPIO system control
 - 0 8 GPI for HMI with optional HID inputs
 - I2C master for configuration and control
- Multiple OS support
 - Windows
 - o Mac OS X
 - Android
- Field upgrade capability
- Power
 - Bus/Self powered
 - O Consumption: 400 mW
- TQFP64 package

The xCORE-AUDIO™ Hi-Res 2 offers high resolution stereo audio interfacing to deliver precise output with low noise/distortion for soothing, high-quality sound at a price-point for mass-market consumer audio applications.

The xCORE-AUDIO Hi-Res 2 supports the full range of high resolution file formats, including PCM audio encoded at 384kHz/32-bit and DSD 2.8 MHz/5.6 MHz audio from any suitable source.

The built-in USB interface uses superior Asynchronous Isochronous transfers to ensure bit-perfect audio reproduction from a wide array of digital devices, including Android®, PC or Mac®. Example Android applications and a free Windows UAC2 stereo driver are available.

The xCORE-AUDIO Hi-Res 2 is configurable and customizable. Eight GPIO are available for implementing Human Machine Interfaces (HMI) and/or the control of external audio DAC devices. An I2C port is provided for system configuration.

The xCORE-AUDIO Hi-Res 2 is packaged in an easy-to-use 64 pin TQFP for low-cost system integration.



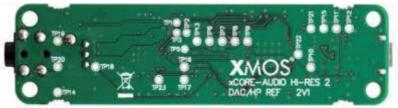
APPLICATION AREAS

- Headphone amplifiers
- Tablet docks
- USB speakers

- Audio DACs
- PC sound cards
- Hi Resolution speakers

xCORE-AUDIO Hi-Res DAC/HPA PLATFORM





	Feature	Benefit
•	High-speed USB 2.0 device	Plug-and-play operation Bus- or self-powered
((USB Audio Class 2.0 compliant	Driverless operation with Mac OS X ¹ and Android ² Multiple driver vendors for Windows
*	2-channel streaming from host at up to 384kHz PCM	Highest resolution stereo playback
	Local clocking Asynchronous USB audio transfer	Low jitter, high quality audio capture and playback
-	Highly integrated	Lowest total system cost and smallest form-factors

ORDERING INFORMATION

For a list of XMOS distributors, please visit www.xmos.com/support/distributors.

Part number	Contents
XHRA-2HPA-TQ64-C	xCORE-AUDIO HiRes-2 processor (XHRA-2)
XK-USB-AUDIO-HPA	xCORE-AUDIO Hi-Res DAC/HPA platform



^{1:} Mac OS X v10.6.4 and later provides native USB Audio Class 2.0 support.
2: Requires that Android device is USB host with USB Audio Class support. Tested against: Samsung Galaxy S3, S4, Note, Sony Xperia Z1, HTC One.