

eatures

- audio interface Native support 24bits/192kHz Wide range of firmware options

Technical

- USB Audio Class 2.0 interface
- TOSLINK/ADAT/TDM/I2S modes Asynchronous USB audio

OS compatibility

- Windows Thesycon ASIO driver Mac OS X driverless Linux Alsa 2.0 compliant

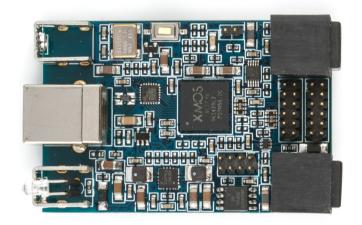
- USB Bus powered

Applications

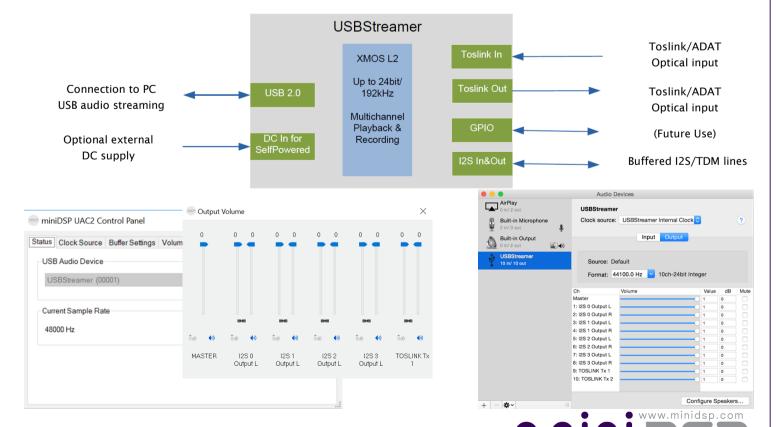
- Custom USB Audio interface
- USB to Toslink/I2S interface
- USB to TDM interface
- USB to ADAT interface

The USBStreamer is a miniature multi-channel USB to Toslink/I2S/TDM/ADAT interface with native support of audio files with format up to 24bit/192kHz. Packaged on a tiny PCB of only 2.4" by 1.4" (40x62mm), this interface is the perfect fit for OEM integration, testing tool for R&D or as part of your next high performance DIY project.

The USBStreamer utilizes high speed USB2.0 along with the Audio Class 2.0 implementation to simultaneously provide multiple channels of recording and playback. Thanks to a wide range of customized firmware, it is the swissarmy knife for audio developers looking to input/output audio to their PC/ MAC/Linux interface. The dongle is up & running in a matter of seconds with compatible ASIO drivers for both Mac/Windows platforms. An easy and flexible system integration that follows the footsteps of the miniDSP product line.



SYSTEM DIAGRAM

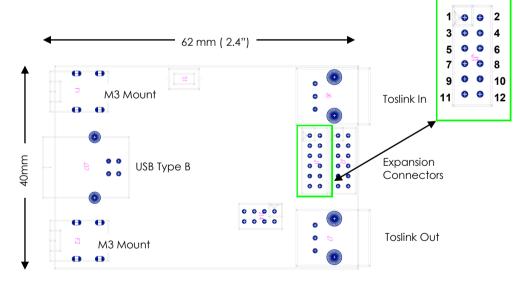




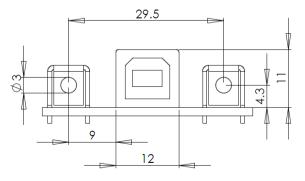
TECHNICAL SPECIFICATIONS

Item	Description
USB Streaming engine	XMOS L2 core / USB 2.0 full speed - USB Audio class 2.0 compliant
Capabilities	I2S + Toslink firmware: 8ch via I2S + 2ch Toslink (bidirectional) Stereo firmware: 2ch I2S + 2ch Toslink (bidirectional) ADAT: 8ch @ 48k bidirectional on optical receiver/transmitter TDM: 8ch audio bidirectionnal
Drivers	Driverless interface for Mac OS X v10.6.4 and up Thesycon Windows ASIO driver provided (XP/Vista/7/8/Win10) Linux Alsa compliant driver Apple IoS (ipad/iphone) using Camera kit - multichannel audio streaming
I2S/TDM format for input/outputs	24 bits I2S master mode Sample rate: 8/11.025/12/16/22.05/24k/32k/64k 44.1/48/88.2/96/176.4/ 192kHz TDM mode: 8ch @ 48k / input and output on I2S_data_in1/out1.
Optical input	Toslink sample rate: 44.1/48/88.2/96/176.4 kHz ADAT sample rate: 8ch ADAT mode @ 48/44.1k
Optical output	Toslink sample rate: 44.1/48/88.2/96/176.4 kHz ADAT sample rate: 8ch ADAT mode @ 48/44.1k
Expansion connector	2 x 12pin, 2mm pitch expansion connector for connectivity to hardware.
Mounting	2 x Right Angle brackets allow easy chassis mounting with M3 threaded hole.
Power supply	USB powered OR 5Vdc external supply via header - 300mA requirement
Dimensions (H x W x D) mm	13 x 40 x 62 mm

MECHANICAL DRAWINGS



Front view - Mechanical drawing



J1 Expansion connector pin out

Pin	Description
1	I2S data OUT ch1&2 - Playback
2	I2S data IN ch1&2 - Recording
3	12S data OUT ch3&4 - Playback
4	12S data IN ch3&4 - Recording
5	12S data OUT ch5&6 - Playback
6	12S data IN ch5&6 - Recording
7	12S data OUT ch7&8 - Playback
8	12S data IN ch7&8 - Recording
9	Master Clock out (MCLK OUT)
10	12S System clock (SCLK)
11	Ground (GND)
12	12S frame synch (LRCLK)

