

Features

- Miniature USB-SPDIF interface
- Native support 24bits/96kHz
- Easy integration for OEM/DIY
- Lowest cost USB-I2S interface

Technical

- USB 2.0 Audio interface
- Isochronous In&Out endpoints
- 24bit Resolution I2S lines
- Support 8/16/32/44.1/48/96KHz
- SPDIF transformers for isolation
- Buffered I2S interface selectable between I2S Master or Slave

Control

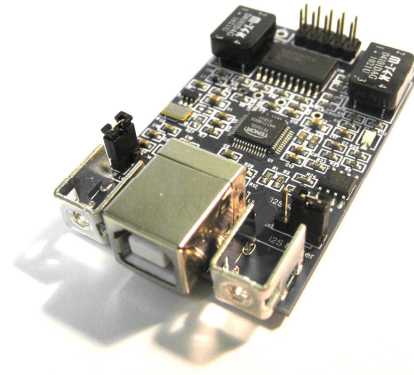
- Plug & Play - No driver required
- WinXP/Vista/7 compatible
- Mac OS X compatible

Power

- USB Bus powered
- External DC supply also available for cleaner Power supply

Applications

- Custom USB Audio interface
- USB-SPDIF-I2S interface
- High resolution Playback Recording



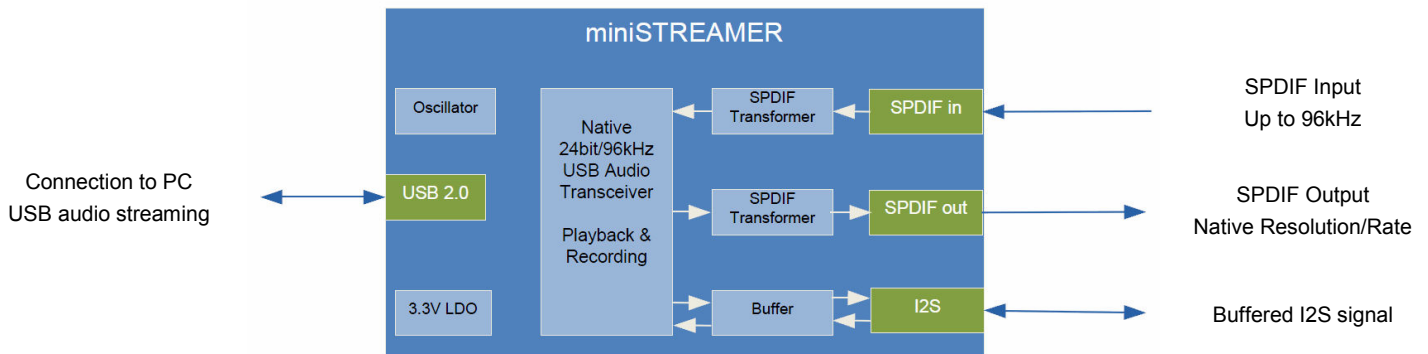
miniSTREAMER is a miniature USB to SPDIF-I2S interface, allowing native support of audio files with format up to 24bit/96kHz. Packaged on a tiny PCB of only 2.3" by 1.4", this interface is the perfect fit for OEM integration or as an element of a customized high performance A/V product.

Don't be fooled by its size, like any miniDSP product, this interface was designed with quality in mind. By combining native high resolution audio (24bits/96kHz) along with galvanic isolation (SPDIF transformers), our team's objective remains best audio quality for both playback and recording.

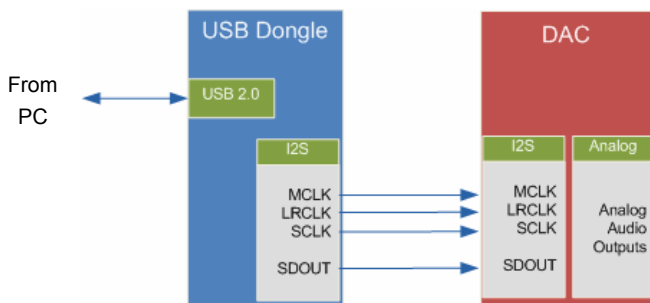
Keep it simple, Keep it real. With no driver installation, this USB/I2S/SPDIF dongle is a true plug & play experience, up & running in a matter of seconds. An easy and flexible system integration that follows the footsteps of the miniDSP legacy. From its I2S Master/Slave selection to its external power supply option, it's all there to make sure this tiny interface fits needs of a wide range of applications.

miniDSP, innovative Digital Audio Products

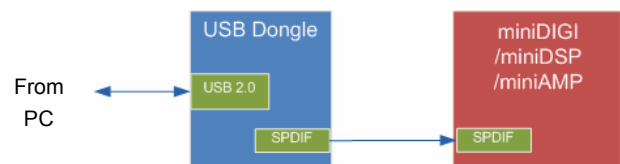
miniSTREAMER Diagram



Sample Application circuits



miniSTREAMER in I2S master, Audio playback

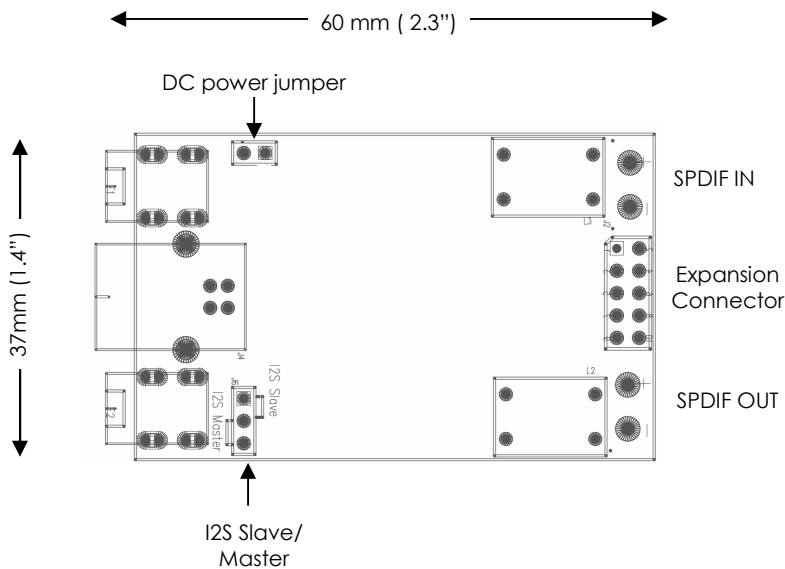


miniSTREAMER connected to miniDIGI

HARDWARE TECHNICAL SPECIFICATIONS

Item	Description
USB Streaming engine	USB 2.0 full speed - USB Audio class 1.0 compliant
Capabilities	2 isochronous input for recording, 2 isochronous outputs for playback
Drivers	Driverless interface for both Windows and Mac OS X environments
Resolution	16/24bit support
Supported sample rate	8/16/32/44.1/48/96kHz
I2S format	24 bits I2S
I2S settings	Master/Slave configurable with simple jumper setting
SPDIF Input	Transformer isolated SPDIF input, 75 Ohms
SPDIF Output	Transformer isolated SPDIF output, 75Ohms
Noise level & Dynamic Range (dB)	-150dB / 133dB
Expansion connector	8 pin, 2.5mm pitch expansion connector for direct connectivity to hardware. <ul style="list-style-type: none"> • SCLKOUT/LRCLKOUT/MCLKOUT/SDOUT for I2S output from the USB (playback) • SCLKIN/LRCLKIN/MCLKIN/SDIN for I2S input to the USB (Recording) • +5VDC external supply, GND
Mounting	2 x Right Angle brackets allow easy chassis mounting with M3 threaded hole.
Power supply	USB powered OR 5Vdc external supply via header - 60mA requirement
Dimensions (H x W x D) mm	12 x 37 x 60 mm

Mechanical Drawing



I2S Expansion connector Pin out

Pin#	Type	Description
1	Output	SCLKOUT - I2S system clock - Playback
2	Output	LRCLKOUT - I2S frame sync - Playback
3	Output	SCLKIN - I2S system clock - Recording
4	Output	LRCLKIN - I2S frame sync - Recording
5	Input	SDIN - I2S data - Recording.
6	Output	SDOUT - I2S data - Playback
7	n/a	GND
8	Output	MCLK OUT - Master clock Playback
9	Output	MCLK IN - Master clock Recording
10	Input	+5VDC from external supply. Warning: DC power jumper must be removed when board is powered from external supply