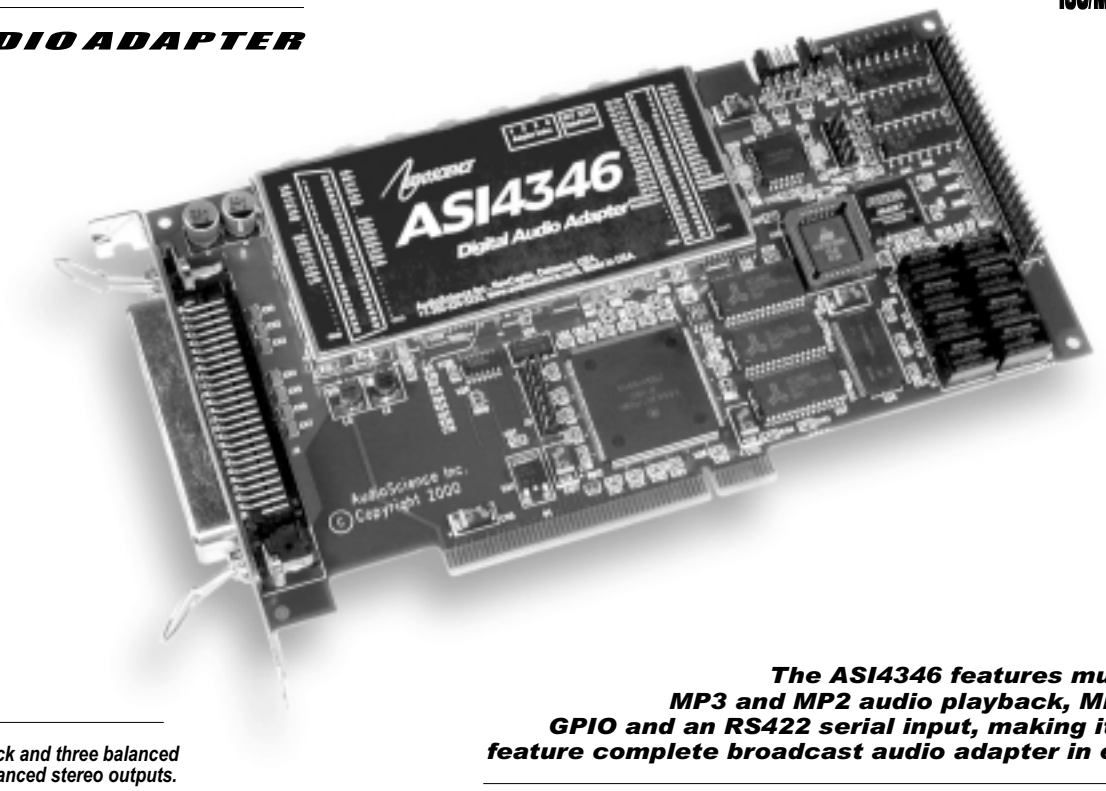
ASI4346

DIGITAL AUDIO ADAPTER

mp3 decode

ISO/MPEG-1 LAYER II



FEATURES

- *Four stereo streams of playback and three balanced stereo inputs mixed to four balanced stereo outputs.*
- *One stereo stream of record selectable from three balanced stereo inputs.*
- *GPIO: Eight relay isolated digital outputs and sixteen opto-isolated digital inputs.*
- *RS422 serial input for direct MPEG record from a satellite receiver.*
- *Formats include MP3 (playback), MPEG Layer 2 and 16bit PCM (record and playback).*
- *Programmable global samplerate of 8 to 50kHz.*
- *Standard 50pin "Centronics" type connector..*
- *20bit oversampling analog-to-digital and digital-to-analog converters. >90dB S/N and <0.005% THD+N.*
- *Automatic volume fade implemented by DSP for cross-fade and mixing effects.*
- *Upto four cards in one system.*
- *DOS, Windows 98, Windows NT/2000 and Linux software drivers available.*
- *Designed and manufactured in the USA.*

The ASI4346 features multi-stream MP3 and MP2 audio playback, MP2 record, GPIO and an RS422 serial input, making it the most feature complete broadcast audio adapter in existence.

The ASI4346 is a feature packed digital audio adapter with powerful on-board mixing, GPIO and direct bitstream inputs. The GPIO consists of eight relay outputs and sixteen opto-isolated inputs. These enable the control of station equipment and sensing of news feeds and other events. Using a standard Windows multimedia control type, the GPIO may be accessed using Windows multimedia mixer calls. A unique feature of the ASI4346 is the RS422 serial input. This supports the direct input of a satellite receiver MPEG bitstream which can be recorded as a standard .WAV or .BWF file for later playback. The ASI4346 removes the transcode and analog-to-digital conversion process that typically occurs when recording network satellite feeds, improving the audio quality. Three balanced stereo inputs and four MP3 or MPEG-1 Layer II playback streams can be digitally mixed to four balanced stereo outputs. One stereo MPEG-1 Layer II record stream can be sourced from any of the three inputs. 20bit over-sampling A/D and D/A converters are used to provide greater than 90dB of Signal-to-Noise Ratio (SNR) and less than 0.005% of Total Harmonic Distortion+Noise (THD+N) when recording or playing. The ASI4346 - No other soundcard offers more functionality or performance.

42C Reads Way, New Castle, Delaware 19720, USA, +1-302-324-5333, Fax +1-302-738-9434, www.audioscience.com

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ASI4346

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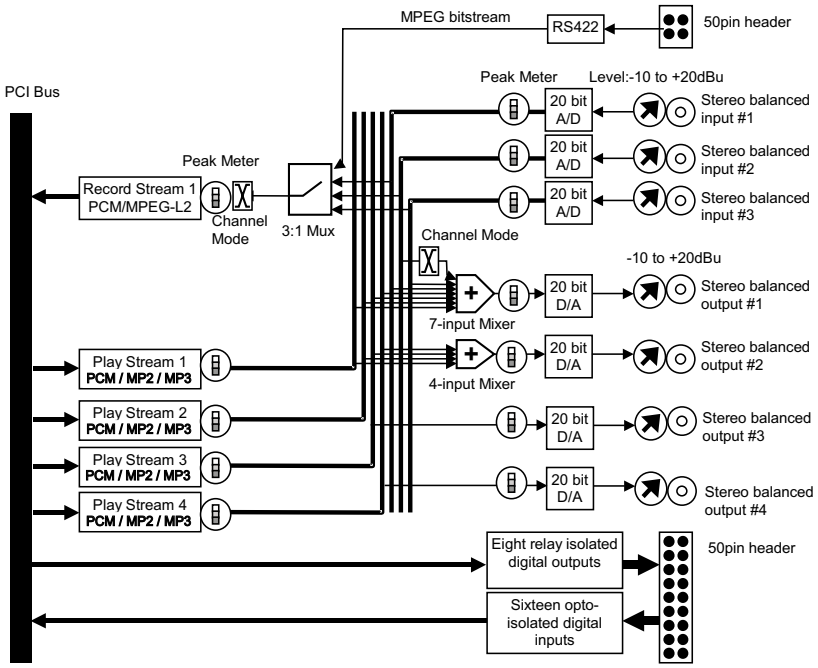

Analog I/O:
50pin Centronics Connector

LI0-	1	26	LI0+
RI0-	2	27	RI0+
LI1-	3	28	LI1+
RI1-	4	29	RI1+
LI2-	5	30	LI2+
RI2-	6	31	RI2+
-	7	32	-
-	8	33	-
RO3-	9	34	RO3+
LO3-	10	35	LO3+
RO2-	11	36	RO2+
LO2-	12	37	LO2+
RO1-	13	38	RO1+
LO1-	14	39	LO1+
RO0-	15	40	RO0+
LO0-	16	41	LO0+
-	17	42	-
-	18	43	-
-	19	44	-
-	20	45	-
-	21	46	-
-	22	47	-
-	23	48	-
-	24	49	-
GND	25	50	GND

Relay, Optoisolator and RS422
I/O : 50pin 0.1" Header

RLY0+	1	2	RLY0-
RLY1+	3	4	RLY1-
RLY2+	5	6	RLY2-
RLY3+	7	8	RLY3-
RLY4+	9	10	RLY4-
RLY5+	11	12	RLY5-
RLY6+	13	14	RLY6-
RLY7+	15	16	RLY7-
OPT0	17	18	OPT1
OPT2	19	20	OPT3
OPT4	21	22	OPT5
OPT6	23	24	OPT7
OPT8	25	26	OPT9
OPT10	27	28	OPT11
OPT12	29	30	OPT13
OPT14	31	32	OPT15
RS422DAT+	33	34	RS422DAT-
RS422CLK+	35	36	RS422CLK-
-	37	38	-
-	39	40	-
-	41	42	-
-	43	44	-
-	45	46	-
-	47	48	-
GND	49	50	VOPT

SPECIFICATIONS

ANALOG INPUTS

Type	Balanced
Connector	50pin Centronics
Level	-10 to +20dBu in 0.5dBu steps
Impedance	20K ohms
A/D converter	20bit, 128X Oversampling
S/N Ratio[1]	90dB minimum
THD+N[2]	86dB minimum
Sample Rates	8 to 48kHz with 100Hz resolution
Frequency Response	20Hz to 20kHz +/-0.5dB

ANALOG OUTPUTS

Type	Balanced
Connector	50pin Centronics
Level	-10 to +20dBu in 0.5dBu steps
Load Impedance	600ohms or greater
D/A converter	20bit
S/N Ratio[1]	90dB minimum
THD+N[2]	86dB minimum
Sample Rates	8 to 48kHz with 100Hz resolution
Frequency Response	20Hz to 20kHz +/-0.5dB

SIGNAL PROCESSING

DSP	100MHz Motorola DSP56301
Audio Formats	8 bit unsigned PCM 16bit signed PCM MPEG-1 Layer 2 MPEG-1 Layer 3 (playback only)

GENERAL

Dimensions	PCI form factor - 9" x 4.5" x 0.6" (230mm x 115mm x 15mm)
Weight	10 oz (284g) max
Operating Temperature	0C to 70C
Power Requirements	+5V @ 1.2mA +12V @ 300mA -12V @ 300mA

[1] - S/N Ratio is the difference between a 1kHz +14dBu sinewave and digital zero using an A weighting filter
[2] - THD+N measured using a +14dBu 1kHz sinewave sampled at 48kHz and A weighting filter

TESTED TO COMPLY WITH

CE FC

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