

1 DESCRIPTION

The ASI5111/ASI5211 are professional PCI audio adapters designed for use in radio broadcast production.

The ASI5111/ASI5211 offer two stereo record stream from either a balanced analog input or AES/EBU digital input and four stereo play streams mixed to both a balanced analog output and an AES/EBU digital output.

The ASI5111 is a PCI adapter and the ASI5211 is a PCI Express (PCIe) adapter. Additionally, the ASI5211 makes available two opto inputs and two relay outputs via a second bracket attached to the ASI5211 using a 10-pin ribbon cable.

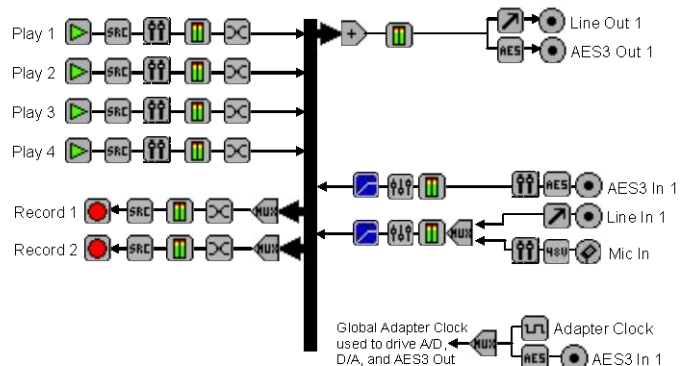
Also included is a microphone input, with low noise pre-amp and a 48V phantom supply.



2 FEATURES

- Four stereo streams of PCM playback
- Two stereo streams of PCM record
- Balanced stereo analog input and output with +24dBu I/O (ASI5211)
- PCI interface (ASI5111) or PCIe interface (ASI5211)
- Two opto inputs and two relay outputs via a second bracket (ASI5211)
- AES/EBU or S/PDIF digital input and output (software selectable)
- Low noise microphone input with 48V phantom supply and DSP based compressor/limiter and 5-band equalizer
- 24bit analog-to-digital and digital-to-analog converters - 100dB SNR and 0.0025% THD+N
- 11 to 96kHz sample rates
- MRX™ multi rate mixing technology supports digital mixing of multiple sample rates
- SoundGuard™ transient voltage suppression protects against lightning and other high voltage surges on all I/O
- Up to 4 cards in one system
- Windows 8, 7, XP, Server 2008/2003 and Linux drivers available

ASI5111/ASI5211



- Key:
- | | | | | |
|---------------|---------------|-----------------------|--------------|------------|
| Record Stream | Volume | Mixer | Meter | Compressor |
| Play Stream | AES/EBU Tx/Rx | Sample Rate Converter | Channel Mode | Equalizer |
| Input/Output | Clock Source | Phantom Power | Mic Input | |

3 SPECIFICATIONS

BALANCED INPUT/OUTPUT

Connector	DB-9 Female
Input Level	-10 to +20dBu (ASI5111) or +24dBu (ASI5211 and ASI5111 Rev F+) in 1dBu steps
Input Impedance	20K ohms
Output Level	-10 to +20dBu (ASI5111) or +24dBu (ASI5211 and ASI5111 Rev F+) in 1dBu steps
Load Impedance	600ohms or greater
S/N Ratio [1]	> 100dB (record or play)
THD+N [2]	< 0.0025% (record or play)
Sample Precision	24bit Oversampling
Frequency Response	20Hz to 20kHz +/-0.25dB 20Hz to 40kHz +0.25/-5dB[3]

MICROPHONE INPUT

Connector	¼" TRS jack
Input Gain	20, 40 and 60dB software adjustable
Input Impedance	11K ohms (+ or – to ground)
Phantom Power	48V +/- 4V, software selectable on and off.
S/N Ratio [1]	90dB @ 40dB gain
THD+N [2]	0.005% @ 40dB gain
Frequency Response	20Hz to 20kHz +/-0.5dB 20Hz to 40kHz +0.5/-5dB [3]

DIGITAL INPUT/OUTPUT

Type	AES/EBU (EIAJ CP-340 Type I / IEC-958 Professional) S/PDIF (EIAJ CP-340 Type II / IEC-958 Consumer) (software selectable)
Connector	DB-9 Male
Sample Rates	32, 44.1, 48, 64, 88.2 and 96kHz
Sample Precision	24bit

SAMPLE RATE CLOCK

Internal	32, 44.1, 48, 64, 88.2 and 96kHz
AES/EBU In	32, 44.1, 48, 64, 88.2 and 96kHz

SIGNAL PROCESSING

DSP	Texas Instruments TMS320C6711 @ 135MHz
Memory	8MB
Audio Formats	8 bit unsigned PCM 16bit signed PCM 32bit IEEE floating point PCM

BREAKOUT CABLES

Analog (INCLUDED)	CBL1001: DB-9 to 2 in and 2 out XLR
Digital (INCLUDED)	CBL1003: DB-9 to 1 in and 1 out XLR
GPIO connector (OPTIONAL)	CBL2008 (full height) or CBL2009 (half height)

GENERAL

Bus	ASI5111: Universal 32bit PCI (3.3V or 5V signaling) ASI5211: X1 PCI Express.
Dimensions	PCI form factor – 6.75" x 3.9" x 0.6" (172mm x 100mm x 15mm)
Weight	8 oz (227g) max
Operating Temperature	0C to 70C
Power Requirements	ASI5111: +5V @ 600mA, +12V @ 150mA, -12V @ 70mA ASI5211: +3.3V @ TBD, +12V @ TBD

[1] - S/N Ratio is the difference between a 1kHz digital full-scale sinewave and digital zero using an A weighting filter

[2] - THD+N measured using a +20dBu 1kHz sinewave sampled at 48kHz and A weighting filter

[3] – Using a 96kHz sampling rate