# ADC-2121 Analog-to-Digital Audio Converter

The ADC-2121 is an analog audio to AES/EBU converter. It is used in i-MOD platform. The module converts 2 analog audio inputs to 2 AES outputs and 2 AES-3id outputs. Output digital audio signals can be synchronized to reference clock signals or digital audio signals. Input level can be displayed via card-edge LEDs.

The ADC-2121 can be controlled locally by means of an intuitive card-edge interface or remotely using i-MOD platform control software IM-MASTER.
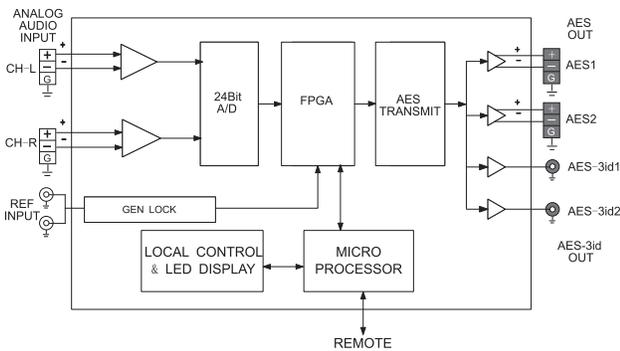
FEATURES

- 24-bit processing
- 2 analog audio inputs
- Input level viewable from -50 dBu to +18 dBu
- Supports external reference inputs: word clock or AES-3id
- Three output sampling rate options: 48 kHz, 96 kHz and 192 Hz
- Output gain adjustment ranges from -12 dB to 12 dB
- Supports left and right channel conversion, stereo output for mono input, and phase reversion
- Non-volatile memory
- Hot-swappable
- IM-MASTER control supported

BLOCK DIAGRAM

BACK MODULES
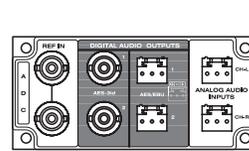
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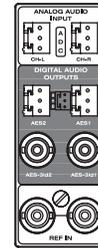
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SPECIFICATIONS
Specifications are subject to change without notice.

REF INPUT
Signal Format........................AES-3id or 48 / 96 / 192 kHz
Word Clock
Connector..............................BNC (×2)
Impedance............................75 Ω

ANALOG AUDIO INPUT
Signal Format........................Balanced analog audio
Quantization...........................24 bits
Connector..............................3Pin (×2)
Impedance............................>20 kΩ
Level Range...........................20 dBu(Max.)

BALANCED DIGITAL AUDIO OUTPUT
Signal Format........................AES3
Connector..............................3Pin (×2)
Impedance............................110 Ω
Level....................................5 Vp-p ±10%
Jitter.....................................<0.02 UI
Output Sampling Rate............48 kHz, 96 kHz, 192 kHz
Output Delay...........................670 ns

UNBALANCED DIGITAL AUDIO OUTPUT
Signal Format........................AES3-3id
Connector..............................BNC (×2)
Impedance............................75 Ω
Level....................................1 Vp-p ±10%
Jitter.....................................<0.02 UI
Output Sampling Rate............48 kHz, 96 kHz, 192 kHz
S/N Ratio..............................>75 dB
Channel Crosstalk..................<-80 dB, 20 Hz ~ 20 kHz
Frequency Response...............±0.25 dB, 20 Hz ~ 20 kHz
Output Delay...........................670 ns

ELECTRICAL
Power....................................2.5 W

ENVIRONMENTAL
Operating Temperature............32° ~ 104° F (0° ~ 40° C)
Relative Humidity....................10% ~ 90%