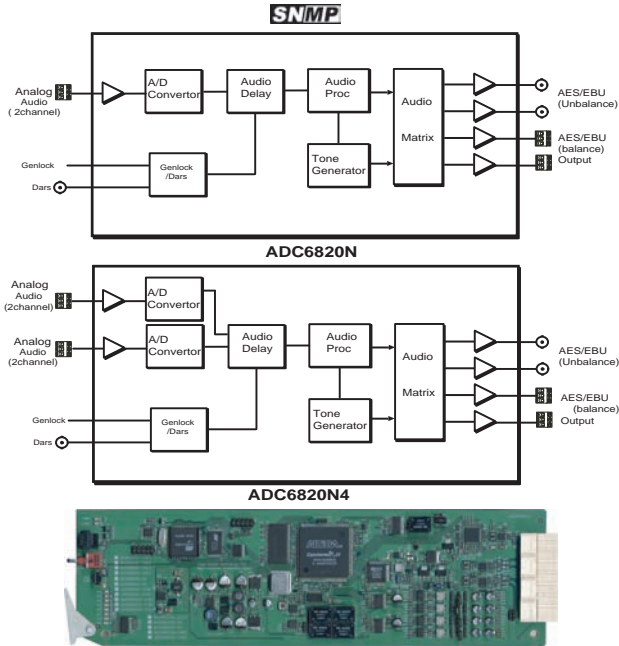


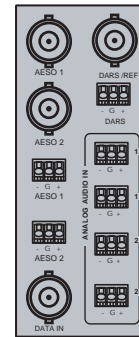
## Description:

The ADC6820N/ADC6820N4 are an audio A to D converter with audio delay. Both two modules can provide two/four balanced audio inputs, two unbalanced and two balanced AES audio outputs. They can also provide one balanced or unbalanced DARS input, one Genlock input. The user can select either DARS or Genlock as synchronized signal. The ADC6820/ADC6820N4 can generate fixed-rate Tone signal and provide flexibility in audio sampling and delay setting.



## Features:

- ▶ One pair/two pairs of balanced analog audio inputs
- ▶ Two pairs of unbalanced AES and two pairs of balanced AES outputs
- ▶ Either DARS or Genlock can be selected as synchronized signal
- ▶ 16-bit, 20-bit, 24-bit sampling setting
- ▶ Generating two fixed-rate audio signal
- ▶ -96 ~ +12dB audio gain range adjustment
- ▶ Maximum 1980ms @ 32KHz manual delay
- ▶ Local or Remote control and monitoring



ADC6820N  
ADC6820N4

## Specifications: (Specifications are subject to change without notice)

### Balanced Analog Audio Input

Number of inputs	ADC6820N: 1 ADC6820N4: 2
Connector	Audio connector
Input coupling	AC coupled
Impedance	>50K
Maximum input level	+16dB to +28dB in 2 dB steps

### Digital Audio Output

Number of outputs	2 AES 75 ohm BNC and 2 AES 110 ohm balanced
Standard	AES 3: 1992, AES3id: 1995 and SMPTE 276M
Impedance	75 ohm /110 ohm
Channel status	Professional

### 110 Ohm Output

Impedance	110 ohm +/-20%
Level	2 V to 7 V peak-to-peak
Common mode	>30 dB below output signal
Rise and fall time	5 to 30 ns
Jitter	0.02 UI

### 75 Ohm Output

Return loss	>30 dB up to 6 MHz
Output level	1.0 V +/- 0.1 V peak-to-peak
DC offset	<10 mV
Rise and fall time	30 to 44 ns
Jitter	0.02 UI

### External Reference Input

Connector type	BNC (unbalanced) Audio connector (balanced)
Impedance	75 ohm (unbalanced) 110 ohm (balanced)
Return loss	>30 dB up to 6 MHz (unbalanced)
AES reference sampling rate	32 kHz, 48 kHz, 96 kHz
Video reference	525,625 Black Burst

### Performance

Quantization	16 bits, 20 bits, 24 bits
Sampling rate	32 kHz, 48 kHz, 96kHz
Frequency response	< +/-0.05 dB @ -10 dBFS, 20Hz to 20 kHz
Linearity	< +/-0.3 dB up to -100 dBFS
Signal to noise @ 0 dBFS	100 dB (no filter) 103 dB (A-weight)
THD+N	<0.003% @ (20 Hz to 20 kHz), -1 dBFS = +23 dBu
IMD	>90 dB (CCIF two tone test @ 0 dBFS = +18 dBu, +24 dBu, +28 dBu, High-Z load)
Crosstalk	>90 dB, 20 Hz to 20 kHz

### Power Consumption

Power	2.3W
Positive rail	350 mA
Negative rail	6 mA

## Ordering Information:

ADC6820N	2 Channels Audio Analog to Balanced/unbalanced AES Converter	ADC6820N4	4 Channels Audio Analog to Balanced/unbalanced AES Converter
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【The pictures are just for reference and subject to actuality】