
MODEL 3208AD

8-CHANNEL ANALOG AUDIO TO DIGITAL CARD

The Model 3208AD 8-Channel Analog Audio to Digital Card is a component of the IED 3200 Series. Its purpose is to provide eight analog audio inputs into the system, and to provide signal processing. It is designed to be mounted in the 3200MF Mainframe, through which its power and signal connections are made. The 3208AD card provides a balanced input, low noise front end for the 3200 Series with gain and provision for phantom powering for condenser microphones.

The 3208AD uses 24-bit A/D converters which perform 64 times oversampling of the audio input and then performs digital anti-alias filtering of the signal before decimating the samples to a synchronous serial data stream. The sampling and serial data are synchronized to an adjustable data rate clock. The 3208AD card is capable of operating at any data rate from 32 kHz to 50 kHz.

The 3208AD card has a maximum input level of +14 dBu with a nominal input impedance of 60 k Ω . The preamplifiers are selectable between microphone and line levels. In addition to the microphone and line level preamplifier functions, the 3208AD provides a full complement of signal processing for the inputs.

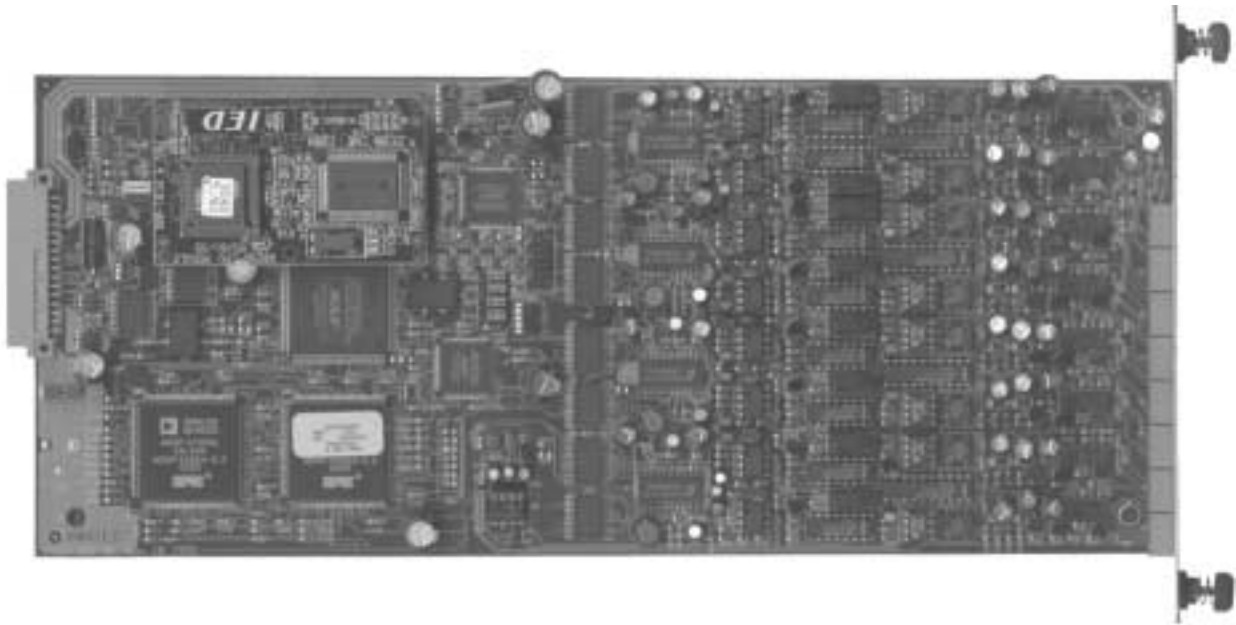


Figure 1 - 3208AD
Analog Audio to Digital Card



SPECIFICATIONS

ELECTRICAL, ANALOG $V_{IN} = +13$ dBu, $V_S = \pm 15$ V, +5V.

1. Frequency Response (system)	+0, -0.5 dB
20 Hz - 20 kHz	
2. Total Harmonic Distortion, THD.	0.01%
20 Hz - 20 kHz, 10 Hz - 80 kHz filters	
3. Nominal Input Impedance	
Gain Line Level	20 k
Gain < Line Level	12 k
4. Maximum Input Level	+14 dBu
5. Gain	Adjustable, -56 dB to +14 dB
6. Power Supply	
Supply Voltage Range	
15 V supply	13.5 V - 16.5 V
+5 V supply.	5.22 V - 5.25 V
+3.3 V supply	2.835 V - 3.135 V
Supply Current	
V= +3.3 V	200 mA
V= +5 V	1.9 A
V= +15 V	200 mA
V= - 15 V	140 mA
Phantom Power	48 V
Selectable for each input via software	

ELECTRICAL, DIGITAL $V_{IN} = +13$ dBu, $V_S = \pm 15$ V, +5V.

1. Sampling Rate (64x oversampling)	512 kHz - 800 kHz
2. Serial Data Rate.	32 kHz - 50 kHz
24-bit A/D	

CONNECTORS

1. 3-pin connector, male, on card, 8 each	Phoenix 1803280
2. Mating 3-pin female connector for 1. Above	Phoenix 1803581

MECHANICAL

1. Size, overall	
Height	(17 cm) 6.71"
Width	(3.25 cm) 1.28"
Depth	(33.5 cm) 13.2"
2. Weight	(796 gm) 1.755 lb

ENVIRONMENTAL

1. Operating Temperature Range	(+32 °F - +104 °F) 0 °C - +40 °C
2. Storage Temperature Range	(-40 °F - +158 °F) -40 °C - +70 °C

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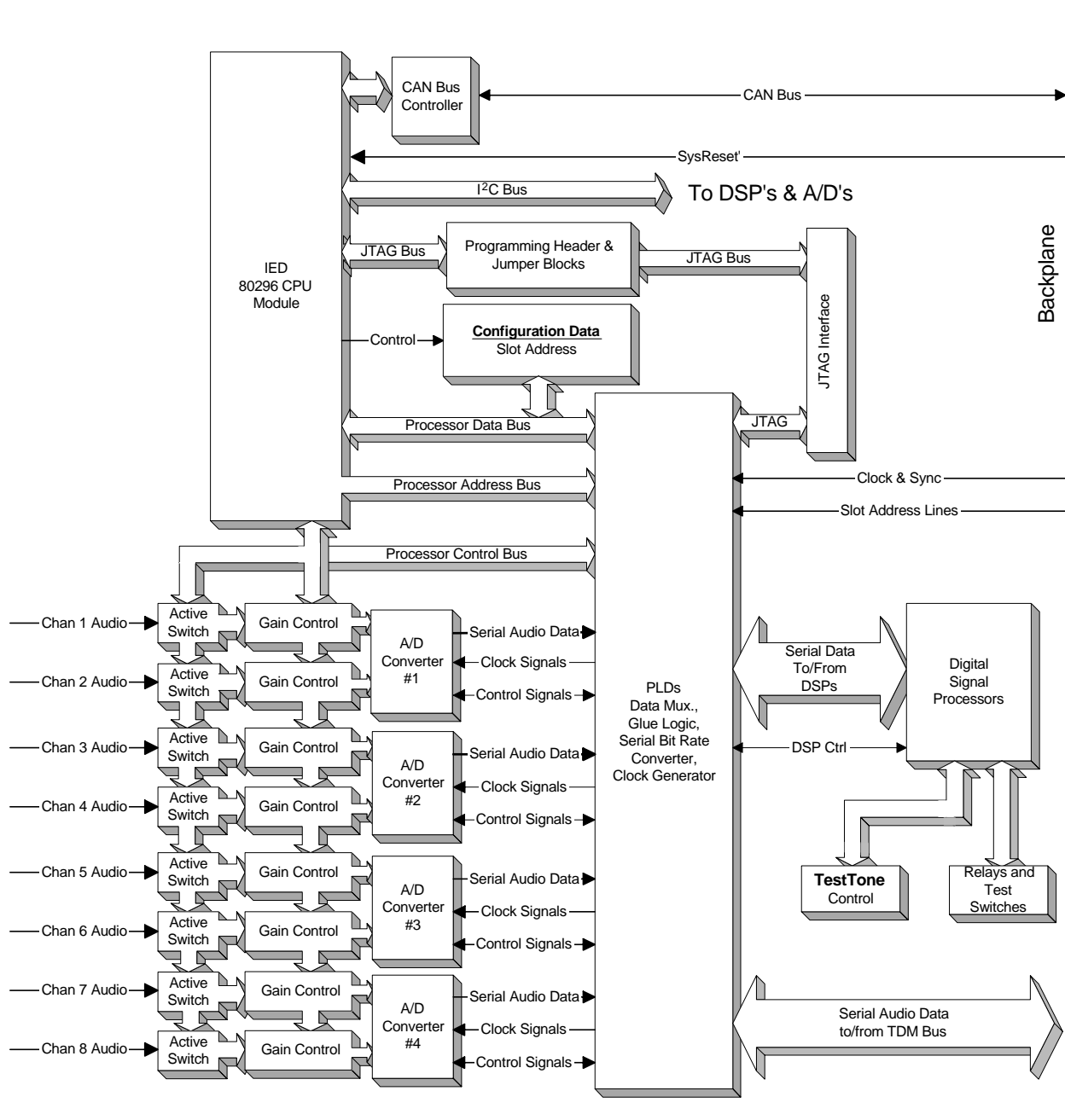


Figure 2 - 3208AD Audio to Digital Card Block Diagram



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