ROSTEC Engineering

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ROSTEC ADIS8
AES Distribution Amplifier for GPU frame

General description

The ADIS8 is an AES Distribution amplifier with eight individually buffered outputs.
It is intended as an extension to the various Reference Generators installed in the GPU frame, but it is also able to distribute the digital audio outputs from A/D and SR converters.

Further, it has an external AES input enabling the ADIS8 to distribute an incoming signal, not generated in the GPU frame environment. The signal can be a digital audio AES or a blank AES for synchronization purposes.
The ADIS8 is compatible with sampling frequencies up to 108 kHz.

Outputs

There are eight AES outputs available on the sub-d connector on the back panel of the GPU frame. All outputs are individually buffered and transformer balanced, having the transformer center-grounded at the IC side and floating at the line output side.
The output impedance is 110 Ohms as called for in the AES/EBU specifications

GPU bus input

GPU input is the normal mode. A jumper on the PCB selects GPU input or external input.
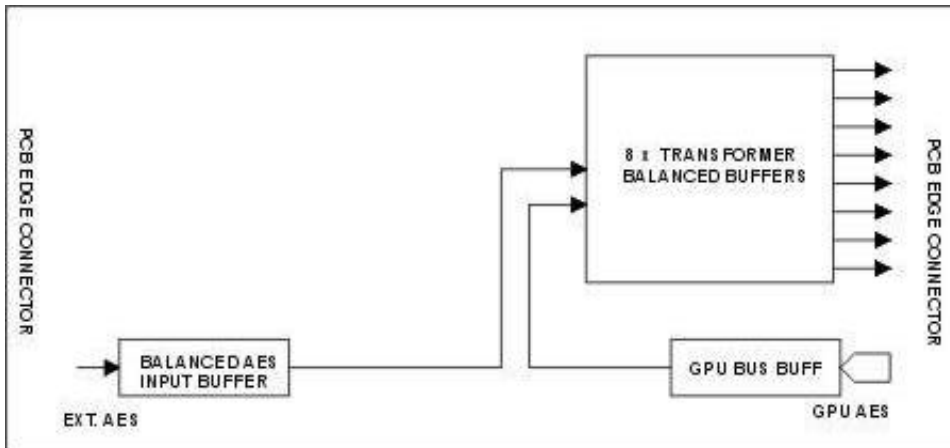
External input

The external input is transformer balanced, having the transformer grounded at the IC side and floating at the line input side.
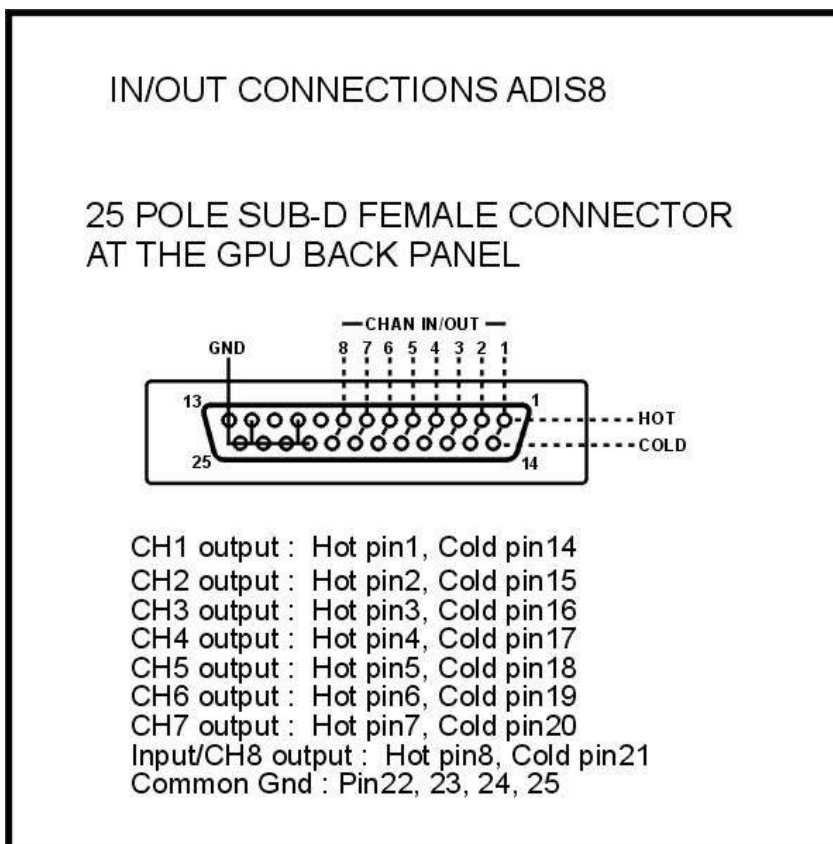Pulse shaping is performed by means of an input Schmitt Trigger with 0,3V hysteresis.
The input impedance is 110 Ohms as called for in the AES/EBU specifications

*Note that when the external input mode is selected, output CH 8 on the back panel connector is changed to input.
Thus only seven outputs are available when this mode is selected.*

Block schematic

Input output connections

IN/OUT CONNECTIONS ADIS8

25 POLE SUB-D FEMALE CONNECTOR
AT THE GPU BACK PANEL

CH1 output : Hot pin1, Cold pin14
CH2 output : Hot pin2, Cold pin15
CH3 output : Hot pin3, Cold pin16
CH4 output : Hot pin4, Cold pin17
CH5 output : Hot pin5, Cold pin18
CH6 output : Hot pin6, Cold pin19
CH7 output : Hot pin7, Cold pin20
Input/CH8 output : Hot pin8, Cold pin21
Common Gnd : Pin22, 23, 24, 25

Development and Manufacturing of Digital Video and Audio Equipment for Broadcast and Recording Industry

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Electrical specifications:

Inputs	: GPU Bus signals
	: AES balanced 110 ohms RS422
Outputs	: 8 x AES11 transformer balanced 110 ohms RS422 (GPU mode)
	: 7 x AES11 transformer balanced 110 ohms RS422 (ext. input mode)
Fs range	: 25 kHz to 108 kHz
Frequency range	: 1 MHz to 15 MHz