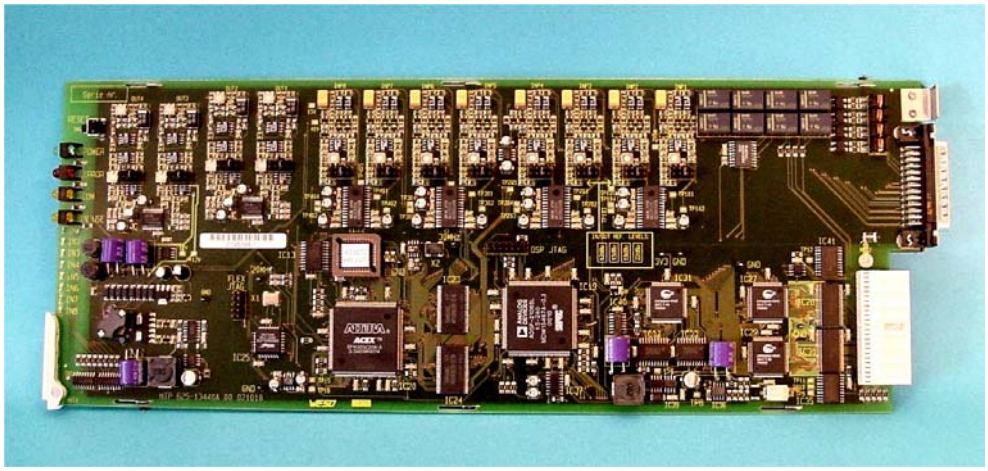
NTP TECHNOLOGY A/S

625 Digital Switching System
Analogue I/O Card 625-134A



General Description.

The 625-134A Analogue I/O card is part of the 32-bit TDM Switching system type 625.
The card is one of the latest developed cards in the 625 series equipped with 8 analogue inputs and 4 analogue outputs in order to make an even more compact and cost effective router solution. Internally the card is equipped with 8 A/D and 4 D/A converters, 24 bit resolution, 48kHz sampling rate and 128x over sampling.
The card has electronically balanced inputs and outputs.
The full scale reference level is selectable +12dBu, +15dBu, +18dBu or +22dBu via Jumper.
The card is equipped with relay contacts in order to connect one stereo output at a time, to the real output monitor bus.

The 625-134A card is equipped with DSP power for making the following functions available; Level adjustment, mixing, summing (Stereo to Mono), modulation detection, phase shift, delay and various filter functions etc.

Specifications:

Input

Number of inputs (mono)	8
Resolution	24 bit
full scale level	+15 or 18dBu
Input impedance (Electronic Balanced)	10kOhm ±10%
Input CMRR @ 15 kHz	>60 dB
Input frequency range relative to 1kHz	
20Hz to 20kHz	±0.1dB
Linearity (ref. 1kHz)	
0dBFS to -80dBFS:	±0.1dB
-80dBFS to -110dBFS:	±1.0dB
Phase difference between 2 channels	
(20 Hz to 20 kHz)	< 3°
Conversion time, digital input to analog output	0.583 ms
Noise (input short-circuit) RMS full bandwidth	< -109dBFS
Noise (input short-circuit) CCIR qpeak	< -97dBFS
Dynamic range (-60 dB 1 kHz, band reject f.)	> 109dB
Channel separation between any	
two inputs (15 kHz)	> 100 dB

Output

Number of outputs (mono)	4
Resolution	24 bit
Output ref level	+12, 15, 18 or 22dBu
Output impedance, electronically balanced	< 30Ohm
Minimum load impedance (+18dBu out)	300Ohm
Output CMRR (20Hz to 20kHz)	>50 dB
Output Asymmetrical (1kHz)	<-40 dB
Input frequency range relative to 1kHz	
(SF: 44k1 and 48k)	20Hz to 20kHz ±0.1dB
Linearity 1kHz	
0dBFS to -80dBFS	±0.1 dB
-80dBFS to -110dBFS	±1.0 dB
Phase difference between stereo L/R pairs	
(20Hz to 20kHz)	<3°
Conversion time, digital input to analog output	567µsec
Output group delay difference between	
any 2 AES channels	250nsec
Harmonic distortion, including noise	
20Hz-20kHz, 0dBFS, R load 600 Ohm)	<0.03%
1kHz, FS 18dBu, R load 600 Ohm)	
0dBFS	<0.008%
-20dBFS	<0.03%
-60dBFS	<3.0%
Dynamic range (-60dBFS 1kHz, band reject f.)	>103 dB
Channel separation between any	
output (20Hz - 20kHz)	>100 dB

Data measured at 25°C amb. Temperature, without de-emphasis, FS=18dBu and balanced output.

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