#### INT-1410

## 4-CODEC AUDIO MATRIX PC/104-PLUS MODULE (ROHS)



**Features** 

- PC/104-Plus compliant architecture
- 8 differential analog input channels (AIN1~AIN8) and 8 differential analog output channels (AOUT1~AOUT8) with 4 programmable front-end audio CODECs
- 2 auxiliary analog input and 2 auxiliary analog output channels with an additional programmable front-end audio CODEC (optional)
- 2 digital S/PDIF input (DIN1&2) and 2 digital S/PDIF output (DOUT1&2) channels (optional; requires an external transceiver)
- PCI interface managing:
  - Play DMA stream: 10-ch main + 2-ch aux
  - Record DMA stream: 12-ch main + 2-ch aux
- · Switch matrix:
  - Inputs: AIN1~AIN8, DIN1&2 MIX1&2 and Play DMA
  - Outputs: AOUT1~AOUT8 and DOUT1&2
- 2-channel mixer (capable of mixing the 8 analog inputs, the 2 digital inputs and the 10-channel play DMA stream)
- 4-to-2 wire converter on an analog input/output channel pair
- Two-way echo canceller on an analog input/output channel pair (optional)
- 1 W Power amplifier on an analog output channel (optional)
- Preamplified microphone input on an analog input channel (optional)

2 S/PDIF DIN (optional) 2 S/PDIF DOUT (optional)



2 Aux IN 2 Aux OUT (optional)

AIN 7-8 AIN 5-6 AIN 3-4 AIN 1-2 AOUT 7-8 AOUT 5-6 AOUT 3-4 AOUT 1-2

### **General Description**

The INT-1410 Audio Matrix is a PC/104-Plus audio peripheral board aimed for managing up to 8 analog input and 8 analog output channels, with programmable front-end audio CODECs, and up to 2 digital (S/PDIF) input/output channels. Other options include 2 auxiliary analog input and 2 auxiliary analog output channels with a programmable front-end audio CODEC.

The onboard PCI interface manages the 10-channel play DMA stream and the 12-channel record DMA stream of the main channels as well as the 2-channel play DMA stream and the 2-channel record DMA stream of the auxiliary channels.

The onboard features include a switch matrix that allows the user to select the driving source of each of the 8 analog output and the 2 digital output channels. A 2-channel mixer which can mix the 8 analog inputs, the 2 digital inputs and the 10-channel play DMA stream is also available as well as a 4-to-2 wire converter on an analog input/output channel pair.

Optional features include a two-way echo canceller on an analog input/output channel pair, a 1-watt power amplifier on an analog output channel and a preamplified microphone input on an analog input channel.

The board is fully compliant with the 2002/95/CE (RoHS) directives and can be qualified inside the standard (0  $\sim$  + 60 °C) and extended (-40  $\sim$  + 85 °C) temperature ranges.

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INT-1410 DATASHEET

# **Physical Characteristics**

• **Dimensions:** 90 x 96 mm (3.6" x 3.8")

• **Height:** 11 mm (0.4")

• **Power supply:** Single +5V DC +/- 5%

Power consumption: 5W maximum

• Operating Temp:  $0 \sim +60$  °C (standard)

-40 ~ + 85 °C (extended)

• **Humidity:** Up to 95% at 40 °C

non-condensing

### **Options**

- Extended operating temperature range
- Conformal coating
- Custom Connectors
- 2 digital (S/PDIF) input and 2 digital (S/PDIF) output channels (requires an external transceiver)
- Auxiliary programmable front-end Audio CODEC
- Two-way echo canceller on an analog input/output channel pair
- Power amplifier on an analog output channel
- Preamplified microphone input on an analog input channel

NOTE: Contact Eurotech for the availability of options

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