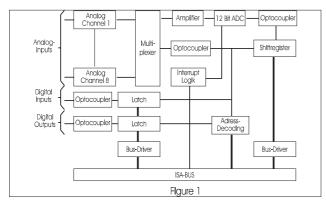


General

The data acquisition board model AD 1199 is an ISA-Bus based data acquisition board with 8 analog input, 3 digital input and 2 digital output channels.

The main future of this board is the channel-to-system isolation eliminating trouble some ground loops and protecting the data acquisition system from damage caused by external high voltage.



The block diagram of the data acquisition board is shown in figure 1.

The 3 digital inputs and 2 digital outputs can be used for controlling.

You can transfer data using interrupt or programmed I/O. The interruptsource is switch-selectable and can be located to IRQ 2, 3 or 5.

Adressing

The BASE address is switch selectable and can be located at the whole IO-adresspace. Only 2 IOadresses are used. This allows installing multiple boards in the same host at the same time.

Analog inputs

The board provides 8 analog input channels. Each channel is configurable independent of the other channels for the following input ranges.

Isolated **Data Acquisition Board AD 1199**

Highlights

- •8 Optical Isolated Analog Input Channels
- •Resolution 12 Bit. 13 us
- •3 Optical Isolated Digital Inputs
- •2 Optical Isolated Digital Outputs
- Voltage, Current And Temperature Ranges
- •Meets EMV-Specification

| voltage | standard: 0-5V,0-10V, ±5V, ±10V |
|-------------|------------------------------------|
| | customer defined |
| current | 0/4 - 20 mA |
| | customer defined |
| temperature | Pt100 |
| | thermocouple |
| | Fe-CuNi (J)/ NiCr-Ni (K)/ Pallapat |
| | PtRh-Pt (S)/ PtRh-El 18 |

Software

A disk is included with programming examples for Basic, Turbo Pascal, C, Visual Basic, 16 bit DLL for Windows 3.1x and 32 bit DLL for Windows 95.

Technical Spezifications Analog Inputs : 8 x Singel : 8 x Differential Optional Channel-To-System-Isolation Interrupt : IRQ 2, 3 or 5 Resolution : 12 Bit, 13 µs Input Ranges Standard range : 0-5 V, 0-10 V,±5 V, ±10 V Optional, current : 0/4 to 20 mA Optional, temperature : Pt100 : +/- 1°C Accuracy Pt100 Optional, temperature : Thermocouple Accuracy thermocouple : +/- 1°C plus accuracy of the reference junction +/-1° C Digital Input : 3 Inputs, Isolated Digital Output 2 Outputs, Isolated Outputpower max. 25 mA / 30 V Supply Voltage +5 V, max. 0,5 A Connector : DM37-male **EMV** : EMV-conform with 89/336/EWG

Ordering Information

AD 1199/XXXXXXXX Channel 7 Channel 0 To 7: Channel 6 0 =Without Channel Channel 5 A =Standard Voltage Channel 4 a =A With Differential Inputs B =Current 0/4 - 20 mA Channel 3 Channel 2 b =B With Differential Inputs Channel 1 C =Thermocouple

Channel 0 T =Pt100

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AD1199.CHP/07.98 Technical Subjects To Change