

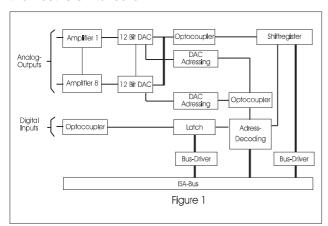
General

The model DA 1256 is a 12-bit D/A board for ISA-Bus based computers. The unit provides 8 D/A channels with current output signals.

The main feature 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 voltages.

The optical isolation can operate with up to 500 V of common-mode voltage.

The output ranges are 0 to 20 mA or 4 to 20 mA. A power-on-reset provides for a defined state when the host is switched on.



The block diagram of the board DA 1256 is shown in figure 1.

Besides the 8 analog outputs there are 4 isolated digital inputs available. These inputs can be used for controlling.

Addressing

The BASE address is switch selectable and can be located anywhere up to 3FEh. Only 2 I/O addresses are used. This allows installing multiple boards in the same host at the same time.

Programming is very simple. No initialization of the board is needed. Channel selection and output current programming is done by only two 8-bit-words.

Isolated **Analog Output Board** Model DA 1256

Highlights

- •8 Optoical Isolated Analog Output Channels
- •Current Output 0/4-20 mA
- •12 Bit Resolution
- •Settling Time 10 μs
- •4 Optical Isolated Digital Inputs
- Meets EMV-Specifications

Analog Output Ranges.

The output range of each channel may be configured by software between 0 to 20 mA or 4 to 20 mA. The Resolution is 12 bit, settling time 10 µs and linearity typ. 0.05%. Input coding is straight binary.

Digital Inputs

In addition to the analog outputs there are 4 digital inputs available. The digital inputs are isolated too. The inputs can be controlled by contacts or open collector of transistors.

Software

A disk is included with programming examples for Basic, Turbo Pascal, C, Visual Basic, 16 Bit DLL for Windows 3.x, and 32 Bit DLL for Windows 95.

Technical Specifications	
Output Channels	: 8 Optoisolated
Voltage Isolation	: 500 V
Resolution	: 12 Bit, 10 μs
Accuracy	: +/-1 Bit
Output Range	
Standard	: 0/4 - 20 mA
Current Load Resistor	: max. 400 Ω
Optional Ranges	: Customer Defined
Supply Voltage	: +5 V, max. 0,25 A
EMV	: EMV-conform with 89/336/EWG
Connector	: DB25-male
Operating Temperature	: 0 - 50 °C
Storage Temperature	: - 25 to +85 °C
Dimensions	: 191 x 100 mm

Ordering Information

DA 1256

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Technical Subjects To Change DA1256.CHP/07.98