



# ADC-44D

## Multi-Function 12 Bit Combination Card with D-type Connector

The ADC-44d is a PC-compatible short card which provides digital inputs and outputs, timers, analogue inputs and analogue outputs. There are 24 TTL compatible programmable digital input/outputs available externally.

There are also three programmable timers. Two of the timer outputs are available externally to the user and may be gated by external circuitry. The third timer acts as a prescaler to the other two.

Analogue inputs may be either sixteen single-ended or eight differential signals. The input ranges from  $\pm 50$  mVolts to  $\pm 10$  Volts for a full scale reading. Input resolution is 12 bits.

There are four analogue outputs available as  $\pm 10$  Volts and 0 to  $\pm 20$  mA (corresponding to a voltage output range of 0 to +10 Volts) simultaneously. Output resolution is 12 bits.

Analogue conversions (input or output) may be made under programmed I/O control, interrupt control or DMA control.

The timers may be used to control the rate of operation if required.

DMA data transfers for both the analogue inputs and outputs may operate simultaneously, thereby providing a constant stream of input and output data with little program intervention.



- 16 single-ended or 8 differential analogue inputs

- Wide input range and programmable gains

- 3 $\mu$ S, 12 bit resolution A to D conversion

- Direct Memory Access (DMA) A/D and D/A

- Four, 12 bit analogue outputs  $\pm 10V @ 20mA$

- 24 digital I/O channels (82C55)

- Available with DLL for Windows

- 50 way male D-type connector (analogue)

- 50 way male IDC connector ((digital))

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## Technical Specification

Analogue input channels:	16 single ended or 8 differential
AD converter:	12 bit, 3 $\mu$ S conversion time
Input ranges:	+/-10V, +/-5V, +/-1.0V, +/-50mV
Programmable gains:	x1, x2, x10, x100
Analogue output channels:	4, voltage and current
DA converter:	12 bit, 3 $\mu$ S settling time
Voltage outputs:	+/-10V

Current outputs:	0 to 20mA corresponding to 0 to +10V
Programmable I/O channels:	24 (TTL level)
Number of timer channels:	3
Data ready flags:	Via interrupt or polling software
Data transfer:	By I/O operation or DMA
DMA channels:	1 and 3
Interrupt channels:	2 to 7
Power Requirement:	5 Volts @ 900 mA maximum
Height:	107 mm
Length:	191 mm
Connectors:	50 way male D-type (analogue) 50 way male IDC header (digital)

## Options

- 50 way screw terminal adapter
- 1 metre cable with IDC connector
- Windows 3.1 DLL driver



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