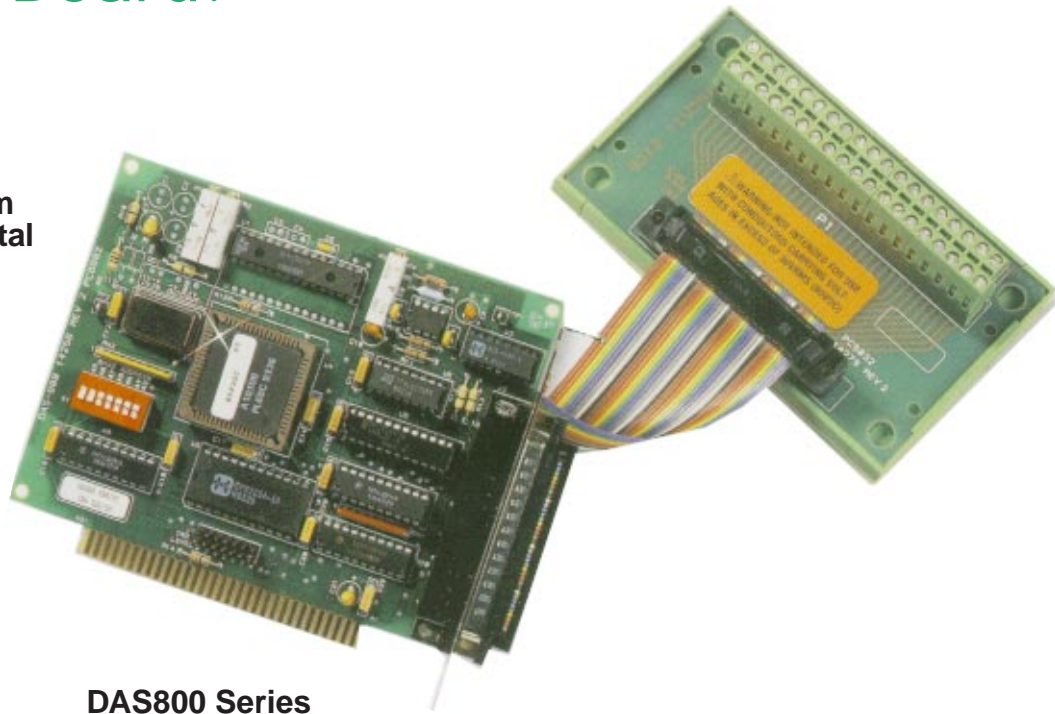


DAS-800 Low Cost Data Acquisition Board.

- ✓ **DAS-800 Series Medium Speed Analog and Digital I/O Board**
- ✓ **3 Models Available with Either Fixed Input or Software Programmable Gain**
- ✓ **100% Register Compatible with DAS-8 and DAS-8PGA**
- ✓ **8 Analog Inputs**
- ✓ **3 Digital Inputs, 4 Digital Outputs**
- ✓ **DriverLINX Drivers for Windows 3.x and Windows 95 Included**



DAS800 Series
\$349
Basic Unit

DAS-800 shown with optional STP-37/C terminal panel, \$80

The DAS-800 Series of boards is 100% register and connector compatible with the DAS-8 analog input boards, so all software and accessories are fully compatible with these new, high performance cards. Significant improvements over the DAS-8 include faster input rates, better accuracy, more flexible triggering and more accurate timing.

The DAS-800 Series includes three boards, the DAS-800, DAS-801 and DAS-802. The DAS-800 provides 8 single-ended analog inputs with a fixed input range of ± 5 Vdc. The DAS-801 and DAS-802 provide 8 analog inputs that can be individually switch selected for single-ended or differential operation. The DAS-801 provides software programmable ranges for low level inputs, while the DAS-802 is designed for higher level inputs.

The inclusion of a 4-location FIFO and on-board timebase insure jitter-free A/D readings at rates to 40 kHz. For compatibility with the

DAS-8 Series, conversion can be initiated by software or the PC clock. An external trigger input can be programmed either to inhibit A/D conversions until it is triggered, or as a gate that enables conversions only when it is true. A FIFO overflow signal is provided.

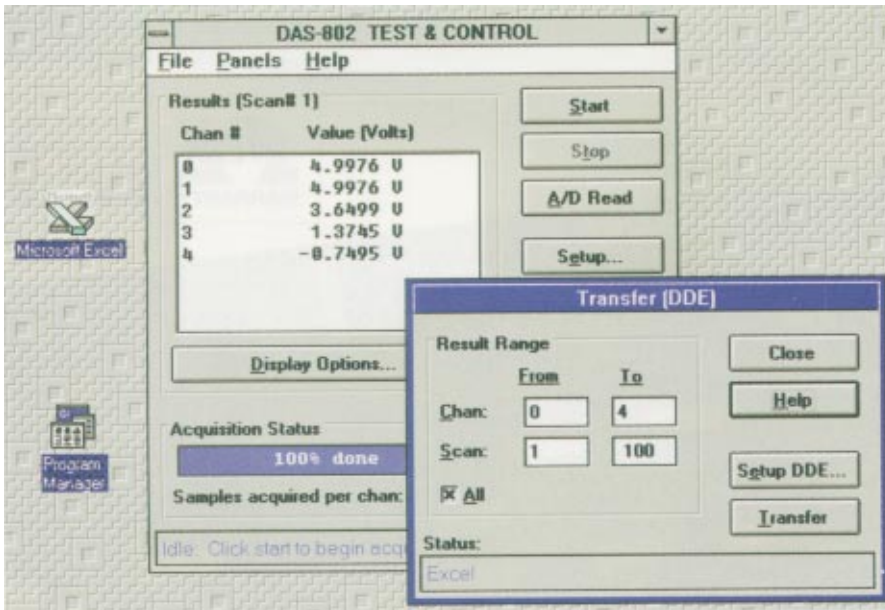
Three 16-bit programmable counter-timers are provided. One or two of these can be combined with the 1 MHz on-board clock for sample periods between 25 μ seconds and 1.2 hours. The remaining counters are available for event counting, pulse generation, frequency or pulse width measurements. The DAS-800 boards include 3 digital inputs and 4 digital outputs. If an EXP-16 or EXP-GP multiplexer and signal conditioning accessory is used, the digital output lines control the multiplexers on the accessories.

All user connections are made using a 37-pin sub-D connector at the rear of the PC. The DAS-800 Series is compatible with a wide variety of

screw terminal, channel expansion and signal conditioning accessories.

Driver Software

DriverLINX software is also included, at no additional charge, with every DAS-1200 series board. Supporting your programming requirements in Windows 3.x/95 environments, DriverLINX provides application developers a standardized interface to over 100 services for creating foreground and background tasks to perform analog input and output, digital input and output, time and frequency measurement, event counting, pulse output and period measurement. In addition to basic I/O support, DriverLINX also provides sophisticated built-in capabilities to handle memory and data buffer management, a rich selection of starting and stopping trigger events including pre-, mid-point, and post triggering protocols, extensive error checking and reporting capabilities, and a context-sensitive on-line help system. There are two versions



DAS-800 installation/configuration software for Microsoft Windows.

included: DriverLINX and DriverLINX/VB. DriverLINX provides the C/C++ interfaces. DriverLINX/VB provides custom control interfaces (VBX and ActiveX) that can be accessed from the palette of built-in tools included in Microsoft's Visual Basic and Visual C environments. Software is supplied on CD-Rom.

TERMINAL PANEL WITH CABLE

All inputs and outputs on the DAS-800/801/802 board are accessed through one 37 Pin D male connector.

Specifications

ANALOG INPUTS

Channels: 8

Channel Configuration: DAS-800, single ended; DAS-801/802, differential or single-ended; selectable

Input Range, DAS-800: ± 5 Vdc

Input Ranges, DAS-801: ± 10 V, ± 5 V, ± 500 mV, ± 50 mV, ± 10 mV, 0-10 V, 0-1 V, 0-100 mV, 0-20 mV

Input Ranges, DAS-802: ± 10 V, ± 5 V, ± 2.5 V, ± 1.25 V, ± 625 mV, 0-10 V, 0-5 V, 0-2.5 V, 0-1.25 V

Input Range Selection: DAS-800, fixed; DAS-801 and DAS-802, software programmable

Input Channel Selection: software selectable or automatic scanning

Max. Overvoltage: ± 35 V, single channel

Input Current: ± 30 nA @ 25°C

A/D Type: successive approximation with internal sample and hold

Resolution: 12-bit

Linearity: ± 1 bit

Conversion Time: 25 μ sec, max.

Accuracy: DAS-800 $\pm 0.01\%$ FS ± 1 LSB;

DAS801/802 $\pm 0.05\%$ FS ± 1 bit

Throughput: gain ≤ 100 40kHz; gain > 100 25kHz

Acquisition Time: 1.4 μ sec

Monotonicity: guaranteed over operating temperature

Clocking: software, on-board time base, external clock

Triggering: software, external digital trigger, external gate

Data Transfer Method: I/O read

FIFO Length: 4-words

DIGITAL I/O

Input Bits: 3

Low Voltage: 0.08 V max

High Voltage: 2.0 V min

Output Bits: 4

Low Voltage: 0.5 Vmax @ 8.0 mA

High Voltage: 2.4 Vmin @ -0.4 mA

COUNTER TIMER

Type: 8254

Number of Counters: 3, 16-bit

Clock Source: counter 2: DAS-800, 1 MHz on-board or CPU bus/2; DAS-801 and DAS-802, 1 MHz on-board

Counter 1: external, or cascaded with counter 1

Counter 0: external

External Clock Frequency: 0-10 MHz

Input, Clock and Gate: DTL, TTL and CMOS compatible

Operating Ambient: 0 to 50°C; 95% RH, non-condensing

Storage Temperature: -20 to 70°C

To Order (*Specify Model Number*)

Model No.	Price	Description
DAS-800	\$349	Fixed gain plug-in board
DAS-801	449	High gain plug-in board
DAS-802	499	Low gain plug-in board
EXP-16	399	General purpose expansion multiplexor, requires C-1800 cable
C-1800	30	Interconnecting cable
STP-37/C	80	Terminal panel enclosed in a case, requires C-1800 cable

All boards come with DriverLINX driver software for Windows 3.x and Windows 95. (supplied on CD-ROM)

Ordering Example: DAS-800 analog input board with STP-37/C panel and C-1800 cable, \$349 + 80 + 30, \$459.