

DAS-16 Series

Compatible with existing applications.
For new applications see the DAS-1600 Series.

50 to 100 Kilosample/Second
ISA-Bus Analog I/O Boards

FEATURES

- Up to 100 ksamples/s (DAS-16F)
- Up to 70 ksamples/s (DAS-16G)
- Up to 50 ksamples/s (DAS-16)
- Software-selectable input ranges (DAS-16G)
- 16 single-ended/8 differential analog inputs
- 2 channels of multiplying 12-bit D/A output
- 4 digital outputs, 4 digital inputs
- 16-bit DriverLINX software drivers for Windows 95/98—ActiveX and DLL based
- TestPoint drivers
- New start-up software included

APPLICATIONS

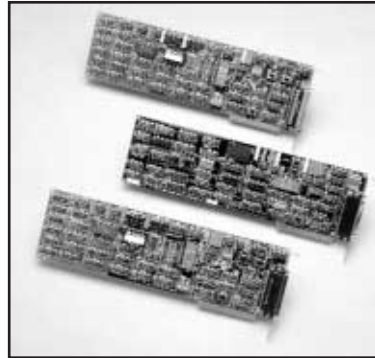
- Signal analysis
- FFT & frequency analysis
- Vibration analysis
- Transient analysis
- Production test
- Process control

Functional Description

The DAS-16 Series consists of the DAS-16, DAS-16F, and DAS-16G high-speed analog and digital interface boards for ISA-bus compatible PCs. The boards install directly into a computer expansion slot, turning it into a high-speed, high-precision data acquisition instrument.

Each member of the DAS-16 Series has similar functionality with the following differences:

- The DAS-16 has switch selectable input ranges and a 50 ksamples/s maximum input rate.
- The DAS-16F has switch-selectable input ranges and a 100 ksamples/s maximum input rate.
- The DAS-16G1 and DAS-16G2 have software-programmable input ranges and a 70 ksamples/s maximum input rate.



The DAS-16 Series offers 16 single-ended or 8 differential analog inputs with 12-bit resolution. The inputs are switch-selectable for unipolar (e.g., 0 to 10V) or bipolar (e.g., $\pm 10V$) input ranges.

A 3-channel programmable interval timer (Intel 8254) provides timing for the A/D or can be used for generating frequency outputs at any rate from 2.5MHz to 1 pulse/hr.

Two channels of multiplying 12-bit D/A converters provide analog outputs. The DAS-16 Series uses an onboard $-5V$ reference for a 0 to $+5V$ output range, or external references can be used to generate other output ranges.

Eight bits of digital I/O (4 input and 4 output) allow the DAS-16 Series to interface to a variety of digital signals. These digital bits can control multiplexers, read external status, gate the counter/timer, etc.

Get "Up & Running" Quickly
with Keithley's FREE
Bundled Start-Up Software

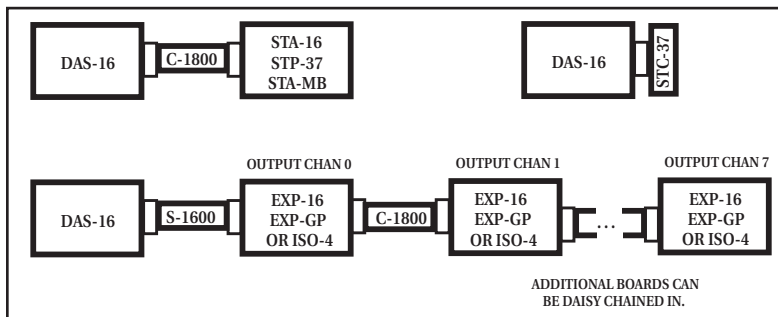


Software

The array of free software included with Keithley's data acquisition products helps developers get applications "Up and Running" quickly. For example, a new start-up software utility makes it possible to interact with a new board in a matter of minutes. Software drivers are provided on a CD for fast, uncomplicated installation. These 16-bit DriverLINX device drivers for Visual Basic, C/C++, and Delphi also help speed defining new applications by offering both DLL and ActiveX interfaces. A variety of useful examples and on-line help are provided with Keithley's software. Of course, Keithley's easy-to-use application development package, TestPoint, takes advantage of the DriverLINX feature set.

- FREE new bundled start-up software
- DriverLINX 16-bit Device Drivers—Visual Basic, C/C++, Delphi, TestPoint, DLL, and ActiveX
- Runs under Windows 95/98

Configuration Guide



Connector Pin Assignments

L.L. GND	19	37	CH0 HI IN
CH0 LO IN/*CH8 HI IN	18	36	CH1 HI IN
CH1 LO IN/*CH9 HI IN	17	35	CH2 HI IN
CH2 LO IN/*CH10 HI IN	16	34	CH3 HI IN
CH3 LO IN/*CH11 HI IN	15	33	CH4 HI IN
CH4 LO IN/*CH12 HI IN	14	32	CH5 HI IN
CH5 LO IN/*CH13 HI IN	13	31	CH6 HI IN
CH6 LO IN/*CH14 HI IN	12	30	CH7 HI IN
CH7 LO IN/*CH15 HI IN	11	29	L.L. GND
D/A 0 REF IN	10	28	L.L. GND
D/A 0 OUT	9	28	D/A 1 OUT
VREF (-5 V)	8	27	D/A 1 REF IN
POWER GND	7	26	D/A 1 OUT
IP1	6	25	IP0/TRIG 0
IP3	5	24	IP2/CTR 0 GATE
OP1	4	23	OP0
OP3	3	22	OP2
CTR 0 OUT	2	21	CTR 0 CLOCK IN
+5 V PWR	1	20	CTR 2 OUT

*ALTERNATIVE CONNECTIONS
REAR VIEW OF I/O CONNECTOR
(37-PIN MALE "D")

QUESTIONS?

1-800-552-1115 (U.S. only)

Call toll free for technical assistance,
product support or ordering information, or
visit our website at www.keithley.com.