

**ADS-976**

PRELIMINARY PRODUCT DATA

16-bit, 200 KHz, Low-Power Sampling A/D Converter

T-51-10-16

FEATURES

- 16-bit resolution
- 200 KHz sampling rate
- Compatible to industry standard ADC76, AD376, AD1376
- Internal sample-hold
- Small 32-pin DIP
- Low-power, 1.8 Watts
- Samples to Nyquist
- 16 word FIFO memory

GENERAL DESCRIPTION

DATEL's ADS-976 is a 16-bit, 200 KHz sampling rate, functionally complete A/D converter with an internal sample-hold. The ADS-976 samples up to Nyquist with no missing codes.

The internal FIFO can be either bypassed or utilized with full (16 words) or half-full (8 words). The FIFO capability still allows the ADS-976 to be compatible to the industry pin-out versions for 16-bit parallel output applications.

Packaged in a small 32-pin DIP, power requirements are ± 15 volts and +5 volts with a 1.8 Watts power dissipation.

INPUT/OUTPUT CONNECTIONS

PIN	FUNCTION	PIN	FUNCTION
1	BIT 1 OUT (MSB)	32	FIFO READ
2	BIT 2 OUT	31	START CONVERT
3	BIT 3 OUT	30	+5V
4	BIT 4 OUT	29	GAIN ADJUST
5	BIT 5 OUT	28	+15V
6	BIT 6 OUT	27	OFFSET ADJUST
7	BIT 7 OUT	26	BIPOLAR OFFSET
8	BIT 8 OUT	25	10V
9	BIT 9 OUT	24	20V
10	BIT 10 OUT	23	FIFO/DIR
11	BIT 11 OUT	22	ANALOG GROUND
12	BIT 12 OUT	21	-15V
13	BIT 13 OUT	20	FSTAT2
14	BIT 14 OUT	19	DIGITAL GROUND
15	BIT 15 OUT	18	EOC
16	BIT 16 OUT (LSB)	17	FSTAT1

