

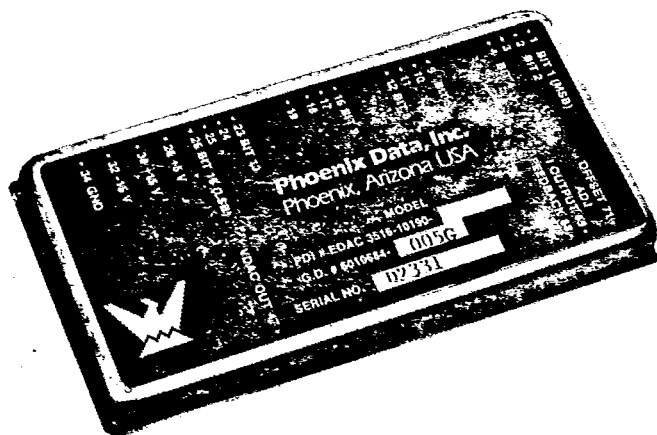
Phoenix Data, Inc.

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Telex 910-951-1364



EDAC 4016

PRELIMINARY

FEATURES

- 16 BIT RESOLUTION
- ACCURACY 0.01%
- LINEARITY 0.0015%
- TTL/CMOS COMPATIBLE
- UNIPOLAR OR BIPOLAR OUTPUT

GENERAL DESCRIPTION:

Phoenix Data precision digital to analog converters have long been an accepted industry standard — providing a wide range of cost and performance configurations to meet the needs of virtually any application. Their ease of application and time proven reliability have made them a first choice with both commercial and military equipment designers world wide.

The EDAC 4016 is an ultra-stable general purpose 16 bit digital to analog converter employing the latest in

precision component and design technology. The converter is designed with two byte-wide latched inputs enabling the designer to interface directly to a wide variety of microprocessors. Separate input strobes allow for interfacing to multiplexed busses without additional components. Tying the input strobes together facilitates non-multiplexed word wide inputs. The converter is PC-board mountable and is totally self-contained except for external power requirements of ± 15 and 5 volts DC.

SPECIFICATIONS:

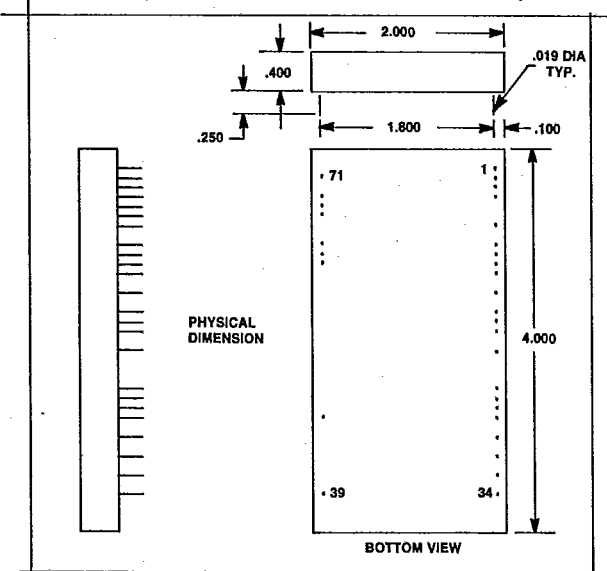
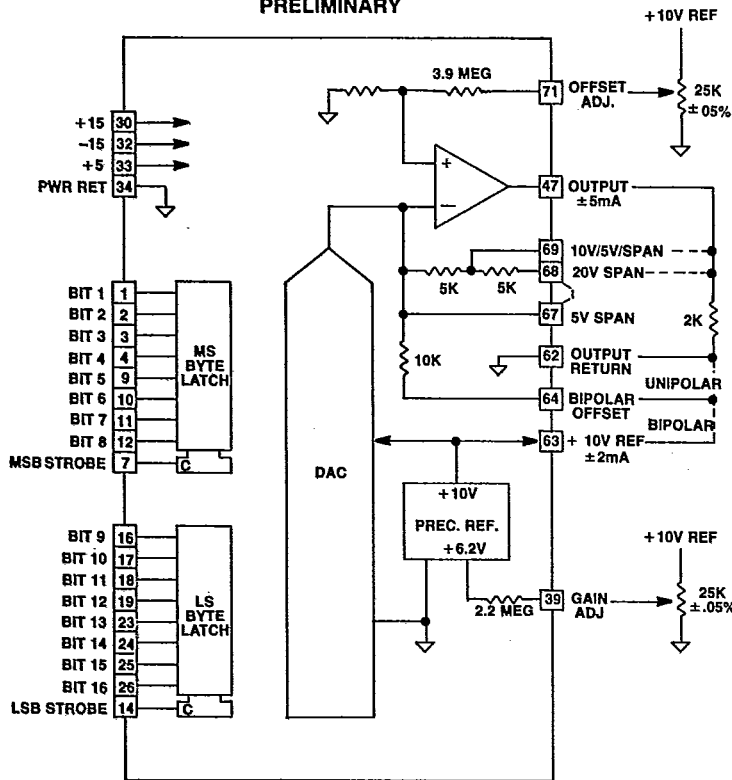
ANALOG SPECS.

FULL SCALE RANGE	$\pm 10V, \pm 5V, \pm 2.5V$ $+ 10V, + 5V$ Programmable
RESOLUTION	16 bits
ACCURACY, FS & ZERO	0.01% FSR (Adj. to zero)
LINEARITY	0.0015%
DIFFERENTIAL LINEARITY	MONOTONIC
TEMPERATURE COEF. (Zero & FC)	5ppm/ $^{\circ}C$ (2.5ppm/ $^{\circ}C$) (1.5ppm/ $^{\circ}C$)
OUTPUT DRIVE	± 5 mA (min)
SETTLING TIME (DAC 4116 @ $\pm 10v$ only)	25 μs to .003% 5 μs to .003%
NOISE (10kHz BW)	25 μv RMS
10V REF.	2 mA Additional external load available

DIGITAL SPECS

INPUT	TTL/CMOS Compatible
INPUT CODE	Offset Binary (C.O.B. option)
2 LATCH STROBES (High byte/Low byte)	DAC follows input when strobes are low.
POWER	
+ 5V, $\pm 5\%$	1 mA
+ 15V, $\pm 3\%$	33 mA
- 15V, $\pm 3\%$	30 mA
SIZE	2" x 4" x 0.4"
SHIELDING	5 side Magnetic 1 side Electrostatic
TEMPERATURE	
Operating	0 $^{\circ}C$ to 70 $^{\circ}C$ -55 $^{\circ}C$ to 105 $^{\circ}C$

EDAC 4016
PRELIMINARY



PROGRAMMABLE OUTPUT RANGE SELECTION (PINOUT JUMPER CONNECTIONS)

SPAN FSR	20V	10V	5V
BIPOLAR OPERATION	63 TO 64 AND 47 TO 68	63 TO 64 AND 47 TO 69	63 TO 64 AND 47 TO 69 AND 67 TO 68
UNIPOLAR OPERATION	62 TO 64	62 TO 64 AND 47 TO 69	62 TO 64 AND 47 TO 69 AND 67 TO 68

ORDERING INFORMATION

EDAC 4 X 1 6 - X X X X

SERIES

SETTLING TIME

0 — 25 μ s TO .003% FSR
1 — 5 μ s TO .003% @ \pm 10V FSR

RESOLUTION (BITS)

INPUTS

0 — STANDARD (O.B.)
1 — COMPLIMENTARY (C.O.B.)

OFFSET T.C. STABILITY OPTION

- A. -FS 10V Unipolar
- B. -FS 5V Unipolar
- C. -FS \pm 10V Bipolar
- D. -FS \pm 5V Bipolar
- E. -FS \pm 2.5V Bipolar
- F. Zero Bipolar \pm 10V
- G. Zero Bipolar \pm 5V
- H. Zero Bipolar \pm 2.5V

TEMPERATURE COEFFICIENT

- 05 — 5PPM/ $^{\circ}$ C
- 15 — 1.5 PPM/ $^{\circ}$ C
- 25 — 2.5 PPM/ $^{\circ}$ C

For additional information, contact your local Phoenix Data, Inc., representative, or:



Phoenix Data, Inc.

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Phoenix Data, Inc., reserves the right, at any time and without notice, to change specifications presented within this data sheet, and assumes no responsibility for the application or use of products herein described.

REPRESENTATIVE

HARMON IND/PHOENIX DATA

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