

# 96-Channel Digital I/O Board For IBM PC and Compatibles



Model CIO-DIO96  
**\$269**



Shown smaller than actual size

- ✓ 96 TTL Digital I/O Lines
- ✓ Each 50-Pin Connector Carries 48 Digital Lines Plus Power
- ✓ LabVIEW Support

The CIO-DIO96 can control 96 devices or sense 96 contact closures from a single card in a PC. The CIO-DIO96 employs four 8255 parallel peripheral interface chips which are programmable in three modes; simple byte input or output or strobed I/O. The 8255 is simple to program.

The CIO-DIO96 is a member of a family of digital I/O boards which use the 50-pin connector. Applications can easily be sized from 48 to 192 digital I/O points or more. Software is extensible to multiple points and all the accessories, including screw terminal boards, electro-mechanical relay boards and solid state relay boards interface to the same connector, regardless of which digital I/O board is used.

### I/O Register Map

The CIO-DIO96 occupies 16 I/O addresses. The first address, or BASE address, is fixed by the base address switch.

### Cabling and Connection

Cabling to the CIO-DIO96 is via standard 50-pin, 0.10" spacing AMP type ribbon cable connectors. Each connector carries 48 digital I/O lines. One 8255 circuit on pins 1-24 and one on pins 25-48.

Each 8255 has 24 I/O lines. The chip is configured as three ports. Two

Base + 0	Port A #1
Base + 1	Port B #1
Base + 2	Port C #1
Base + 3	#1 Control
Base + 4	Port A #3
Base + 5	Port B #3
Base + 6	Port C #3
Base + 7	#3 Control
Base + 8	Port A #2
Base + 9	Port B #2
Base + 10	Port C #2
Base + 11	#2 Control
Base + 12	Port A #4
Base + 13	Port B #4
Base + 14	Port C #4
Base + 15	#4 Control

ports, A & B, are 8-bits wide, while port C may be an 8-bit port or two 4-bit ports.

Individual ports may be configured as input or output, and are written to or read from as a unit.

Optional software drivers, called UNIV-DRVR, are available for programming in both DOS, & Windows 3.1/95/98/NT.

DOS support includes QuickBasic 4.5, Visual Basic, Turbo C, Visual C++, Microsoft C and Quick C. Windows support includes Microsoft C, Visual C++, Visual Basic, Borland C, and C++. LabVIEW drivers are also available.

### Specifications

**Logic Low Level:** -0.5 to 0.8 V max.

**Logic High Level:** 2.0 to 5.0 V max.

**Input Current:** ±10 uA

**Output Low Sink Current:** 2.5 mA @ 0.45 V

**Output High Source Current:** -2.5 uA @ 2.4 V

### To Order (Specify Model Number)

Model No.	Price	Description
CIO-DIO96	\$269	96 channel digital I/O board
CIO-TERM100	149	100 channel 16"x4" screw terminal board; requires 2 C50FF-2 cables
CIO-MINI50	69	50 channel 4"x4" screw terminal board; requires 1 C50FF-2 cable
CIO-SCB-50	199	50 conductor, shielded signal connection box
SSR-RACK24	149	24 channel solid state relay mounting rack
CIO-ERB24	249	24 channel electro-mechanical relay board; requires 1 C50FF-2 cable
C50FF-2	25	50-conductor connection cable, 2 ft
UNIV-DRVR	49	Universal Driver Library for DOS and Windows
CIO-LABVIEW-DRVR	49	LabVIEW Driver

**Ordering Example:** CIO-DIO96 digital I/O board with two CIO-MINI50 terminal panels and two C50FF-2 cables and OMEGACARE<sup>SM</sup> 1 year extended warranty (adds 1 year to standard 3 year warranty), \$269 + (2)69 + (2)25 + 25 = \$482.

D3-18

D3  
DIGITAL I/O AND  
COUNTER/TIMER CARDS



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