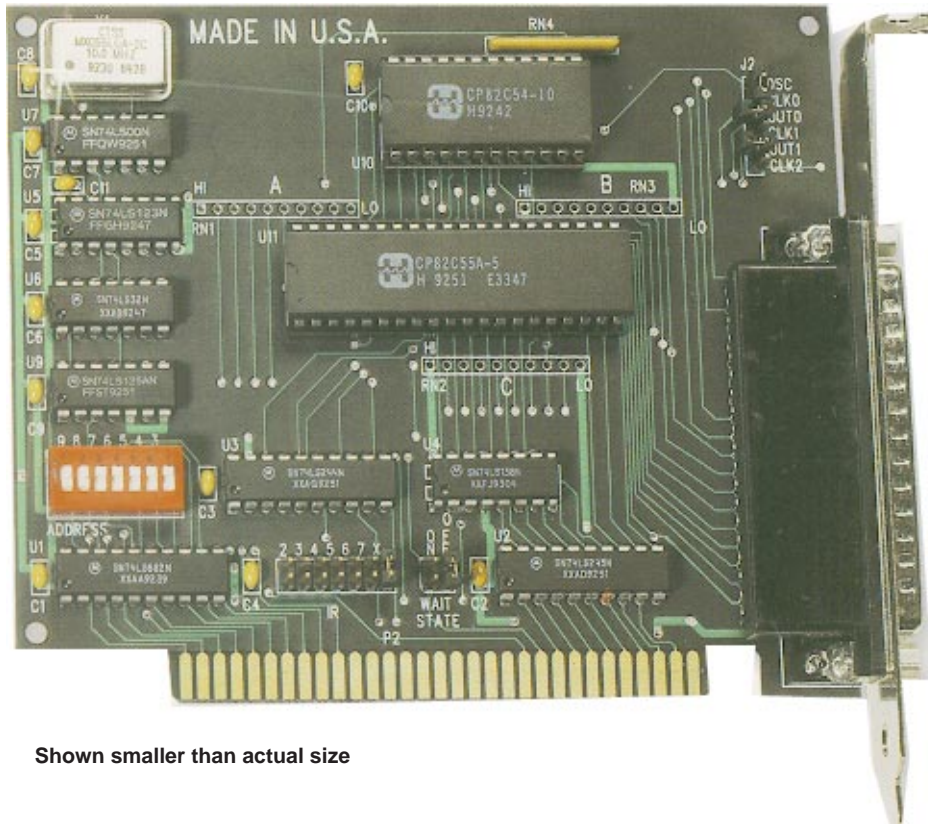




24 Channel Digital I/O and Counter Timer Board

For IBM PC and Compatibles



Shown smaller than actual size

The CIO-DIO24/CTR3 combines digital input/output and counters on one board. It has the digital lines common to the PIO-12, PIO-24 and CIO-DIO24 boards, and is also connector compatible with them.

In addition, three 16-bit counters allow frequency measurement or event counting, such as monitoring the number of times a door opens or items passing on a conveyor belt.

Programming

It is very easy to program from any language that supports writing to and reading from I/O ports. An 8255 chip contains the 24 lines of digital I/O and an 8254 chip contains the 3 16-bit counters. Optional software drivers, called UNIV-DRVR, are available for programming in both DOS, Windows 3.1 & Windows 95. 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. (requires UNIV-DRVR)

I/O Connector

The connector carries 24 digital I/O lines plus the counter inputs and outputs. The 8255 digital I/O chip has 24 I/O lines. The chip is configured as three ports. Two ports, A and B, are 8-bits wide. 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. Counter inputs, gates and outputs may be controlled or chained at the connector, or inboard on a counter chaining jumper.

CIO-DIO24/CTR3

\$99

- ✓ Three 16-Bit Counters
- ✓ 24 Lines of Digital I/O
- ✓ 10 MHz Oscillator On-Board
- ✓ Internal Jumpers for Counter Chaining
- ✓ Labview Support

Specifications

- Digital I/O Channels:** 24, as three 8-bit ports
- Logic Low Level:** -0.5 to 0.8 V max.
- Logic High Level:** 2.0 to 5.0 V max.
- Input Current:** ±10 µA
- Output Low Sink Current:** 1.7 mA @ 0.45 V
- Output High Source Current:** -200 µA @ 2.4 V
- 8254 Counter:** fully programmable, 16-bit down counter; gated input TTL level control; 10 MHz (on-board oscillator) max input frequency
- Interrupt Inputs:** 1, PC Bus 2-7
- Power Consumption:** +5 V, 400 mA

I/O Register map

The CIO-DIO24/CTR3 occupies 8 I/O addresses. The first address, or BASE address, is fixed by the base address switch.

Base + 0	Port A, 8255	Base + 4	CTR0, 8254
Base + 1	Port B, 8255	Base + 5	CTR1, 8254
Base + 2	Port C, 8255	Base + 6	CTR2, 8254
Base + 3	8255 Control	Base + 7	8254 Control

To Order (<i>Specify Model Number</i>)		
Model Number	Price	Description
CIO-DIO24/CTR3	\$99	Digital I/O and counter board
CIO-TERMINAL	99	16" x 4" screw terminal board with prototype area, requires C50FF-2 cable
CIO-MINI37	49	4" x 4" screw terminal board, requires C50FF-2 cable
C37FF-2	25	Connection cable, 2 ft
UNIV-DRVR	49	Universal Drivers for DOS and Windows
CIO-Labview-DRVR	49	Labview Drivers (requires UNIV-DRVR)

Ordering Example: CIO-DIO24/CTR3 digital I/O/counter board with CIO-MINI37 terminal panel and C37FF-2 cable, \$99 + 49 + 25 = **\$173.**