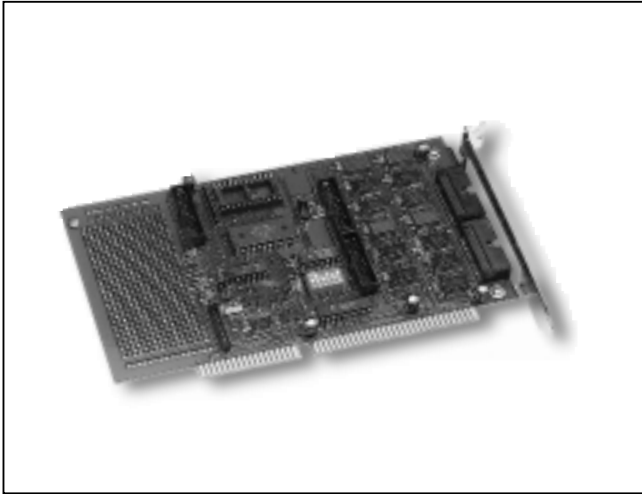




DIO-64

32 Digital Input & 32 Digital Output with Timer/Counter Board



Functional Description

The DIO-64 provides 32 digital input channels, 32 output channels and 6 counter/timer channels. The DIO-64 consists of two 16-bit input ports and two 16-bit output ports. The user can use the DB-16P to connect the input ports (CN2, CN4) for isolation purpose, or use DB-16R to interface to the output ports (CN1, CN3) for relay control. There are four clock sources, 2M, 1M, 500K, and 250K on the board. The user can choose one of them through jumper setting. The user can use the frequency from the soldering pad. On board Timer/Counter provides 3 channels for frequency measure, event counting and pulse generation. The optional 8254 provides 3 channel for interrupt features.

Features

- 32 digital input lines
- 32 digital output lines
- Buffer output for higher driving capability
- 3 independent programmable 16 bit down counter
- One 16-bit counter, one 32 bit counter with a 4MHz time base
- Breadboard area for add-on circuit

Applications

- Digital I/O control
- Factory Automation
- Product Test
- Relay control
- Timer /Counter

Specifications

- Logic inputs and output
 - Input logic high voltage: 2.0V(Min)/5.0V(Max)
 - Input logic low voltage: -0.5V(Min)/0.8V(Max)

- Input load current: -0.45mA(Min)/+70µA
- Output sink current: +64mA(Max)
- Output source current: -15mA
- All outputs and inputs are TTL Compatible
- Programmable counter/timer
- Clock frequency: 250KHz, 500KHz, 1MHz, 2MHz (jumper selectable)
- Frequency divider: can be divided by100, 10,1
- Power consumption: +5V @ 500 mA Typical
- Environment
 - Operating Temperature: 0 to 50°C
 - Storage Temperature: -20°C to 70°C
 - Humidity: 0 to 90 %
 - Dimensions: 93 mm x 135 mm

Software

- DIO Development Toolkit for DOS
- DIO Development Toolkit for Win95
- DIO Development Toolkit for WinNT

Order Description

- DIO-64 /3: 32 Digital I/O with 3 timer/Counter Board
- DIO-64 /6: 32 Digital I/O with 6 timer/Counter Board

Options

- DB-16P: 16 channel opto-isolated input terminal board
- DB-16R: 16 channel relay terminal board
- DB-24PR: 24 channel Power Relay Output board
- DB-24C: 24 channel Open-Collector Output board
- DB-24POR: 24 channel Photo Mos Relay Output board
- DN-20: I/O connector block with DIN-Rail mounting and two 20-PIN Header
- ADP-20: 20-pin Extender
- DIO LabVIEW Development Toolkit for Win95
- DIO LabVIEW Development Toolkit for WinNT

Pin Assignment

DIO	1	2	D11
DI2	3	4	DI3
DI4	5	6	DI5
DI6	7	8	DI7
DI8	9	10	DI9
DI10	11	12	DI11
DI12	13	14	DI13
DI14	15	16	DI15
D GND	17	18	D GND
+5V	19	20	+12V

DO0	1	2	DO1
DO2	3	4	DO3
DO4	5	6	DO5
DO6	7	8	DO7
DO8	9	10	DO9
DO10	11	12	DO11
DO12	13	14	DO13
DO14	15	16	DO15
D GND	17	18	D GND
+5V	19	20	+12V

CLK 2	1	2	CLK 1
OUT 2	3	4	OUT 1
GATE 2	5	6	GATE1
EVENT	7	8	CLK 0
GATE 3	9	10	OUT 0
GATE 4	11	12	GATE 0
EXT IRQ	13	14	N.C.
N.C.	15	16	N.C.
D GND	17	18	D GND
+5V	19	20	+12V

DI : Digital Input
 DO: Digital Output
 CLK: Counter Clock Input
 OUT: Counter Output
 GATE: Counter Gate
 EXT IRQ: External Interrupt
 N.C.: No Connect