PC OPTO DIO48

DESCRIPTION

A full length card providing 24 input and 24 output high current, high voltage lines with ±2500Volts opto isolation.
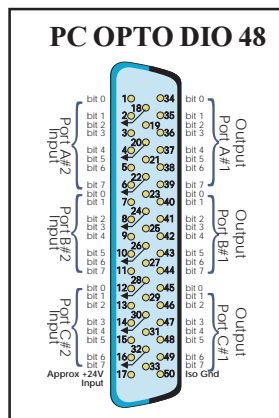
The 48 i/o lines, with isolated ground and external power input lines, are accessible from the edge connector, a 50 way 'D' connector for greater shielding. Fast TTL buffers and opto isolators allow a maximum throughput of 150kHz. Each input line is current limited and reverse connection protected so ensuring long term use in an industrial environment.

OPTO DIO48 requires an external power input to supply the isolated side of the opto circuit range 17.5 - 35Volts.

The 48 i/o lines, arranged as 6 eight bit port registers with one read/write watchdog register, occupy 8 i/o locations at base address in the range 200-3FF Hex, default=308H. Software enabled interrupts on input lines Port C#2 bits 0 and 3.

WATCHDOG TIMER

The watchdog is a fail safe way to ensure the users program is running correctly. On power up, the watchdog is disabled. If the users program enables the watchdog, an interrupt or reset signal is generated on timeout. Reading the watchdog register refreshes the timer, postponing timeout for 50 mS. A watchdog output, selectable active high/low or pulsed high/low, available inside the PC or output via Port A bit 0, may control external hardware.

PC OPTO DIO 48

SPECIFICATION

- Ports: 3 x 8 bit inputs
  3 x 8 bit outputs
- Opto Isolation: ±2500Volts
- Watchdog: Active high/low
  Pulsed high/low
- PC Power: 800mA @ 5V
- Weight: 0.15kg; 0.35lb
- Size: 10x18cm;
  7.8x4.2in
- Ext power in: 17.5 - 35V
  24V Nominal
- Output drivers: UDN 2989
- Input level low: 0.0 - 2.4 Volts
- Input level high: 2.4 - 24.0 Volts
  Max Input: 35 Volts
  Max Currents:
  -one input high: 7.25mA @ 24V
  -all inputs high: 150mA

APPLICATIONS

Process control, sensing inputs, volt free contacts, product testing, noise free inputs, driving relays, solenoids, stepper motors, lamps, automotive industry etc.

EQUIVALENT INPUT LINE

FEATURES

- ±2500 Volts opto isolation.
- Each input reverse connection protected & current limited
- On board high duty suppression diodes & pull down resistors ensuring long term industrial use
- Fast - 150kHz bandwidth
- Protects PC against wiring faults/accidental high voltage
- Ideal for industrial environments
- Fail safe watchdog timer
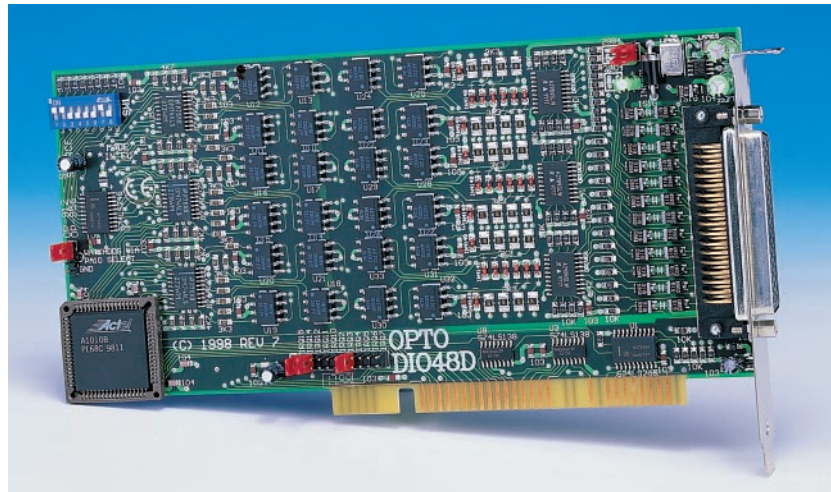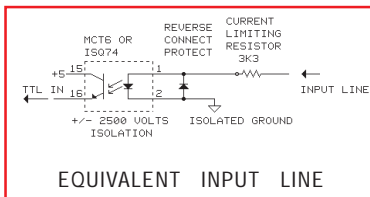- Software enabled Port C bit 0 & 3 and watchdog interrupts on IRQ2-7, 10-12 & 15

SOFTWARE

Data Acquisition Device Driver CD contains documentation and sample code in various DOS and Windows languages e.g. Visual Basic, Visual C++, Turbo Pascal for Windows. The driver pack includes a fully interrupt driven devise driver for Windows NT, 3.51 and NT 4.0 and a DLL pack for Windows 3.x, Windows 95 and 98 all with worked examples.

The CD includes a 200 page software guide and a 100 page hardware "Interfacing Guide" with debugged circuits fully explained.