

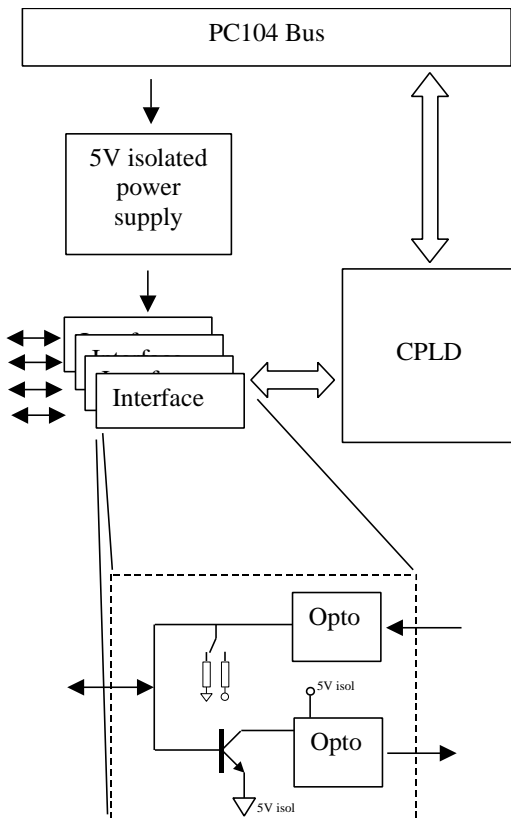
# IRTS DIGIO16-I PC104 I/O BOARD

## Overview

The IRTS PC/104 Digio16-I board has 16 independent opto isolated digital I/O ports. The configuration of each I/O port is accomplished through register configuration. The 16 Digital I/Os are placed on one 20-pin 2mm lockable header.

The board is fully software configurable for addressing, and can be connected to an hardware interrupt thanks to hardware configuration. 11 external hardware interrupts are supported.

A small DOS utility program called TESTDIG is used to access the I/O port set-up registers as well as allowing easy assignment and testing of each I/O. The source code of TESTDIG is provided for the user so that they can easily incorporate the coded example into their application.



## Features

The IRTS Digio16-I PC/104 Card is a highly flexible, embedded Digital I/O module with the following features:

- **Default port input voltage when not connected :**  
0V or 5V
- **Opto isolation** –100V, with replaceable DIP Ics
- **Configuration** - Onboard software registers for individually configuring In/Out profile, and IRQs conditions for each digital port
- **Physical Size** - Compact PC/104 footprint (3.550" x 3.775")
- **Connectors** – Digital I/O ports accessible through one lockable 20 pin 2mm header
- **Power** - Powered through the PC/104 header
- **IRQs** - 11 separate interrupts available (interrupts 10, 11, 12, 15 and 14 available when full 16-bit PC/104 bus used)
- **BUS** - Full 16-bit PC/104 bus header allows usage with any PC/104 CPU, including those with only the 8-bit PC/104 bus connector.

## Specifications

### Physical Specifications

PC/104 Form Factor (3.550"x3.770").

### Power Specifications

Supply voltage: 5V DC +/- 5%  
 Supply voltage ripple: 100 mV peak to peak 0 - 20 MHz  
 Supply current (maximal): 100 mA, no load

### Operating Environment

Temperature:  
 -40° to +85°C Extended Operating Temperature Range (\*\*with appropriate airflow)  
 Humidity: 5% to 95% non-condensing  
 (\*) The maximum operating temperature is the maximum measurable temperature on any spot on the modules' surface. It is the user's responsibility to maintain this temperature within the above specification.