IP-Unidig-E-48

IndustryPack Module With 48 TTL-Level I/O Lines and ESD Protection

Application Information

The IP-Unidig-E-48 digital I/O IndustryPack provides 48 flexible input/output signal lines with TTL-level inputs and outputs. Outputs will sink up to 4 mA of continuous load current. Inputs will handle TTL levels. Each line may be dynamically and individually configured for either input or output, providing maximum flexibility. Inputs and outputs may be double buffered, making the IndustryPack compatible with simulation systems requiring many inputs and outputs to be latched simultaneously.

Writing a one to any line turns off the output driver, allowing a passive pull up resistor to set the line to a logic high. Writing a zero to any line turns on the driver, driving the line to a logic low. For input use, a one is written to the corresponding line— this is the power up default. For output use, the binary value desired is written to the corresponding line.

Input and output lines may double buffered by providing an external clock. A bit in the Control Register selects the polarity of this clock, allowing inputs and outputs to be latched on either the rising or falling clock edge. The IP-Unidig-T is ideally suited for generating this clock, though any CMOS/TTL compatible clock source may be used.

Reset turns off the open collector output driver and sets disables double buffering for a consistent software interface.

A subroutine library and Windows NT drivers are available.

Features

- 48 TTL-level digital I/O lines on a single-wide IndustryPack
- All lines have LineSafe ESD protection
- Each line programmable as input or output
- Double-buffered input and output
- External clock triggers double-buffering

Specifications

Form Factor	Single-wide Type II IndustryPack
IndustryPack Interface	Complies with ANSI/VITA-4 No wait states
Interface Speed	8 MHz
Wait States	None
Number of Digital Lines	48 individually programmable and input or output
Input Driver	TTL levels
Output Driver	TTL levels. 4 mA sink capability, 10 kOhm pullup.
ESD Protection	Included
Interrupts	None
Dimensions	1.8 inches x 3.9 inches
Weight	0.06 kg (0.1 lb)
Power Requirements (no load)	+5 VDC, 50 mA typ
Environmental	Operating temperature: -0 to +70°C Humidity: 5 to 95% non-condensing Storage: –40 to +85°C

Ordering Information

IP-UNIDIG-E-48	IndustryPack with 48 TTL-level I/O lines and ESD protection

EKIP50-UNIDIG03	Engineering kit for IP-Unidig-E-48 if mounted on a carrier with 50-pin ribbon cable header front panel I/O connectors. Contains:
	    Six foot 50 conductor ribbon cable (C-IP50F-IP50F-6)
	    Fifty screw terminal block with ribbon header (IP-TERM)
	(More items as below)

EKHD50-UNIDIG03	Engineering kit for IP-Unidig-E-48 if mounted on a carrier with HD50 front panel I/O connectors. Contains:
	    Six foot cable HD50 male to HD50 male (C-HD50M-HD50M)
	    Fifty screw terminal block with HD50 female (IP-TERM-HD50)
	(More items as below)

EKCM50-UNIDIG03	Engineering kit for IP-Unidig-E-48 if mounted on a carrier with Champ50 front panel I/O connectors. Contains:
	    Six foot Champ50 male to HD50 male cable (C-HD50M-CM50M)
	    Fifty screw terminal block with HD50 female (IP-TERM-HD50)
	(More items as below)

All IP-UNIDIG-E-48 engineering kits include:	Printed hardware user manual Bill of materials Board schematics Assembly diagram AVX: Transguard VC080505A150

QP-UNIDIG-DIG	QuickPack subroutine library for IP-Unidig-E-48. Contains:
	    Printed software user manual
	    Floppy Disk containing:
	        C source code
	        Release notes

ND-SDPACK	Windows NT 4.0 SDpacK IndustryPack driver CDROM

Associated Products

IP-UNIDIG	IndustryPack with 24 buffered TTL-level I/O lines
IP-UNIDIG-E	IndustryPack with 24 TTL-level I/O lines
C-IP50M-IP50M-3	Three foot 50 conductor ribbon cable
C-IP50M-IP50M-6	Six foot 50 conductor ribbon cable
C-CM50M-IP50M	Three foot Champ50 male to ribbon cable
C-HD50M-HD50M	Six foot HD50 male to HD50 male cable
C-HD50M-CM50M	Six foot Champ50 male to HD50 male cable
IP-TERM	50 screw terminal block with ribbon cable connector
IP-TERM-HD50	50 screw terminal block with HD50 female connector