



Features

- ◆ Fuse protected +5V or +12V power
- ◆ Built-in Wait-State Generation
- ◆ 16 Bit Reads/Writes supported to provide higher through-puts
- ◆ Background readback of input lines via interrupt mode
- ◆ Isolated inputs can be fed directly into the IRQ Bus system or toggled via Global Register System

Description

An enhanced feature on this board is an additional 16 digital inputs and 16 digital output lines. Wait State generation is incorporated allowing operation in computers with fast Bus Clock speeds. All inputs are signal conditioned and fed into an external interrupt line (pulses of up to 24V). A jumper enables the external lines to be commoned to digital ground or be completely isolated.

Ordering Information

Supplied with EDR Software and Internal Cable (IDC40 to DB37)

PC-62C 16 Channel Optically Isolated Input Board

Optional Accessories

OPTION 1 (Opto-Isolator):

ADPT-3740 IDC20 (M) to 21way Screw Terminal
DB37M/F 37way Screened Cable DB37 (M) to (F)

OPTION 2 (Digital I/O):

ADPT-3740 IDC20 (M) to 21way Screw Terminal
IDC40 40way Ribbon Cable

Specifications

Opto Isolators	
Optically Isolated Inputs:	16 (expandable to 48)
Frequency Response:	10KHz
Logic Levels:	0V to 3V: Logic 0 3.1V to 24V: Logic 1
Isolation Voltage:	450Vrms
Max Reverse Voltage:	50V
Input Current:	Continuous: 30mA Peak: 1A (Pulse 300ms, 2% Cycle)
Max forward current [LED]:	50mA
Interrupts	
Interrupt selection:	IRQ2 to IRQ15 (software selectable)
Power-up levels:	Tri-stated
Individual Isolated Line:	IRQ2 to IRQ15 (software selectable)
Shared Isolated Lines:	IRQ2 to IRQ15 (software selectable)
No of Registers/Line:	2
Reset Register on Lines:	Individual or Global Reset
External Digital I/O	
Digital Input Lines:	16
Digital Output Lines:	16
Logic Levels:	0V to 0.8V: Logic 0 2.1V to 5V: Logic 1
Minimum Input Voltage:	0V (Low)
Maximum Input Voltage:	5.3V (High)
Max Current Output Drive:	20mA per Digital Output Line
Frequency Response:	20MHz
ISA Bus	
Word size:	16bit or 8bit
Address selection:	0 to 7FFh
I/O address location:	16 Words or 32 bytes (ISA)
Wait State Selection:	0, 1, 2, 4, 8
External User Power	
+5V (fuse protected):	250mA (max)
+12V (fuse protected):	250mA (max)
PC Interface	
Operating Temp:	0 to 50°C
Relative Humidity:	0% to 90% (non-condensing)
Power requirements:	+5V @ 300mA typ
Board Dimensions:	77.2mm x 105.9mm

IDC-40M

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
DO17	17	18	DGND
DI0	19	20	DI1
DI2	21	22	DI3
DI4	23	24	DI5
DI6	25	26	DI7
DI8	27	28	DI9
DI10	29	30	DI11
DI12	31	32	DI13
DI14	33	34	DI15
DI16	35	36	DGND
DI18	37	38	DGND
DI19	39	40	DGND

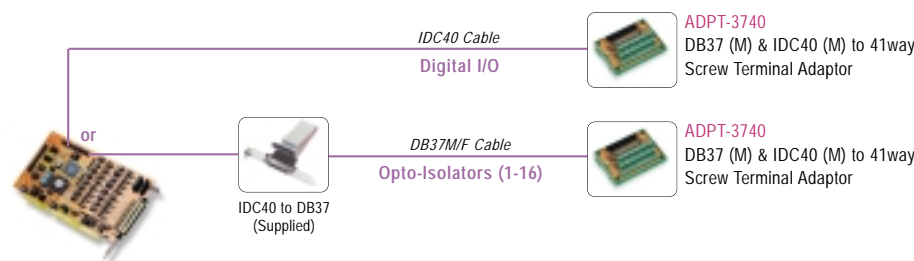
DB-37M (Int) Use PCI-63-I/O

DO1	20	1	DO0
DO2	21	2	DO3
DO4	22	3	DO5
DO6	23	4	DO7
DO8	24	5	DGND
DO9	25	6	DO10
DO11	26	7	DO12
DO13	27	8	DO14
DO15	28	9	DO16
DI0	29	10	DI1
DI2	30	11	DI3
DI4	31	12	DI5
DI6	32	13	DI7
DI8	33	14	DGND
DI9	34	15	DI10
DI11	35	16	DI12
DI13	36	17	DI14
DI15	37	18	DI16
DI17	38	19	DGND

DB-37F Opto-isolator

DGND	37	19	+5V
PORTB COM RET	36	18	+12V
PORTB7 RET	35	17	PORTA COM RET
PORTB6 RET	34	16	PORTA7 RET
PORTB5 RET	33	15	PORTA6 RET
PORTB4 RET	32	14	PORTA5 RET
PORTB3 RET	31	13	PORTA4 RET
PORTB2 RET	30	12	PORTA3 RET
PORTB1 RET	29	11	PORTA2 RET
PORTB0 RET	28	10	PORTA1 RET
DGND	27	9	PORTA0 RET
DGND	26	8	PORTA0 RET
DGND	25	7	PORTA0 RET
DGND	24	6	PORTA0 RET
DGND	23	5	PORTA0 RET
DGND	22	4	PORTA0 RET
DGND	21	3	PORTA0 RET
DGND	20	2	PORTA0 RET
DGND	19	1	PORTA0 RET

System Diagram



Supplied with Internal Cable for Digital I/O (IDC40 to DB37)