EDREX Hardware Bridge
Part of EDR Enhanced ActiveX Toolbox
Copyright © 2000, Eagle Technology

1. PCI36C Series

The PCI36C & PCI36C_ADV is designed around an 8255 PPI and thus has got three 8 bit digital I/O ports. There is also an optically isolated digital input. The ADV version has got an extra 16 bit high current port. The PPI ports supports auto configuration. To set a port as an output or input simply write to it or read from it.

1.1. Port locations:

PPI 8 bit I/O port A = port 0
PPI 8 bit I/O port B = port 1
PPI 8 bit I/O port C = port 2
16-bit output port = port 3

1.2. Interrupt sources

0 = None
1 = Port C bit 0
2 = Port C bit 4
3 = Not available
4 = Not available
5 = Opto-Isolator
6 = Not available

2. PCI62C Series

The PCI62C is available in three version namely a 16, 32 and 48 Opto-isolator version.

2.1. Port locations:

16-bit digital I/O port = port 0
Opto-port 1 = port 1 (PCI62C16,PCI62C32,PCI62C48)
Opto-port 2 = port 2 (PCI62C32,PCI62C48)
Opto-port 3 = port 3 (PCI62C48)

2.2. Interrupt Sources

0 = None
1 = Any Opto-Isolator

3. PCI63C Series

The PCI63C is available in two version namely a 16 reed relays version and a 32 reed relay version. The digital I/O port is located at port 0.

3.1. Port locations:

16-bit digital I/O port = port 0
Reed relays 0-15 = port 1
Read relays 16-31 = port 2

3.2. Interrupt sources

0 = None

1 = Opto-Isolator

4. PCI30FG Series

The PCI30FG is available in various versions. Each type board has got a different number of A/D and D/A channels and the sampling differ as well. The digital I/O ports support auto configuration. To set it as an output or input simply write to it or read from it.

4.1. Sampling speed.

PCI30GX series = 100kHz
PCI30FX series = 330kHz

4.2. Digital I/O port locations

PPI 8 bit port A = port 0
PPI 8 bit port B = port 1
PPI 8 bit port C = port 2

4.3. Interrupt Sources

The PCI30FG series does not support any user selectable interrupts.

4.4. Analog to digital

The analog channels can either be read by a single read or by continuous sampling. Two modes are supported by continuous sampling, namely normal and burst mode. In normal mode only one conversion is triggered on each A/D pulse and in burst a series of A/D conversions is triggered on each A/D pulse. Normal mode is a channel by channel sampling and in burst mode all channels are sampled at the same time. On the boards that do not support SSH the skew is about 5us.

4.5. Digital to analog

The D/A Write function supports auto ranging and will always select the range with the best resolution.