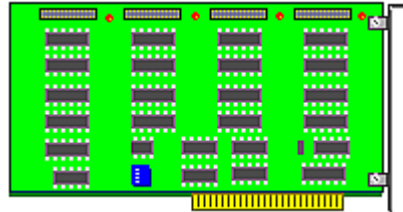


312-2

SMATLAB
INDUSTRIAL AUTOMATION SERIES



USER'S MANUAL INDUSTRIAL CONTROL CARDS (ISA)



8 channel industry control adapter

Product Code: A8 IND

INTRODUCTION

The 8-channel industry control board is a programmable I/O interface for PC/XT, PC/AT, PC/386, or compatibles. It provides total 8 i/O digital I/O ports, each I/O port contains 8 I/O lines, and can be set either input or output by the user's program. The signal assignments of 8-channel industry control board is designed as a standard configurations, so that it can be used to connect to the expansion card family are 16/8-channel relay output board, 16/8-channel isolator input board, 8-channel SSR/Logic output board etc.

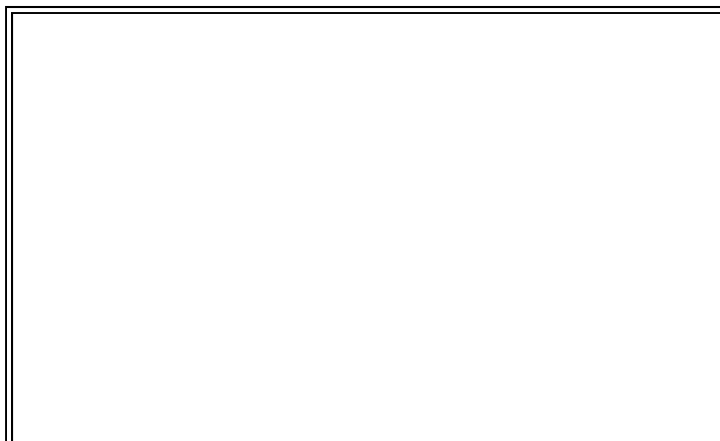
The features of 8-channel industry control board are:

1. Provides 8 I/O ports.
2. Each I/O port contains 8 digital I/O lines, total 64 I/O lines.
3. Port address selectable.
4. Standard signal assignment to connect to expansion board family.

The package includes following item

The package contains:

1. 8-channel industry control board.
2. Four expansion flat cable with 26 pins connector.
3. User's manual.
4. Diskette.





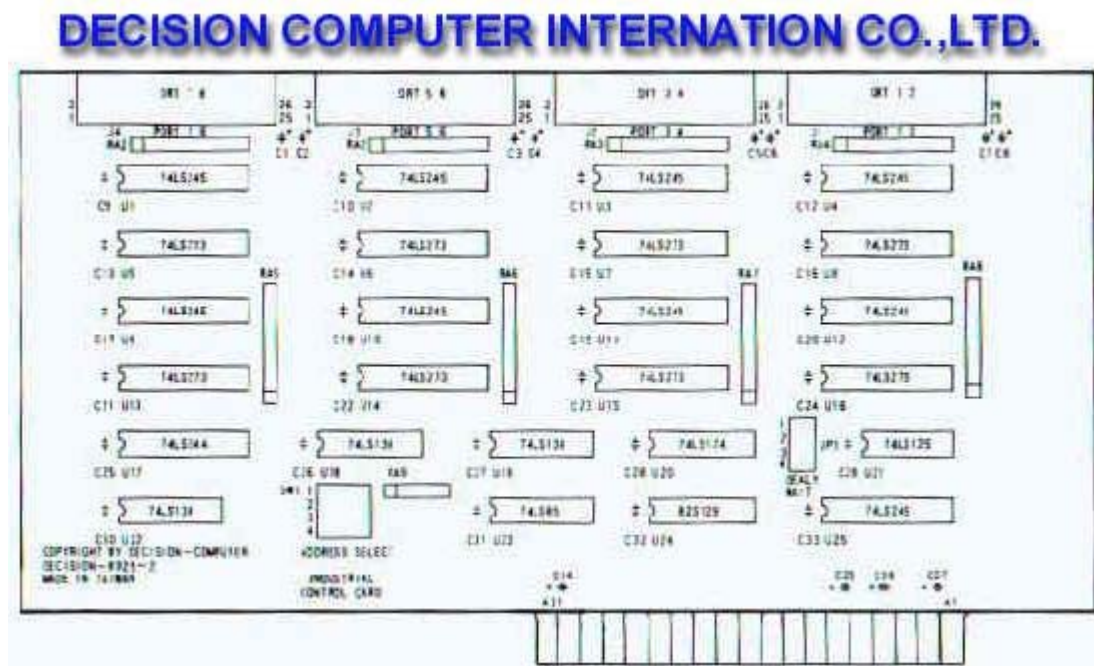
HARDWARE INSTALLATION

Your 8-channel industry control board is designed to be inserted in any available slot in your computer. In order to gain access to the expansion slots and the program switches on the main board, follow the steps listed in the followings:

1. Set the 8-channel industry control board switch.
2. Turn off all power of your computer and all peripheral devices before installing your 8-channel industry control board.
3. Remove the cover of the computer.
4. Insert you reconfigured board into any available slot. Make sure your I/O card is firmly seated in the chosen slot.
5. Replace the cover of the computer.
6. You are now ready to use your 8-channel industry control board for several applications.

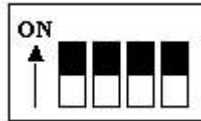
HARDWARE CONFIGURATION

Before you use the 8-channel industry control board, you must ensure that the I/O address is set correctly. Observe the figure in the follows; the proper settings for the 8-channel industry control board are described in the following.



1. I/O Address

Dip switch is used to set I/O address, the I/O address mapping are



SW1	SW2	SW3	SW4	I/O ADDRESS
ON	ON	ON	ON	180H V 187H
ON	ON	ON	OFF	188H V 18FH
ON	ON	OFF	ON	190H V 197H
ON	ON	OFF	OFF	198H V 19FH
ON	OFF	ON	ON	1A0H V 1A7H
ON	OFF	ON	OFF	1A8H V 1AFH
ON	OFF	OFF	ON	1B0H V 1B7H
ON	OFF	OFF	OFF	1B8H V 1BFH
OFF	ON	ON	ON	1C0H V 1C7H
OFF	ON	ON	OFF	1C8H V 1CFH
OFF	ON	OFF	ON	1D0H V 1D7H
OFF	ON	OFF	OFF	1D8H V 1DFH
OFF	OFF	ON	ON	1E0H V 1E7H
OFF	OFF	ON	OFF	1E8H V 1EFH
OFF	OFF	OFF	ON	1F0H V 1F7H
OFF	OFF	OFF	OFF	1F8H V 1FFH

2. Pin Assignments

1. Connector 1 (J1)

Pin	Description	Pin	Description
1	+12V	14	port1/line1
2	GND	15	port1/line2
2	+12V	16	port1/line3
3	GND	17	port1/line4
4	port0/line0	18	port1/line5
5	port0/line1	19	port1/line6
6	port0/line2	20	port1/line7

2. Connector 2 (J2)

Pin	Description	Pin	Description
1	+12V	14	port3/line1
2	GND	15	port3/line2
3	+12V	16	port3/line3
4	GND	17	port3/line4
5	port2/line0	18	port3/line5
6	port2/line1	19	port3/line6
7	port2/line2	20	port3/line7

7	port0/line3	21	/CS1
8	port0/line4	22	/CS2
9	port0/line5	23	+5V
10	port0/line6	24	GND
11	port0/line7	25	12V
12	port1/line0	26	GND

8	port2/line3	21	/CS3
9	port2/line4	22	/CS4
10	port2/line5	23	+5V
11	port2/line6	24	GND
12	port2/line7	25	12V
13	port3/line0	26	GND

3. Connector 3 (J3)

Pin	Description	Pin	Description
1	+12V	14	port1/line1
2	GND	15	port1/line2
2	+12V	16	port1/line3
3	GND	17	port1/line4
4	port0/line0	18	port1/line5
5	port0/line1	19	port1/line6
6	port0/line2	20	port1/line7
7	port0/line3	21	/CS1
8	port0/line4	22	/CS2
9	port0/line5	23	+5V
10	port0/line6	24	GND
11	port0/line7	25	12V
12	port1/line0	26	GND

4. Connector 4 (J4)

Pin	Description	Pin	Description
1	+12V	14	port7/line1
2	GND	15	port7/line2
3	+12V	16	port7/line3
4	GND	17	port7/line4
5	port2/line0	18	port7/line5
6	port2/line1	19	port7/line6
7	port2/line2	20	port7/line7
8	port2/line3	21	/CS7
9	port2/line4	22	/CS8
10	port2/line5	23	+5V
11	port2/line6	24	GND
12	port2/line7	25	12V
13	port3/line0	26	GND

DIAGNOSTIC

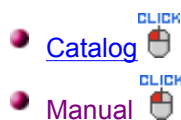
The CONTROL.BAS program provides diagnostic routine to test your industry control board under MS/DOS operating system. Moreover, you can connect expansion board such as 16 channel photo isolate input board, 16 channel relay output board, 8-channel relay output/ 8-channel photo isolate input board, and 8-channel SSR output / 8-channel logical output board to check / 8-channel logical output board to check whether these boards are good.





NOTE: In order to prevent violation of input data from input port, please reset the input port before perform input procedure, this mean you must output 255 to input port to reset it.

BASIC EXAMPLE:

OUTPUT: OUT &H180,VALUE

INPUT : OUT &H180,255: DATA=INP(&H180)



- [Device Driver](#) 
- [Self Test Software & Sample Code](#) 
- [Web Based DAQ](#) 
- [Application](#) 
- [Q&A](#) 