

PORT STATUS BOARD

FEATURES

- 8 X Buffered LED Indicators for a visual status for each of the I/O pins
- Test Points available for each of the I/O pins
- 2 x 10-way box headers allows the units to be connected in-line to monitor device pins
- Easy connection to the I/O port via a 10-way box header that suits a standard IDC connector.
- 72mm Standard width for DIN Rail Modules



GENERAL DESCRIPTION

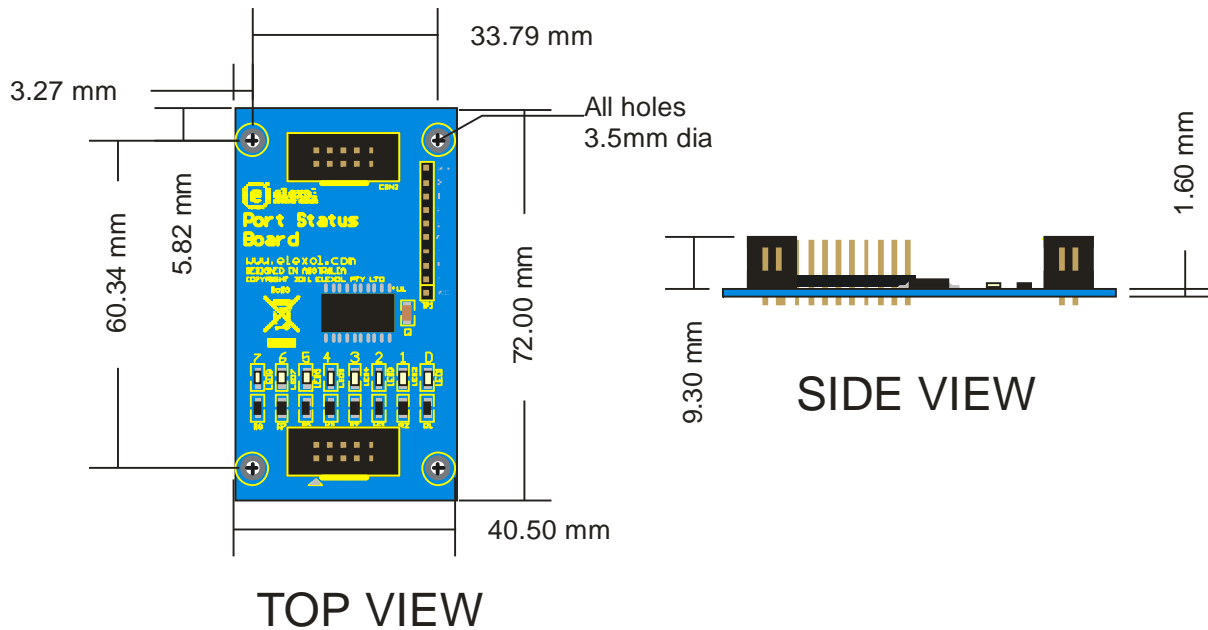
The Port Status Board is an accessory board that allows visual indication as well as offering test points to the I/O pins of a single port on the existing I/O 24 range. The Elexol I/O 24 Range consists of Ether I/O 24 R, Ether I/O 24 DIP R, USB I/O 24 R and the USB I/O 24 DIP R.

The board consists of 8 buffered LED indicators that provide a visual indication of the current state on the port.

There are also two 10-way box headers so that it can be connected in-line without inhibiting the function of the current port. The connection between the I/O 24 module and the Port Status Board is via a 30 cm IDC connection cable. This cable is provided with the board.

The board has been designed to a 72mm standard width so that it can easily be mounted in DIN rail mounting modules.

LAYOUT AND MECHANICALS



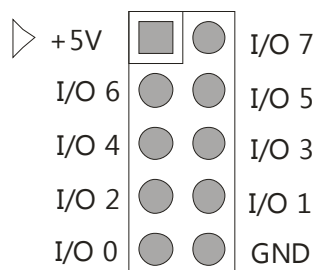
Dimensions: 1.59 X 2.8 X 0.43 inches (40.5 X 72 X 11mm)

PINOUTS AND BOARD CONNECTIONS

10 PIN BOX HEADER

Shown in the diagram below is the I/O port Connector for each of the Ports on the module.

I/O 24 Port Connection



Note: Pin1 Marked on I/O Accessory with ▷

10 PIN BOX HEADER CONNECTIONS

PIN #	SIGNAL	TYPE	DESCRIPTION
1	+5V	PWR	+3.3V to +5V drawn from I/O module powers (Supplies power to the connected I/O Board)
2	I/O 7	I/O	Input / Output pin 7
3	I/O 6	I/O	Input / Output pin 6
4	I/O 5	I/O	Input / Output pin 5
5	I/O 4	I/O	Input / Output pin 4
6	I/O 3	I/O	Input / Output pin 3
7	I/O 2	I/O	Input / Output pin 2
8	I/O 1	I/O	Input / Output pin 1
9	I/O 0	I/O	Input / Output pin 0
10	GND	PWR	Ground signal from I/O module

COMMUNICATIONS

SETTING UP THE PORT ON THE I/O 24 FOR THE PORT STATUS BOARD

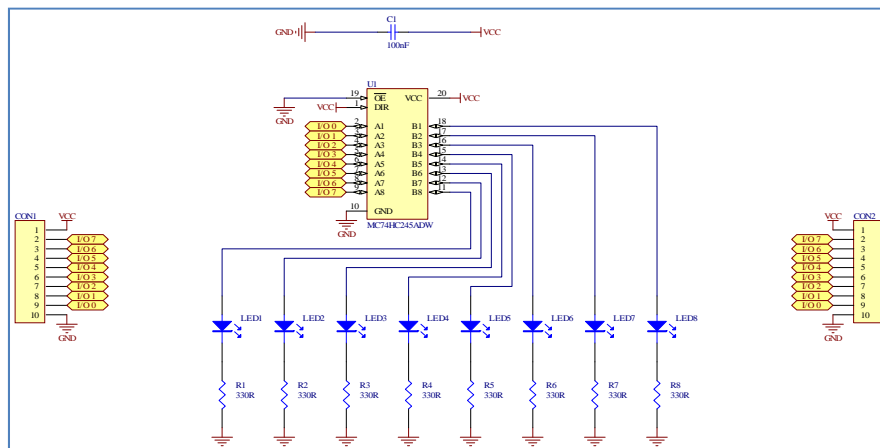
The Port on the I/O 24 can either be set as input or output for the Port Status board. If the board is going to be used as an inline device then the port configuration will need to be configured for the device that it is being connected too.

CODING EXAMPLES

For code on how to set the I/O 24 port states please refer to the individual datasheet for the device.

The datasheets for the I/O 24 range are available for download from our website www.elexol.com

SCHEMATIC



ABSOLUTE MAXIMUM RATINGS

Port Status Board

Supply Voltage VCC to Port Status Board.....	0V to +6V
Input Voltage on I/O pin to Port Status Board.....	0V to VCC
Total Power dissipation	500mW
Maximum Current allowable to buffer (74HC245).....	+/-70mA
Maximum output current sunk by any output pin.....	25mA
Maximum output current sourced by any output pin.....	25mA

NOTE: Care will need to be taken when connecting this device to the USB I/O 24 as you may exceed the maximum current draw allowed via the USB specifications.

FURTHER READING

Information about the I/O 24 range and the accessory boards can be found on the Elexol product datasheets for the devices. These can be downloaded from the Elexol website at www.elexol.com

DOCUMENT REVISION HISTORY

- Port Status Board Datasheet Revision 1 – Initial document created