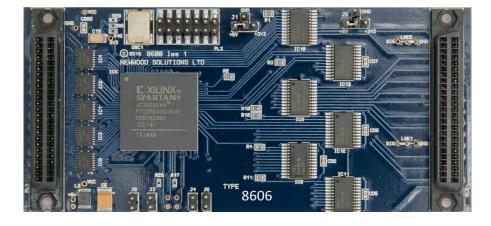


## 48-bit DIGITAL I/O IndustryPack®



## **Product Description**

**DIO8606** 

This is a single-width IP module with forty eight channels of buffered digital input/output. The I/O signals are accessed in groups of 16-bits. Each set of sixteen signals can be selected to be inputs or outputs. At power-up or after an IP reset, all signals default to the input state.

A control register associated with the I/O register determines whether each group will act as inputs or outputs. It also controls the way that inputs are sampled for input mode.

When output mode is selected, the output data reflects the last data written to the corresponding I/O register. The buffered TTL outputs can be programmed to be steady levels or pulses with positive true or false states.

When input mode is selected other control register bits come into play and determine the sampling mode of the register. One common sampling clock can be selected from a choice of four in the range 1kHz to 1MHz. Also, a common de-bounce clock can be chosen from the following frequencies: 100Hz, 200Hz, 500Hz and 1kHz.

Writing to a group when input mode is selected has no effect.

Reading the group when output mode is selected will read back the last data written.

A pulse parameter register determines the duration of pulsed outputs up to 100 seconds.

A further register associated with each group controls which bits may generate an interrupt when in input mode.

All the above registers occupy I/O space on the IP card in three groups, starting at offset zero+a (where a = 00, 20 or 40 Hex).

## PRODUCT SPECIFICATIONS

Size:	Single width Industry Pack 1.8ins x 3.9 ins
Operating temp:	0 to 45 deg C ambient
Number of input/outputs:	48 (configurable as 3 groups of 16 in or 16 out )
Input level:	TTL
Output level	TTL 24mA, programmable logic sense high or low true
Input/output termination:	4k7 ohms to 0V, or +3.3V or 5V by jumper selection
Internal clock:	50MHz oscillator.
Clock accuracy:	+/-100ppm (0.01%)
Power:	+5V @ 250mA typical

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