

**PIA-3148**

## 48-bit Digital I/O Module

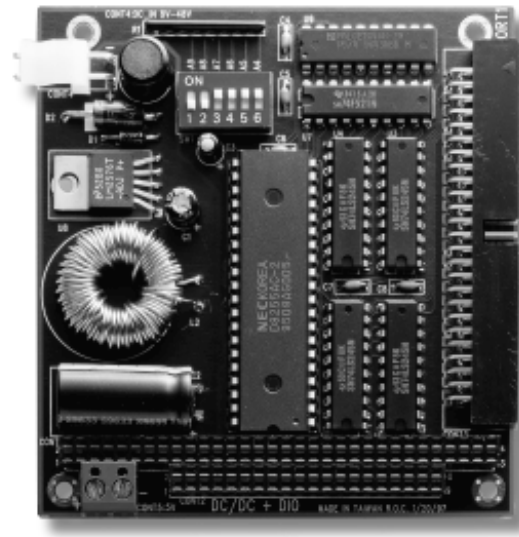
The PIA-3148 is a 48-bit digital I/O module. The module can be used together with TTL level input /output circuitry.

Its 48 bits are arranged in two 24-bit digital I/O groups. Each group emulates an 8255 PPI (programmable peripheral interface) mode 0, but has a higher driving capacity than the 8255 PPI. Each 24-bit group is divided into three 8-bit ports.

- 48 digital I/O lines (2 groups)
- Group emulates a 8225 PPI mode 0
- Buffered circuits for higher driving capacity than 8255
- Bit 0 of port C can generate an interrupt to IRQ 2, 3, 4, 5, 6 or 7
- Interrupt trigger on rising / falling edge
- Output status readback
- Pin-compatible with OPTO-22 I/O module racks
- Transfer rate: 300 KB/sec. (typical)
- Digital output: Logic level 0: 0.5 V max. @ 24 mA  
Logic level 1: 2.0 V min. @ 15 mA
- Digital input: Logic level 0: 0.8 V max.  
Logic level 1: 2.0 V min.

### ORDERING

- **PIA-3148** : PC/104 48-bit Digital I/O Module
- **PIA-3124** : PC/104 24-bit Digital I/O Module



**PIA-3036**

## 24-bit Digital I/O Module with DC/DC Converter

The PIA-3036 is a 24-bit digital I/O. The module can be used together with TTL level input / output circuitry.

- 24 digital I/O lines (1 group)
- Group emulates a 8225 PPI mode 0
- Higher driving capacity than 8255 PPI
- Output status readback
- Pin-compatible with OPTO-22 I/O module racks
- Transfer rate: 300 KB/sec. (typical)
- Digital I/O characteristics: same as PIA-3148/3124

The DC to DC converter accepts any input between +8 and +48 V<sub>DC</sub>, which is converted into single + 5 V<sub>DC</sub> output. The converter includes cycle-by-cycle current limiting and thermal shutdown for full protection.

- Input voltage range : +8 ~ +48 V<sub>DC</sub>
- Output voltage: +5 V<sub>DC</sub> @ 3 A max.
- Switch frequency : 52 KHz fixed frequency
- Efficiency: over 80%
- Thermal shutdown and current limit protection

### ORDERING

- **PIA-3036** : 24-bit Digital I/O & DC/DC Converter Module