DIAMOND SYSTEMS CORPORATION

ONYX-MM-DIO

Low-Cost 48-Line Digital I/O PC/104 Module

- 48 digital I/O lines
- Programmable port directions
- All lines power up in input mode
- Dual 50-pin I/O headers
- Low cost
- Software and technical manual included

DESCRIPTION

If you're looking for a basic 48-line digital I/O PC/104 module, then Onyx-MM-DIO is what you need. This module is the same as our Onyx-MM digital & counter/timer module but without the counter/timer and interrupt circuitry. This board still has the quality and attention to detail of our other modules, such as: 10K Ohm pull-up resistors on all I/O lines; all ports reset to 0 on power-up or system reset; connector pinouts compatible with our other digital I/O boards; and free software.

The 48 digital I/O lines on Onyx-MM-DIO are based on 2 82C55 ICs. They can be programmed for input or output in groups of 8 lines. Direct as well as strobed (latched) I/O modes are supported, and all I/O lines are connected to 10K Ohm pull-up resistors.

ORDERING INFORMATION

Part No.	Description
OMM-DIO-XT	Onyx-MM 48 Digital I/O only Extended Temperature

FOR MORE INFORMATION

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SPECIFICATIONS

Digital I/O lines	48 programmable direction
DIO Input voltage	Logic 0: -0.5V min, 0.8V max Logic 1: 2.0V min, 5.5V max
DIO Output voltage	Logic 0: 0.0V min, 0.4V max Logic 1: 3.0V min, Vcc-0.4V max
Programmable I/O Output Current (Max per line)	±2.5mA per line
Fixed I/O and Counter / Timers Output Current	N/A
Counter / Timers	3, 16-bit based on 82C54 (Onyx-MM only)
Clock	10Mhz
Bus Interface	PC/104 (8-bit ISA)
Dimensions	3.55" x 3.775" (90mm x 96mm)
Input Power	+5VDC±10%
Power Draw (typical)	100mA (Onyx-MM-DIO) 120mA (Onyx-MM)
Operating temp	-40°C to +85°C
Weight	2.3oz / 65g (Onyx-MM-DIO) 2.8oz / 79g (Onyx-MM)
Digital I/O lines	48 programmable direction
DIO Input voltage	Logic 0: -0.5V min, 0.8V max Logic 1: 2.0V min, 5.5V max
DIO Output voltage	Logic 0: 0.0V min, 0.4V max Logic 1: 3.0V min, Vcc-0.4V max