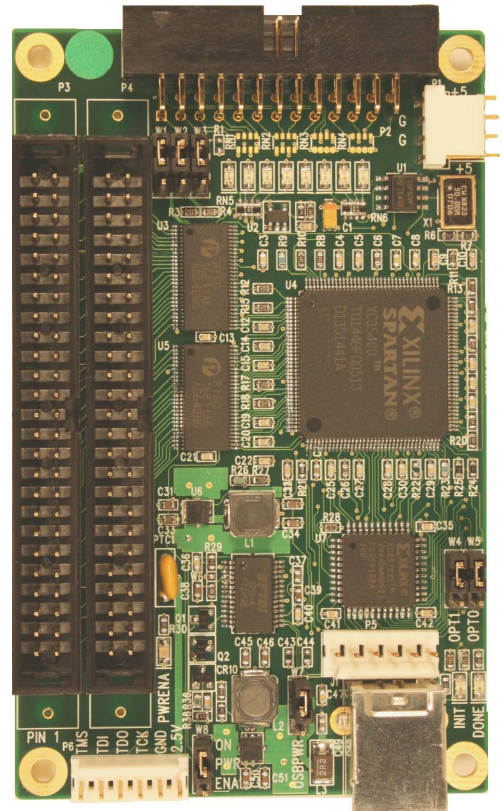


7143 ANYTHING I/O CARD

- Xilinx FPGA based I/O card
- Low cost
- 200K or 400K gate FPGA
- 48 I/O BITS
- 5V tolerant I/O
- 24 mA output drive
- USB or EPP printer port interface
- EEPROM configuration storage
- 11 LED status indicators
- Source supplied for all functions
- FPGA downloaded from host
- Low power consumption
- Made in USA - local support
- 2 year warranty



The MESA 7143 is a low cost, general purpose programmable I/O card that connects to the host computer via USB or PC parallel port. The 7143 uses a 200K or 400K gate Xilinx FPGA for all logic, so it is truly an Anything I/O card.

The FPGA is downloadable from the USB or Parallel port bus side, and also has the capability of local configuration storage in an on card EEPROM.

Efficient switching regulators are used for FPGA core and 3.3V power, allowing the 7143 to be USB bus powered. The 7143 can also be powered by an external 5V source.

The 7143 has 48 I/O bits available on two 50 pin connectors. Both connectors use I/O module rack compatible pinouts. All I/O bits are 5V tolerant.

The I/O connectors are compatible with our 7 series daughter cards for isolated I/O, motion control and other applications.

USB Drivers are available for Windows and Linux. The drivers available for the FT245R USB interface chip make the software interface a simple buffered byte stream.

Parallel port bus interface uses EPP mode. The -P version is less expensive and lacks the USB interface.

A 50 MHz oscillator provides the FPGA clock. This clock can be multiplied or divided in the FPGA for other clock rates.

Configurations are provided for simple GPIO, Smart Motion control (SoftDMC), host based motion control (HostMot2), and a waveform generator.

7143 I/O CONNECTOR PINOUT:

PIN#	7143 SIGNAL (P4,P3)	PIN#	7143 SIGNAL
1	I/O 0,24	2	GND
3	I/O 1,25	4	GND
5	I/O 2,26	6	GND
7	I/O 3,27	8	GND
9	I/O 4,28	10	GND
11	I/O 5,29	12	GND
13	I/O 5,30	14	GND
15	I/O 7,31	16	GND
17	I/O 8,32	18	GND
19	I/O 9,33	20	GND
21	I/O 10,34	22	GND
23	I/O 11,35	24	GND
25	I/O 12,36	26	GND
27	I/O 13,37	28	GND
29	I/O 14,38	30	GND
31	I/O 15,39	32	GND
33	I/O 16,40	34	GND
35	I/O 17,41	36	GND
37	I/O 18,42	38	GND
39	I/O 19,43	40	GND
41	I/O 20,44	42	GND
43	I/O 21,45	44	GND
45	I/O 22,46	46	GND
47	I/O 23,47	48	GND
49	POWER	50	GND

ORDERING INFORMATION:

7143-2 Anything I/O USB/EPP 48 bit - 200K gate FPGA
7143-P2 Anything I/O EPP only 48 bit - 200K gate FPGA
7143-4 Anything I/O USB/EPP 48 bit - 400K gate FPGA
7143-P4 Anything I/O EPP only 48 bit - 400K gate FPGA
Add -I for industrial temperature range.