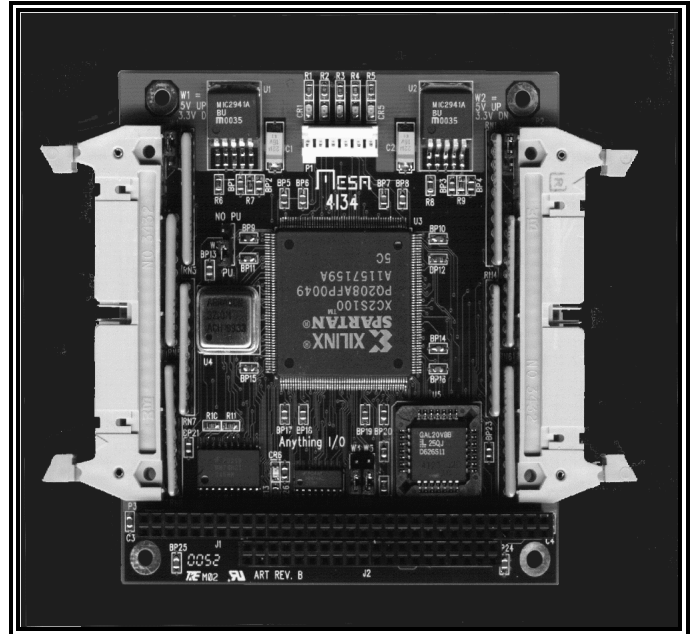


4I34 ANYTHING I/O CARD

- **Xilinx FPGA BASED I/O card**
- **64 or 48 I/O BITS (4I34/4I34M)**
- **5V tolerant I/O**
- **24 mA output drive**
- **Full 16 bit PC104 I/O interface**
- **Interrupts and DMA support**
- **Many I/O functions supplied**
- **6 or 8 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 4I34 is a general purpose programmable I/O card for the PC/104 bus. The 4I34 uses a 100K or 200K gate Xilinx FPGA for all logic, so it is truly an "Anything I/O" card.

The FPGA is downloadable from the PC/104 bus side, allowing creation of almost any kind of specialized I/O function, even including micro-controllers in the FPGA.

Several pre-made functions are provided, including a 64 channel event capture card, a 64 bit parallel I/O card with 16 bit host interface, an 8 channel host based servo motor controller, a 4 channel micro-controller based servo motor controller (micro-controller CPU built into FPGA), and a 8 channel, 32 bit timer counter card capable of running at 100 MHz.

VHDL source is provided for all examples and custom I/O functions can be provided on a contract basis.

All I/O bits are 5V tolerant and can sink 24 mA. Pullup resistors are provided for all pins so that they may be connected directly to opto-isolators, contacts etc.

The 4I34 is available in 2 versions, the 4I34 with 64 I/O bits and the 4I34M with 48 I/O bits. The 4I34 uses two 40 pin connectors with proprietary pinouts, while the 4I34M uses two 50 pin connectors with I/O module rack compatible pinouts and interleaved grounds.

6 (4I34) or 8 (4I34M) LEDs are available for circuit debugging or circuit status information.

Configuration decode can be at 210H 220H or 230H. Configuration decode can be disabled after FPGA is configured to reclaim I/O space.

A 50 MHz crystal oscillator is provided as a system clock. Higher frequencies can be generated by the PLL built into the FPGA.

4I34/4I34M CONNECTOR PINOUT:

PIN#	4I34 SIGNAL	4I34M SIG	PIN#	4I34 SIGNAL	4I34M SIGNAL
1	GND	I/O	2	I/O	GND
3	I/O	I/O	4	I/O	GND
5	I/O	I/O	6	I/O	GND
7	I/O	I/O	8	I/O	GND
9	I/O	I/O	10	VCC	GND
11	GND	I/O	12	I/O	GND
13	I/O	I/O	14	I/O	GND
15	I/O	I/O	16	I/O	GND
17	I/O	I/O	18	I/O	GND
19	I/O	I/O	20	VCC	GND
21	GND	I/O	22	I/O	GND
23	I/O	I/O	24	I/O	GND
25	I/O	I/O	26	I/O	GND
27	I/O	I/O	28	I/O	GND
29	I/O	I/O	30	VCC	GND
31	GND	I/O	32	I/O	GND
33	I/O	I/O	34	I/O	GND
35	I/O	I/O	36	I/O	GND
37	I/O	I/O	38	I/O	GND
39	I/O	I/O	40	VCC	GND
41		I/O	42		GND
43		I/O	44		GND
45		I/O	46		GND
47		I/O	48		GND
49		VCC	50		GND

ORDERING INFORMATION:

4I34 Anything I/O PC/104 64 bit - 2X 40 pin connectors

4I34M Anything I/O PC/104 48 bit - 2X 50 pin connectors

Add -I for industrial temperature range. Add -2 for 200K gate FPGA instead of 100K