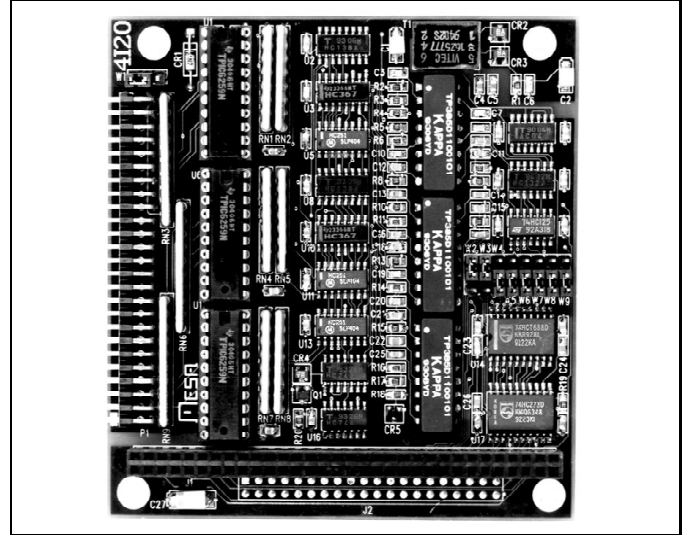


FEATURES:

- 24 open drain 350 mA outputs
- 45V switching capability
- Outputs isolated from logic ground
- Short circuit protection
- Readback on all outputs
- Bit addressable architecture
- Made in USA - local support
- Two year warranty



The 4I20 is a stackable PC/104 card with 24 open drain 350 mA outputs for solenoids, valves, relays, motors, incandescent lamps and other medium power DC loads.

The 4I20 outputs are galvanically isolated from logic ground to avoid ground loops, as the total ground return current be as much as 8.4 amps. The isolation also allows the 4I20 to drive ground referred loads.

The 4I20 has readback capability on all outputs to verify output switching, and allow unused outputs to be used as input bits.

The output drivers on the 4I20 (TI TIP6A259) have a built-in 800 mA current limit and are protected against short circuits and capacitive loads with a unique chopping current limit system.

The outputs have built in 50V clamp diodes to allow driving inductive loads without external flyback diodes.

The 4I20 output connector is a 50 pin header with I/O module compatible pinout (interleaved grounds), allowing the 4I20 to drive unbuffered OPTO-22 style I/O module racks.

All outputs have optional (plug in) pullup resistors that can be powered from the isolated 5V power on the 4I20 or external voltage up to 24V. A small amount of isolated power is available from the I/O connector if needed.

The 4I20 input and output are organized as a 24 bit multiplexor and a 24 bit addressable latch. This allows simple addressing of single I/O bits. All 4I20 access is through a single 8 bit I/O port.

4I20 I/O CONNECTOR PINOUT

PIN#	SIGNAL	PIN#	SIGNAL
1	OUT 0	25	OUT 12
3	OUT 1	27	OUT 13
5	OUT 2	29	OUT 14
7	OUT 3	31	OUT 15
9	OUT 4	33	OUT 16
11	OUT 5	35	OUT 17
13	OUT 6	37	OUT 18
15	OUT 7	39	OUT 19
17	OUT 8	41	OUT 20
19	OUT 9	43	OUT 21
21	OUT 10	45	OUT 22
23	OUT 11	47	OUT 23
		49	Power for pullup resistors

All even pins connected to (isolated) ground

4I20 SPECIFICATIONS:

	Min	Max	Units	Notes
POWER REQUIREMENTS:				
Supply voltage	4.5	5.5	V	
Supply current	----	100	mA	No interface loading
OUTPUT RATINGS				
Output current @25°C ambient	----	350	mA	All outputs on
Output current @100°C ambient	----	200	mA	All outputs on
Output resistance @25°C case	----	1.5	Ohm	Typically 1 Ohm
Output resistance @125°C case	----	2.5	Ohm	Typically 1.7 Ohm
Maximum load on isolated +5V power	----	10	mA	
INPUT RATINGS				
Minimum input High level	----	2.4	V	Nominal TTL input thresholds
Maximum input low level	----	0.8	V	
ENVIRONMENTAL:				
Temperature range -C version	0	+70	°C	
Temperature range -I version	-40	+85	°C	
Relative humidity	0	90	Percent	Non-Condensing

ORDERING INFORMATION:

4I20 Power driver card
 Add -I for industrial temperature range.