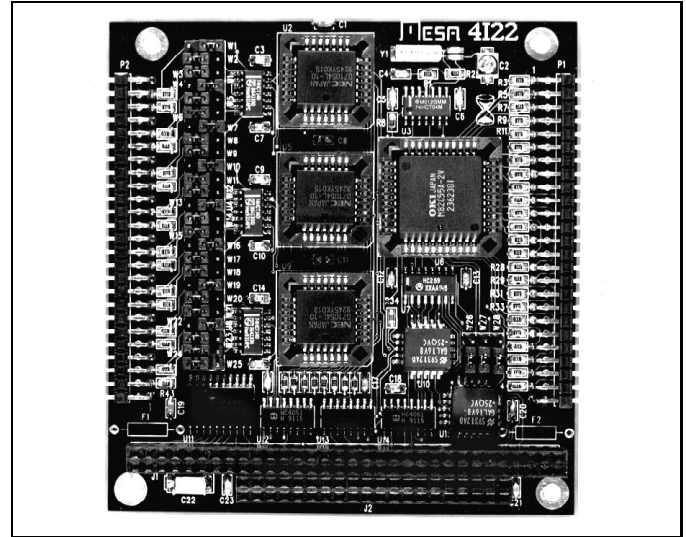


FEATURES:

- Nine 16 bit 10 / 25 MHz counters
- 24 bit parallel I/O port
- 10 / 25 MHz trimmable timebase
- Selectable gate and output polarity
- Two counters can interrupt CPU
- Software selectable IRQ line
- Socketed PIO and counters
- Low power - all CMOS
- Made in USA - local support
- Two year warranty



The 4I22 is a stackable PC/104 card with nine 16 bit counters and 24 digital I/O bits. An on card 10 or 25 MHz trimmable crystal oscillator is provided as a time base.

The 82C54 counters on the 4I22 may be used for event counting, frequency counting, period measurement, frequency generation, pulse width modulators, digital one shots, interrupt timers and many other timing and counting uses.

Example programs and source code are provided to illustrate most of these 4I22 applications.

Eight of the nine counters on the 4I22 have external clock, gate, and output connections. Counter clock source of these counters can be the external input or the on card time base. The ninth counter is used as a optional 10 or 25 MHz time base prescaler for the other eight counters. Gate and output polarity can be jumper selected as active high or low.

24 general purpose I/O bits are provided by a 82C55 PIA. Pullup resistors on the parallel I/O simplify connection to contact closure, Opto-detector, and open collector outputs.

Timer and digital I/O connectors are 50 pin headers with I/O module rack compatible pin-outs. This connector pin-out has all input and output signals interleaved with grounds to reduce crosstalk.

The 4I22 is an 8 bit card, but uses the stack through 16 bit PC/104 card format to allow access to all of the AT bus interrupts. Two of the counters on the 4I22 can generate interrupts. These interrupts can be or'ed on the 4I22 card if desired. The IRQ line selection is software programmable (no interrupt jumpers!).

The 4I22 uses 16 contiguous I/O locations. The I/O base address is set with a PAL device, and has 8 standard base address options.

4I22 I/O CONNECTOR PINOUTS

PIN	PAR PORT	TIMER PORT	PIN	PAR PORT	TIMER PORT
1	PC7	OUT3B	3	PC6	GATE3B
5	PC5	CLK3B	7	PC4	OUT3A
9	PC3	GATE3A	11	PC2	CLK3A
13	PC1	OUT2C	15	PC0	GATE2C
17	PB7	CLK2C	19	PB6	OUT2B
21	PB5	GATE2B	23	PB4	CLK2B
25	PB3	OUT2A	27	PB2	GATE2A
29	PB1	CLK2A	31	PB0	OUT1C
33	PA7	GATE1C	35	PA6	CLK1C
37	PA5	OUT1B	39	PA4	GATE1B
41	PA3	CLK1B	43	PA2	OUT1A
45	PA1	GATE1A	47	PA0	CLK1A
49	+5V (Fused)	+5V (Fused)			

Both connectors are 50 pin .1" headers --- All even pins are connected to ground.

4I22 SPECIFICATIONS:

	Min	Max	Units	Notes
POWER REQUIREMENTS:				
Supply voltage	4.5	5.5	V	
Supply current	----	100	mA	No interface loading
I/O PORT LOADING:				
Input logic low	-.3	.8	V	
Input logic high		2.0	5.5 V	
Output low	---	.4	V	2.5 mA sink
Output high	3.0	---	V	2.5 mA source
TIME BASE ACCURACY:				
Factory Trimmed	---	+/-10	PPM	@ 25°C
Accuracy over temperature	---	+/-1	PPM/°C	
ENVIRONMENTAL:				
Temperature range -C version	0	+70	°C	
Temperature range -I version	-40	+85	°C	
Relative humidity	0	90	Percent	Non-Condensing

ORDERING INFORMATION:

4I22 10 MHz timer counter card
 4I22-25 25 MHz timer counter card

Add -I to specify industrial temperature range