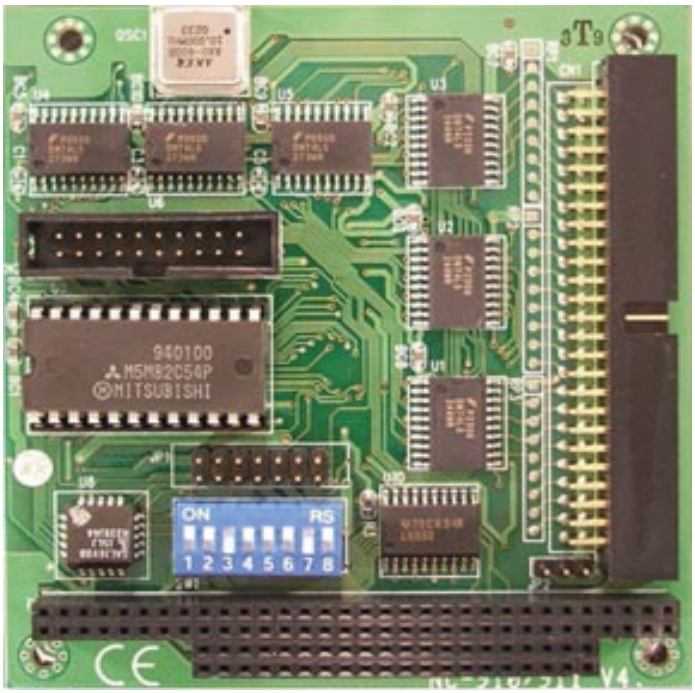
MSI PC/104 Embedded PC Series

MSI-NC911 DIGITAL I/O & COUNTER/TIMER CARD

FEATURES

- 24 parallel TTL I/O lines with high current drive.
- 8255 emulation with selectable strobed I/O mode.
- 50-pin digital I/O connector (Opto-22 or equivalent).
- Single 82C54 for three independent 16-bit counter/timers from DC to 10 MHz.
- Selectable option jumpers for each gate, clock input and output signal with buffered clock inputs.
- 8-bit stackthrough PC/104 with I/O mapped 16-bit addressing.
- Six selectable interrupt-sharing channels using tri-state buffers.
- Jumper selectable address and card options.
- Single +5V power supply operation.
- 100% testing and 48-hour burn-in.
- One year warranty from date of shipment.



DESCRIPTION

The MSI-NC911 is a digital I/O and counter/timer card designed for use with all PC/104 embedded systems. The card provides a versatile mixture of I/O functions for the designer which includes 24 TTL I/O lines with high current drivers and three 16-bit counter/timers. The card is designed for use in harsh environments such as those which occur in industrial applications.

TTL I/O Lines - A 8255 PPI emulation provides 24 TTL I/O lines which are programmable as ports A, B and C. Ports A and B are programmable as 8-bit

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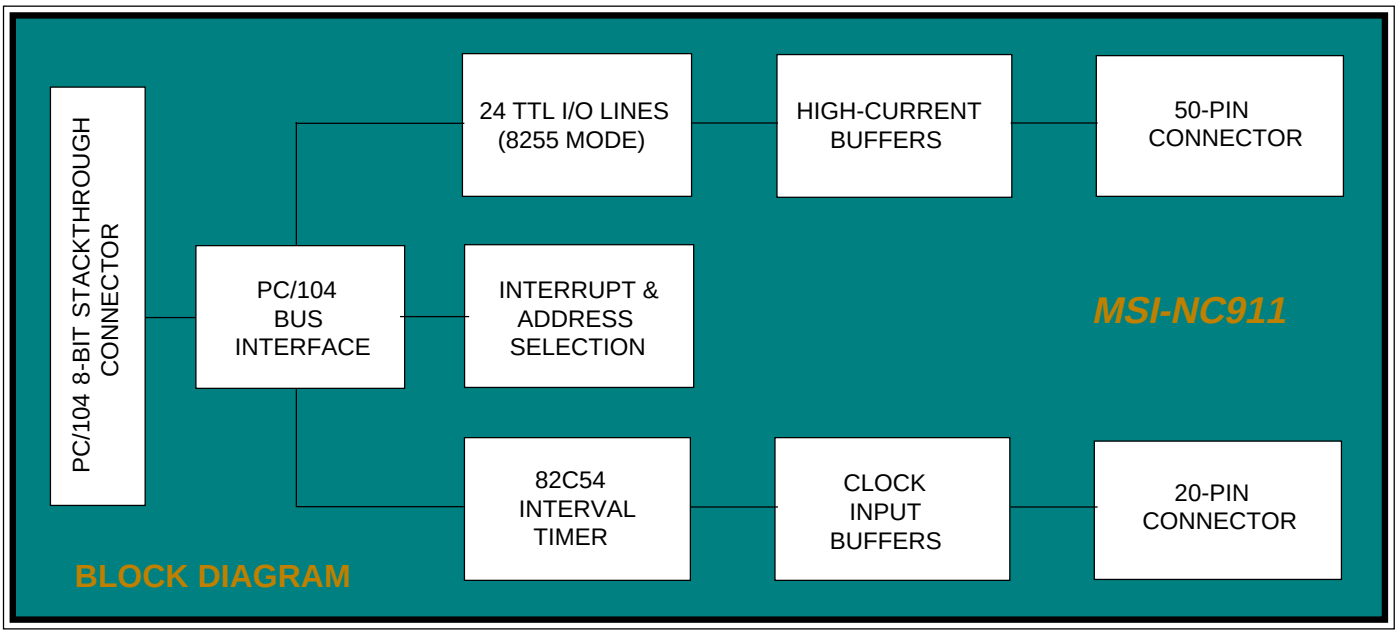

groups of input or output lines. Port C is programmable as two 4-bit groups of input or output lines. Provisions for implementing an interrupt driven strobed I/O mode are also included using option jumpers. An optional 10K pull-up resistor is connected to each I/O line for accommodating input connections. I/O connections are provided by a 50-pin connector that is Opto-22 (or eqivalent) compatible.

Counter/Timer Channels - A 82C54 interval timer provides three 16-bit timers programmable in six modes. I/O is provided for all gates, clock inputs and outputs of the three channels using a 20-pin connector.

Card Addressing - The card is I/O mapped using 9-bit addressing to select the various devices in base address ranges from 200H to 3F8H (where H denotes a hexadecimal address). A dip switch is provided for base address selection.

SPECIFICATIONS

PC/104	8-bit, stackthrough	
Digital I/O Lines		
	PPI	8255 Emulation, Mode 0
	Port A & B	8-bit, Input or Output
	Port C	Two 4-bit, Input or Output
	Interface	TTL levels
		Current Output -15 mA max.
		Current Sink - 24 mA max.
	Connectors	50-pin, 0.100" grid
Counters/Timers		
	Device	82C54
	Channels	Three, 6 programmable modes
	Clock Input	DC to 10 MHz
	Connector	20-pin, 0.100" grid
Interrupts		
	Channels	Six, IRQ **9(2), 5, 10, 11, 12, 15**
Option Jumpers	.025" square posts, 0.1" grid	
Electrical & Environmental		
	+5V @ 200 mA typical	
	0° to 60° C	

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