KATRON TECHNOLOGIES, INC.
ARC-220

NIC Type	ARCnet
Transfer Rate	2.5Mbps
Data Bus	16-bit ISA
Topology	Star
	Linear bus
Wiring Type	RG-62A/U 93ohm coaxial
	Unshielded twisted pair
Boot ROM	Available
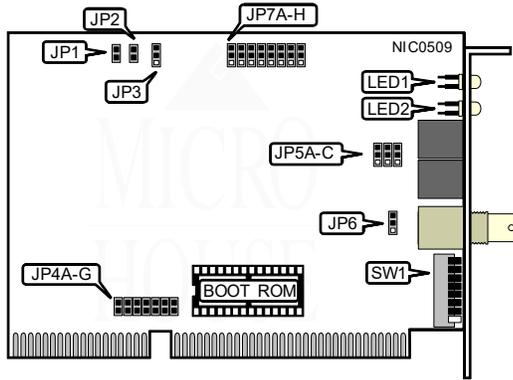
NODE ADDRESS								
Node	SW1/1	SW1/2	SW1/3	SW1/4	SW1/5	SW1/6	SW1/7	SW1/8
0	-	-	-	-	-	-	-	-
1	Off	On	On	On	On	On	On	On
2	On	Off	On	On	On	On	On	On
3	Off	Off	On	On	On	On	On	On
4	On	On	Off	On	On	On	On	On
251	Off	Off	On	Off	Off	Off	Off	Off
252	On	On	Off	Off	Off	Off	Off	Off
253	Off	On	Off	Off	Off	Off	Off	Off
254	On	Off	Off	Off	Off	Off	Off	Off
255	Off	Off	Off	Off	Off	Off	Off	Off

Note: Node address 0 is used for messaging between nodes and must not be used.

A total of 255 node address settings are available. The switches are a binary representation of the decimal node addresses. Switch 1 is the Least Significant Bit and switch 8 is the Most Significant Bit. The switches have the following decimal values: switch 1=1, 2=2, 3=4, 4=8, 5=16, 6=32, 7=64, 8=128. Turn off the switches and add the values of the off switches to obtain the correct node address. (On=0, Off=1)

CONNECTIONS	
Function	Location
External LED1 (See LED table for LED1 indications)	JP1
External LED2 (See LED table for LED2 indications)	JP2

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BOOT ROM	
Setting	JP3
íDisabled	Pins 2 & 3 closed
Enabled	Pins 1 & 2 closed

INTERRUPT REQUEST							
IRQ	JP4A	JP4B	JP4C	JP4D	JP4E	JP4F	JP4G
í2/9	Closed	Open	Open	Open	Open	Open	Open
3	Open	Closed	Open	Open	Open	Open	Open
4	Open	Open	Closed	Open	Open	Open	Open
5	Open	Open	Open	Closed	Open	Open	Open
10	Open	Open	Open	Open	Closed	Open	Open
11	Open	Open	Open	Closed	Open	Closed	Open
12	Open	Open	Open	Closed	Open	Open	Closed

CABLE TYPE	
Type	JP5A - JP5C
Unshielded twisted pair	Pins 1 & 2 closed
AUI transceiver via DB-15 port	Pins 2 & 3 closed

ONBOARD TERMINATOR	
Setting	JP6
íDisabled	Pins 1 & 2 closed
Enabled	Pins 2 & 3 closed
Notes: If the card is on either end of a linear bus network segment, the onboard terminator can be used instead of using an external terminator.	

I/O BASE ADDRESS			
Address	JP7F	JP7G	JP7H
260-26Fh	Pins 2 & 3 closed	Pins 2 & 3 closed	Pins 2 & 3 closed
290-29Fh	Pins 1 & 2 closed	Pins 2 & 3 closed	Pins 2 & 3 closed
í2E0-2EFh	Pins 2 & 3 closed	Pins 1 & 2 closed	Pins 2 & 3 closed
2F0-2FFh	Pins 1 & 2 closed	Pins 1 & 2 closed	Pins 2 & 3 closed
300-30Fh	Pins 2 & 3 closed	Pins 2 & 3 closed	Pins 1 & 2 closed
350-35Fh	Pins 1 & 2 closed	Pins 2 & 3 closed	Pins 1 & 2 closed
380-38Fh	Pins 2 & 3 closed	Pins 1 & 2 closed	Pins 1 & 2 closed
3E0-3EFh	Pins 1 & 2 closed	Pins 1 & 2 closed	Pins 1 & 2 closed

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BASE MEMORY ADDRESS & BOOT ROM ADDRESS						
Base Address	Boot ROM Address	JP7A	JP7B	JP7C	JP7D	JP7E
C0000-C07FFh	C2000-C3FFFh	Pins 2&3	Pins 2&3	Pins 2&3	Pins 2&3	Pins 2&3
C0800-C0FFFh	C2000-C3FFFh	Pins 1&2	Pins 2&3	Pins 2&3	Pins 2&3	Pins 2&3
C1000-C17FFh	C2000-C3FFFh	Pins 2&3	Pins 1&2	Pins 2&3	Pins 2&3	Pins 2&3
C1800-C1FFFh	C2000-C3FFFh	Pins 1&2	Pins 1&2	Pins 2&3	Pins 2&3	Pins 2&3
C4000-C47FFh	C6000-C7FFFh	Pins 2&3	Pins 2&3	Pins 1&2	Pins 2&3	Pins 2&3
C4800-C4FFFh	C6000-C7FFFh	Pins 1&2	Pins 2&3	Pins 1&2	Pins 2&3	Pins 2&3
C5000-C57FFh	C6000-C7FFFh	Pins 2&3	Pins 1&2	Pins 1&2	Pins 2&3	Pins 2&3
C5800-C5FFFh	C6000-C7FFFh	Pins 1&2	Pins 1&2	Pins 1&2	Pins 2&3	Pins 2&3
CC000-CC7FFh	CE000-CFFFFh	Pins 2&3	Pins 2&3	Pins 2&3	Pins 1&2	Pins 2&3
CC800-CCFFFh	CE000-CFFFFh	Pins 1&2	Pins 2&3	Pins 2&3	Pins 1&2	Pins 2&3
CD000-CD7FFh	CE000-CFFFFh	Pins 2&3	Pins 1&2	Pins 2&3	Pins 1&2	Pins 2&3
CD800-CDFFFh	CE000-CFFFFh	Pins 1&2	Pins 1&2	Pins 2&3	Pins 1&2	Pins 2&3
íD0000-D07FFh	D2000-D3FFFh	Pins 2&3	Pins 2&3	Pins 1&2	Pins 1&2	Pins 2&3
D0800-D0FFFh	D2000-D3FFFh	Pins 1&2	Pins 2&3	Pins 1&2	Pins 1&2	Pins 2&3
D1000-D17FFh	D2000-D3FFFh	Pins 2&3	Pins 1&2	Pins 1&2	Pins 1&2	Pins 2&3
D1800-D1FFFh	D2000-D3FFFh	Pins 1&2	Pins 1&2	Pins 1&2	Pins 1&2	Pins 2&3
D4000-D47FFh	D6000-D7FFFh	Pins 2&3	Pins 2&3	Pins 2&3	Pins 2&3	Pins 1&2
D4800-D4FFFh	D6000-D7FFFh	Pins 1&2	Pins 2&3	Pins 2&3	Pins 2&3	Pins 1&2
D5000-D57FFh	D6000-D7FFFh	Pins 2&3	Pins 1&2	Pins 2&3	Pins 2&3	Pins 1&2
D5800 D5FFFh	D6000-D7FFFh	Pins 1&2	Pins 1&2	Pins 2&3	Pins 2&3	Pins 1&2
D8000-D87FFh	DA000-DBFFFh	Pins 2&3	Pins 2&3	Pins 1&2	Pins 2&3	Pins 1&2
D8800-D8FFFh	DA000-DBFFFh	Pins 1&2	Pins 2&3	Pins 1&2	Pins 2&3	Pins 1&2
D9000-D97FFh	DA000-DBFFFh	Pins 2&3	Pins 1&2	Pins 1&2	Pins 2&3	Pins 1&2
D9800-D9FFFh	DA000-DBFFFh	Pins 1&2	Pins 1&2	Pins 1&2	Pins 2&3	Pins 1&2
DC000-DC7FFh	DE000-DFFFFh	Pins 2&3	Pins 2&3	Pins 2&3	Pins 1&2	Pins 1&2
DC800-DCFFFh	DE000-DFFFFh	Pins 1&2	Pins 2&3	Pins 2&3	Pins 1&2	Pins 1&2
DD000-DD7FFh	DE000-DFFFFh	Pins 2&3	Pins 1&2	Pins 2&3	Pins 1&2	Pins 1&2
DD800-DDFFFh	DE000-DFFFFh	Pins 1&2	Pins 1&2	Pins 2&3	Pins 1&2	Pins 1&2
E0000-E07FFh	E2000-E3FFFh	Pins 2&3	Pins 2&3	Pins 1&2	Pins 1&2	Pins 1&2
E0800-E0FFFh	E2000-E3FFFh	Pins 1&2	Pins 2&3	Pins 1&2	Pins 1&2	Pins 1&2
E1000-E17FFh	E2000-E3FFFh	Pins 2&3	Pins 1&2	Pins 1&2	Pins 1&2	Pins 1&2
E1800-E1FFFh	E2000-E3FFFh	Pins 1&2	Pins 1&2	Pins 1&2	Pins 1&2	Pins 1&2
Note: Pins designated should be in the closed position.						

DIAGNOSTIC LED(S)			
LED	Color	Status	Condition
LED1	Green	On	Network connection is good
LED1	Green	Off	Network connection is broken
LED2	Red	On	Data is being transmitted or received.
LED2	Red	Off	Data is not being transmitted or received.