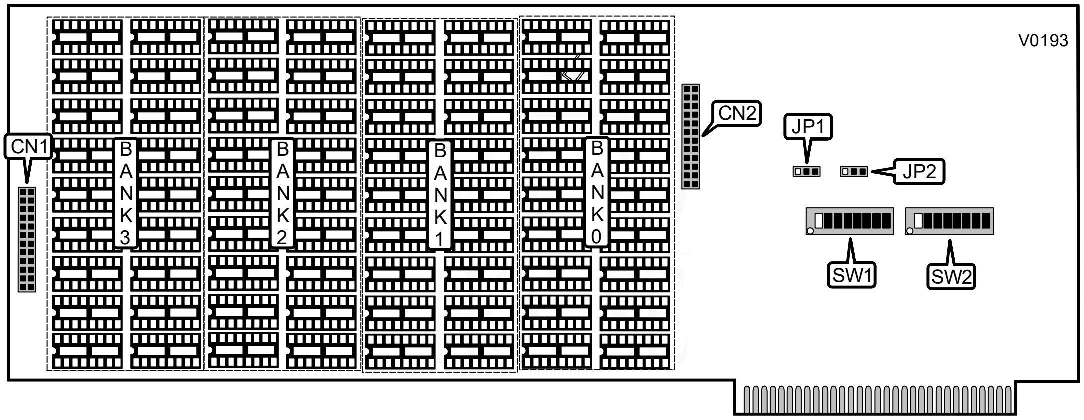
BOCA RESEARCH INC.
BOCARAM/AT

Card Type	Memory card
Chipset/Controller	N/A
I/O Options	N/A
Maximum DRAM	4096KB



CONNECTIONS			
Purpose	Location	Purpose	Location
Add-On board connector	CN1	Add-On board connector	CN3
Add-On board connector	CN2	Add-On board connector	CN4
Note: CN1 interfaces with CN3, CN2 interfaces with CN4			

FACTORY CONFIGURED - DO NOT ALTER	
Switch	Position
SW2/7	Pins 2 & 3 closed
SW2/8	Pins 1 & 2 closed

SYSTEM SPEED CONFIGURATION	
Speed	JP2
≥12Mhz	Pins 2 & 3 closed
<12Mhz	Pins 1 & 2 closed

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SYSTEM EXTENDED MEMORY CONFIGURATION

Ext. Memory	Max. Memory	SW1/1	SW1/2	SW1/3	SW1/4	JP1
0MB	N/A	Off	Off	On	Off	Pins 2 & 3 closed
512KB	N/A	Off	Off	On	On	Pins 2 & 3 closed
1.0MB	N/A	Off	On	Off	Off	Pins 2 & 3 closed
1.5MB	N/A	Off	On	Off	On	Pins 2 & 3 closed
2.0MB	N/A	Off	On	On	Off	Pins 2 & 3 closed
2.5MB	N/A	Off	On	On	On	Pins 2 & 3 closed
3.0MB	N/A	On	Off	Off	Off	Pins 2 & 3 closed
3.5MB	3.5MB	On	Off	Off	On	Pins 2 & 3 closed
4.0MB	2.0MB	On	Off	On	Off	Pins 2 & 3 closed
4.5MB	2.5MB	On	Off	On	On	Pins 2 & 3 closed
5.0MB	2.0MB	On	On	Off	Off	Pins 2 & 3 closed
5.5MB	1.5MB	On	On	Off	On	Pins 2 & 3 closed
6.0MB	1.0MB	On	On	On	Off	Pins 2 & 3 closed
6.5MB	512KB	On	On	On	On	Pins 2 & 3 closed
7.0MB	N/A	Off	Off	Off	Off	Pins 1 & 2 closed
7.5MB	N/A	Off	Off	Off	On	Pins 1 & 2 closed
8.0MB	N/A	Off	Off	On	Off	Pins 1 & 2 closed
8.5MB	N/A	Off	Off	On	On	Pins 1 & 2 closed
9.0MB	N/A	Off	On	Off	Off	Pins 1 & 2 closed
9.5MB	N/A	Off	On	Off	On	Pins 1 & 2 closed
10.0MB	N/A	Off	On	On	Off	Pins 1 & 2 closed
10.5MB	N/A	Off	On	On	On	Pins 1 & 2 closed
11.0MB	3.5MB	On	Off	Off	Off	Pins 1 & 2 closed
11.5MB	2.0MB	On	Off	Off	On	Pins 1 & 2 closed
12.0MB	2.5MB	On	Off	On	Off	Pins 1 & 2 closed
12.5MB	2.0MB	On	Off	On	On	Pins 1 & 2 closed
13.0MB	1.5MB	On	On	Off	Off	Pins 1 & 2 closed
13.5MB	1.0MB	On	On	Off	On	Pins 1 & 2 closed
14.0MB	512KB	On	On	On	Off	Pins 1 & 2 closed

Note: Extended memory is memory already installed prior to adding BOCARAM/AT Card.
Maximum memory is the maximum amount of memory that can be added from the BOCARAM/AT card.

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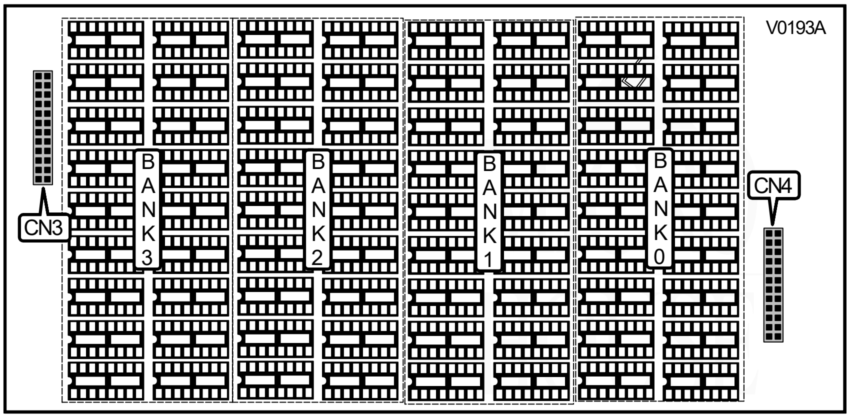
BOCARAM/AT EXTENDED MEMORY CONFIGURATION				
Extended Memory	SW1/5	SW1/6	SW1/7	SW1/8
512KB	Off	Off	Off	On
1.0MB	Off	Off	On	Off
1.5MB	Off	Off	On	On
2.0MB	Off	On	Off	Off
2.5MB	Off	On	Off	On
3.0MB	Off	On	On	Off
3.5MB	Off	On	On	On
4.0MB	On	Off	Off	Off
None	Off	Off	Off	Off

I/O PORT ADDRESS SELECTION				
Address	SW2/1	SW2/2	SW2/3	SW2/4
í 268h-269h	Off	Off	Off	On
208h-209h	On	Off	Off	Off
218h-219h	Off	On	Off	Off
258h-259h	Off	Off	On	Off

FRAME SEGMENT ADDRESS SELECTION		
Address	SW1/5	SW1/6
í D000h	Off	On
E000h	On	Off



BOCARAM/AT Add-On Board

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BOCARAM/AT EXTENDED MEMORY CONFIGURATION IN ADDITION TO CONVENTIONAL MEMORY									
Memory	SW1/1	SW1/2	SW1/3	SW1/4	SW1/5	SW1/6	SW1/7	SW1/8	JP1
0KB	Off	Off	Off	On	Off	Off	Off	On	2 & 3
512KB	Off	Off	Off	On	Off	Off	On	Off	2 & 3
1.0MB	Off	Off	Off	On	Off	Off	On	On	2 & 3
1.5MB	Off	Off	Off	On	Off	On	Off	Off	2 & 3
2.0MB	Off	Off	Off	On	Off	On	Off	On	2 & 3
2.5MB	Off	Off	Off	On	Off	On	On	Off	2 & 3
3.0MB	Off	Off	Off	On	Off	On	On	On	2 & 3
3.5MB	Off	Off	Off	On	On	Off	Off	Off	2 & 3
Note: Pins designated should be in the closed position.									

DRAM CONFIGURATION				
Size	Bank 0	Bank 1	Bank 2	Bank 3
128KB	(16) 4164	None	None	None
512KB	(16) 41256	None	None	None
1MB	(16) 41256	(16) 41256	None	None
1.5MB	(16) 41256	(16) 41256	(16) 41256	None
2MB	(16) 41256	(16) 41256	(16) 41256	(16) 41256

DRAM CONFIGURATION - ADD-ON BOARD				
Size	Bank 4	Bank 5	Bank 6	Bank 7
2.5MB	(16) 41256	None	None	None
3MB	(16) 41256	(16) 41256	None	None
3.5MB	(16) 41256	(16) 41256	(16) 41256	None
4MB	(16) 41256	(16) 41256	(16) 41256	(16) 41256