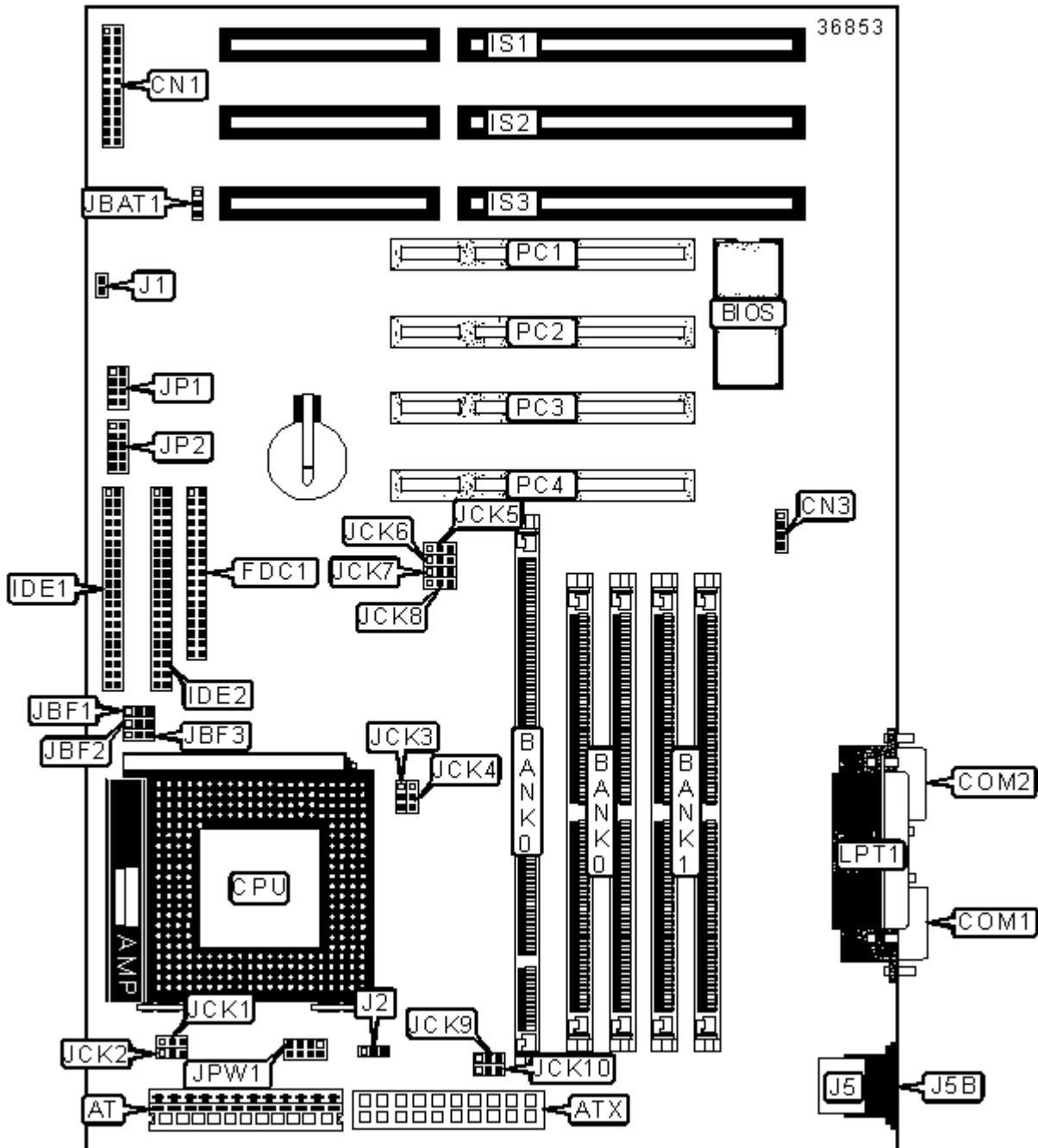


OCEAN INFORMATION SYSTEMS, INC.

RHINO 18

Device Type	Mainboard
Processor	CX 6X86/IBM 6X86/CX 6X86MX/AM K5/AM K6/Pentium/Pentium MMX
Processor Speed	75/90/100/120/133/150/166/180/200/233MHz
Chip Set	VIA
Maximum Onboard Memory	256MB (EDO & SDRAM supported)
Cache	256/512KB
BIOS	Award
Dimensions	216mm x 236mm
I/O Options	32-bit PCI slots (4), 16-bit ISA slots (3), floppy drive interface, green PC connector, IDE interfaces (2), AT Keyboard port, parallel port, PS/2 mouse port, serial ports (2), USB interface, ATX power connector, AT power connector



CONNECTIONS

Purpose	Location	Purpose	Location
AT power connector	AT	Floppy drive interface	FDC1
ATX power connector	ATX	IDE interface 1	IDE1
Power LED & keylock	CN1/Pins 1, 3, 5, 7 & 9	IDE interface 2	IDE2
Speaker	CN1/Pins 13, 15, 17 & 19	16-bit ISA slots	IS1 - IS3
Reset switch	CN1/Pins 18 & 20	Power switch	J1
Green PC connector	CN1/Pins 10 & 12	PS/2 mouse port	J5
IDE interface LED	CN1/Pins 23 & 24	AT keyboard port	J5B
Unidentified	CN3	USB interface	JP1
Serial port 1	COM1	Parallel port	LPT1
Serial port 2	COM2	32-bit PCI slots	PC1 - PC4

USER CONFIGURABLE SETTINGS

Function		Label	Position
»	Factory configured - do not alter	J2	Unidentified
»	CMOS memory normal operation	JBAT1	Pins 1 & 2 closed
	CMOS memory clear	JBAT1	Pins 2 & 3 closed
»	Factory configured - do not alter	JCK8	Unidentified
»	Factory configured - do not alter	JP2	Unidentified

SIMM CONFIGURATION

Size	Bank 0	Bank 1
8MB	(2) 1M x 36	None
16MB	(2) 2M x 36	None
16MB	(2) 1M x 36	(2) 1M x 36
24MB	(2) 2M x 36	(2) 1M x 36
32MB	(2) 4M x 36	None

32MB	(2) 2M x 36	(2) 2M x 36
40MB	(2) 4M x 36	(2) 1M x 36
48MB	(2) 4M x 36	(2) 2M x 36
64MB	(2) 8M x 36	None
64MB	(2) 4M x 36	(2) 4M x 36
72MB	(2) 8M x 36	(2) 1M x 36
80MB	(2) 8M x 36	(2) 2M x 36
96MB	(2) 8M x 36	(2) 4M x 36
128MB	(2) 8M x 36	(2) 8M x 36
Note: Board supports EDO memory.		

DIMM CONFIGURATION	
Size	Bank 0
8MB	(1) 1M x 64
16MB	(1) 2M x 64
32MB	(1) 4M x 64
64MB	(1) 8M x 64
128MB	(1) 16M x 64
Note: Board supports EDO & SDRAM memory.	

DIMM/SIMM VOLTAGE CONFIGURATION		
Voltage	JCK9	JCK10
» 3.3V	Pins 1 & 2 closed	Pins 1 & 2 closed
5V	Pins 2 & 3 closed	Pins 2 & 3 closed

CPU SPEED SELECTION (CX 6X86)								
CPU speed	Clock speed	Multiplier	JBF1	JBF2	JBF3	JCK5	JCK6	JCK7
120MHz	50MHz	2x	Open	2 & 3	1 & 2	2 & 3	2 & 3	2 & 3
133MHz	55MHz	2x	Open	2 & 3	1 & 2	2 & 3	2 & 3	1 & 2

150MHz	60MHz	2x	Open	2 & 3	1 & 2	1 & 2	2 & 3	2 & 3
166MHz	66MHz	2x	Open	2 & 3	1 & 2	2 & 3	1 & 2	2 & 3
200MHz	75MHz	2x	Open	2 & 3	1 & 2	1 & 2	2 & 3	1 & 2

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (CX 6X86MX)								
CPU speed	Clock speed	Multiplier	JBF1	JBF2	JBF3	JCK5	JCK6	JCK7
166MHz	60MHz	2.5x	Open	1 & 2	1 & 2	1 & 2	2 & 3	2 & 3
200MHz	66MHz	2.5x	Open	1 & 2	1 & 2	2 & 3	1 & 2	2 & 3
233MHz	75MHz	2.5x	Open	1 & 2	1 & 2	1 & 2	2 & 3	1 & 2

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (IBM 6X86)								
CPU speed	Clock speed	Multiplier	JBF1	JBF2	JBF3	JCK5	JCK6	JCK7
200MHz	75MHz	2x	Open	2 & 3	1 & 2	1 & 2	2 & 3	1 & 2

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K5)								
CPU speed	Clock speed	Multiplier	JBF1	JBF2	JBF3	JCK5	JCK6	JCK7
75MHz	50MHz	1.5x	Open	2 & 3	2 & 3	2 & 3	2 & 3	2 & 3
90MHz	60MHz	1.5x	Open	2 & 3	2 & 3	1 & 2	2 & 3	2 & 3
100MHz	66MHz	1.5x	Open	2 & 3	2 & 3	2 & 3	1 & 2	2 & 3
120MHz	60MHz	1.5x	Open	2 & 3	2 & 3	1 & 2	2 & 3	2 & 3
133MHz	66MHz	1.5x	Open	2 & 3	2 & 3	2 & 3	1 & 2	2 & 3
150MHz	60MHz	2.5x	Open	2 & 3	1 & 2	1 & 2	2 & 3	2 & 3
166MHz	66MHz	2.5x	Open	1 & 2	1 & 2	2 & 3	1 & 2	2 & 3

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K6)

CPU speed	Clock speed	Multiplier	JBF1	JBF2	JBF3	JCK5	JCK6	JCK7
166MHz	66MHz	2.5x	Open	1 & 2	1 & 2	2 & 3	1 & 2	2 & 3
200MHz	66MHz	3x	Open	1 & 2	2 & 3	2 & 3	1 & 2	2 & 3
233MHz	66MHz	3.5x	Open	2 & 3	2 & 3	2 & 3	1 & 2	2 & 3

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (PENTIUM)

CPU speed	Clock speed	Multiplier	JBF1	JBF2	JBF3	JCK5	JCK6	JCK7
75MHz	50MHz	1.5x	Open	2 & 3	2 & 3	2 & 3	2 & 3	2 & 3
90MHz	60MHz	1.5x	Open	2 & 3	2 & 3	1 & 2	2 & 3	2 & 3
100MHz	66MHz	1.5x	Open	2 & 3	2 & 3	2 & 3	1 & 2	2 & 3
120MHz	60MHz	2x	Open	2 & 3	1 & 2	1 & 2	2 & 3	2 & 3
133MHz	66MHz	2x	Open	2 & 3	1 & 2	2 & 3	1 & 2	2 & 3
150MHz	60MHz	2.5x	Open	1 & 2	1 & 2	1 & 2	2 & 3	2 & 3
166MHz	66MHz	2.5x	Open	1 & 2	1 & 2	2 & 3	1 & 2	2 & 3
180MHz	60MHz	3x	Open	1 & 2	2 & 3	1 & 2	2 & 3	2 & 3
200MHz	66MHz	3x	Open	1 & 2	2 & 3	2 & 3	1 & 2	2 & 3

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (PENTIUM MMX)

CPU speed	Clock speed	Multiplier	JBF1	JBF2	JBF3	JCK5	JCK6	JCK7
166MHz	66MHz	2.5x	Open	1 & 2	1 & 2	2 & 3	1 & 2	2 & 3
200MHz	66MHz	3x	Open	1 & 2	2 & 3	2 & 3	1 & 2	2 & 3

Note: Pins designated should be in the closed position.

CPU VOLTAGE SELECTION (DUAL)

Voltage	JCK1	JCK2	JCK3	JCK4	JPW1
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2.5V	2 & 3	2 & 3	2 & 3	2 & 3	Open
2.8V	2 & 3	2 & 3	2 & 3	2 & 3	9 & 10
2.9V	2 & 3	2 & 3	2 & 3	2 & 3	7 & 8
3.2V	2 & 3	2 & 3	2 & 3	2 & 3	5 & 6

Note: Pins designated should be in the closed position.

CPU VOLTAGE SELECTION (SINGLE)

Voltage		JCK1	JCK2	JCK3	JCK4	JPW1
»	3.3V	1 & 2	1 & 2	1 & 2	1 & 2	3 & 4
	3.5V	1 & 2	1 & 2	1 & 2	1 & 2	1 & 2

Note: Pins designated should be in the closed position.