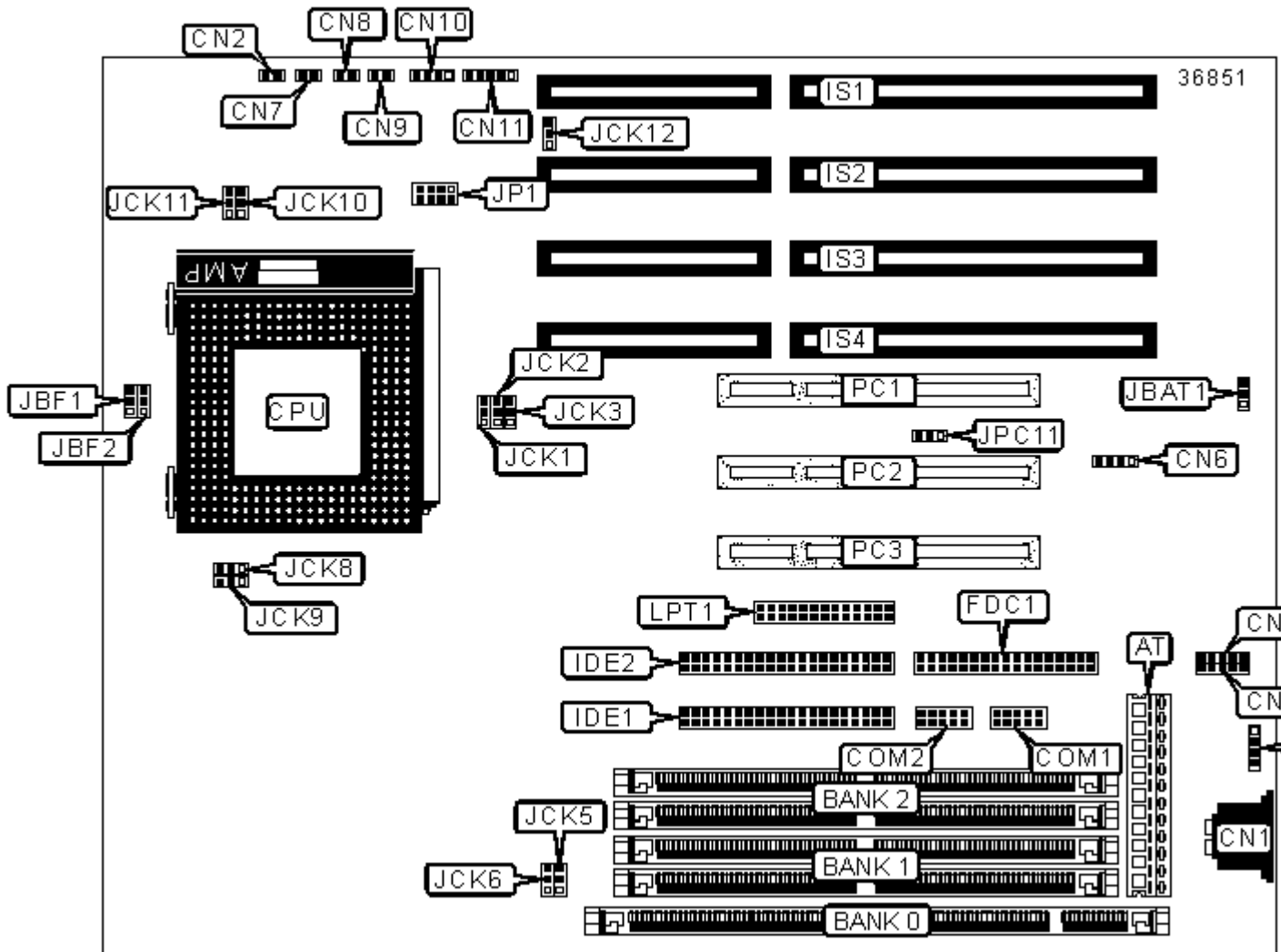


OCEAN INFORMATION SYSTEMS, INC.

RHINO 12

Device Type	Mainboard
Processor	CX 6X86/IBM 6X86/CX 6X86L/IBM 6X86L/AM K5/AM K6/Pentium/Pentium MMX
Processor Speed	75/100/120/133/150/166/180/200MHz
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 (3), 16-bit ISA slots (4), floppy drive interface, IDE interfaces (2), AT Keyboard port, parallel interface, PS/2 mouse interface, serial interfaces (2), USB interface, AT power connector



CONNECTIONS

Purpose	Location	Purpose	Location
AT power connector	AT	Speaker	CN10
AT keyboard port	CN1	Power LED & keylock	CN11

IDE interface LED	CN2	Serial interface 1	COM1
USB interface 1	CN3	Serial interface 2	COM2
USB interface 2	CN4	Floppy drive interface	FDC1
PS/2 mouse interface	CN5	IDE interface 1	IDE1
Unidentified	CN6	IDE interface 2	IDE2
Turbo switch	CN7	16-bit ISA slots	IS1 - IS4
Turbo LED	CN8	Parallel interface	LPT1
Reset switch	CN9	32-bit PCI slots	PC1 - PC3

USER CONFIGURABLE SETTINGS

Function		Label	Position
»	Factory configured - do not alter	JBAT1	Unidentified
»	Factory configured - do not alter	JCK12	Unidentified
»	Factory configured - do not alter	JPC11	Unidentified

SIMM CONFIGURATION

Size	Bank 1	Bank 2
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

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

DIMM/SIMM VOLTAGE CONFIGURATION		
Voltage	JCK5	JCK6
» 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	JCK1	JCK2	JCK3
120MHz	50MHz	2x	1 & 2	2 & 3	2 & 3	2 & 3	2 & 3
133MHz	55MHz	2x	1 & 2	2 & 3	2 & 3	2 & 3	1 & 2
150MHz	60MHz	2x	1 & 2	2 & 3	1 & 2	2 & 3	2 & 3
166MHz	66MHz	2x	1 & 2	2 & 3	2 & 3	1 & 2	2 & 3
200MHz	75MHz	2x	1 & 2	2 & 3	1 & 2	2 & 3	1 & 2

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (CX 6X86L)							
CPU speed	Clock speed	Multiplier	JBF1	JBF2	JCK1	JCK2	JCK3
166MHz	66MHz	2x	1 & 2	2 & 3	2 & 3	1 & 2	2 & 3

200MHz	75MHz	2x	1 & 2	2 & 3	1 & 2	2 & 3	1 & 2
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Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (IBM 6X86)

CPU speed	Clock speed	Multiplier	JBF1	JBF2	JCK1	JCK2	JCK3
120MHz	50MHz	2x	1 & 2	2 & 3	2 & 3	2 & 3	2 & 3
133MHz	55MHz	2x	1 & 2	2 & 3	2 & 3	2 & 3	1 & 2
150MHz	60MHz	2x	1 & 2	2 & 3	1 & 2	2 & 3	2 & 3
166MHz	66MHz	2x	1 & 2	2 & 3	2 & 3	1 & 2	2 & 3
200MHz	75MHz	2x	1 & 2	2 & 3	1 & 2	2 & 3	1 & 2

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (IBM 6X86L)

CPU speed	Clock speed	Multiplier	JBF1	JBF2	JCK1	JCK2	JCK3
166MHz	66MHz	2x	1 & 2	2 & 3	2 & 3	1 & 2	2 & 3
200MHz	75MHz	2x	1 & 2	2 & 3	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	JCK1	JCK2	JCK3
75MHz	50MHz	1.5x	2 & 3	2 & 3	2 & 3	2 & 3	2 & 3
90MHz	60MHz	1.5x	2 & 3	2 & 3	1 & 2	2 & 3	2 & 3
100MHz	66MHz	1.5x	2 & 3	2 & 3	2 & 3	1 & 2	2 & 3
120MHz	60MHz	1.5x	2 & 3	2 & 3	1 & 2	2 & 3	2 & 3
133MHz	66MHz	1.5x	2 & 3	2 & 3	2 & 3	1 & 2	2 & 3
150MHz	60MHz	2.5x	1 & 2	2 & 3	1 & 2	2 & 3	2 & 3

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K6)

CPU speed	Clock speed	Multiplier	JBF1	JBF2	JCK1	JCK2	JCK3
200MHz	66MHz	3x	2 & 3	1 & 2	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	JCK1	JCK2	JCK3
75MHz	50MHz	1.5x	2 & 3	2 & 3	2 & 3	2 & 3	2 & 3
90MHz	60MHz	1.5x	2 & 3	2 & 3	1 & 2	2 & 3	2 & 3
100MHz	66MHz	1.5x	2 & 3	2 & 3	2 & 3	1 & 2	2 & 3
120MHz	60MHz	2x	1 & 2	2 & 3	1 & 2	2 & 3	2 & 3
133MHz	66MHz	2x	1 & 2	2 & 3	2 & 3	1 & 2	2 & 3
150MHz	60MHz	2.5x	1 & 2	1 & 2	1 & 2	2 & 3	2 & 3
166MHz	66MHz	2.5x	1 & 2	1 & 2	2 & 3	1 & 2	2 & 3
180MHz	60MHz	3x	2 & 3	1 & 2	1 & 2	2 & 3	2 & 3
200MHz	66MHz	3x	2 & 3	1 & 2	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	JCK1	JCK2	JCK3
200MHz	66MHz	3x	2 & 3	1 & 2	2 & 3	1 & 2	2 & 3

Note: Pins designated should be in the closed position.

CPU VOLTAGE SELECTION (DUAL)

Voltage	JCK8	JCK9	JCK10	JCK11	JP1
2.5V	2 & 3	2 & 3	2 & 3	2 & 3	Open
2.8V	2 & 3	2 & 3	2 & 3	2 & 3	7 & 8
2.9V	2 & 3	2 & 3	2 & 3	2 & 3	5 & 6

Note: Pins designated should be in the closed position.

CPU VOLTAGE SELECTION (SINGLE)

Voltage		JCK8	JCK9	JCK10	JCK11	JP1
»	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.