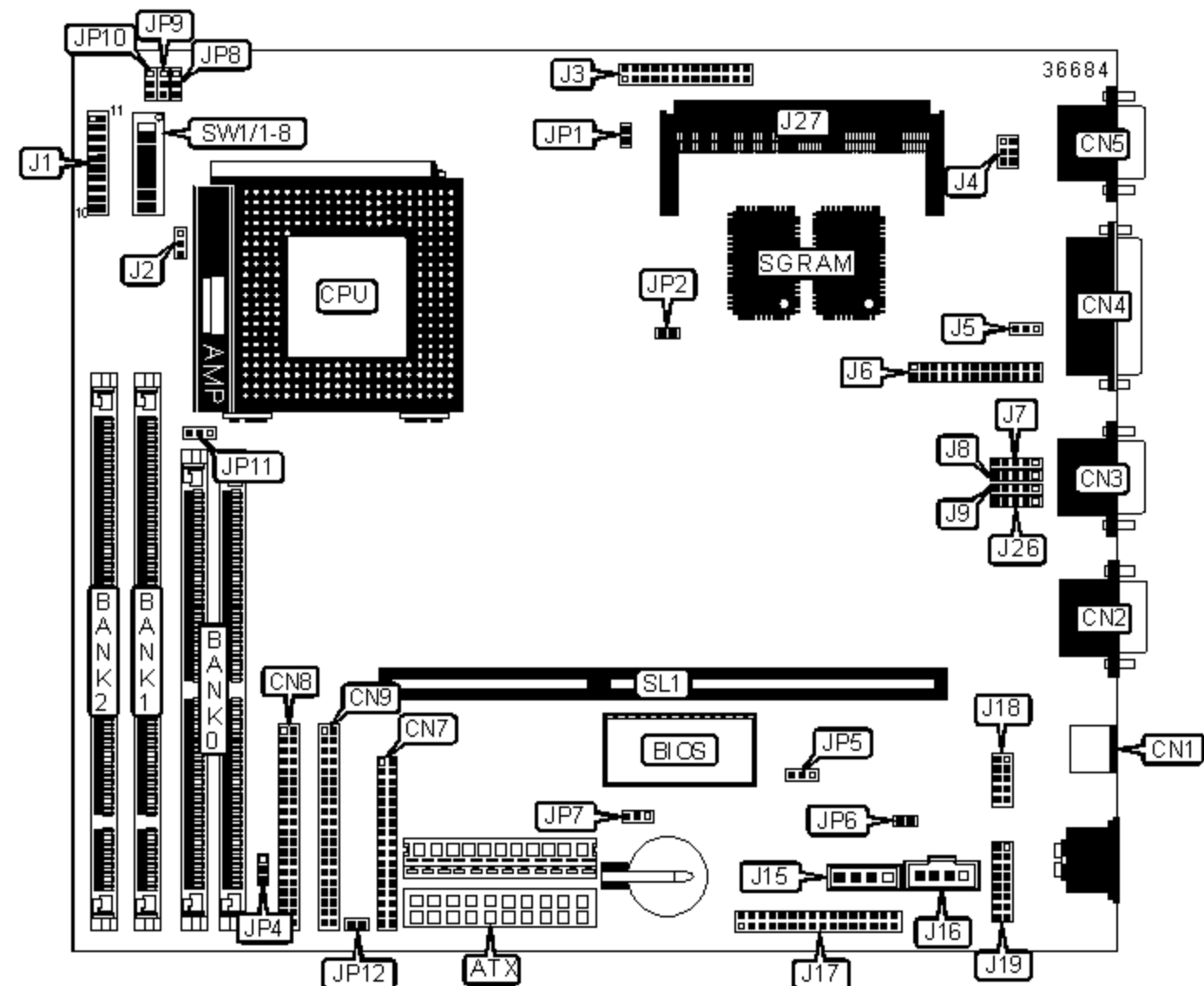


# VEXTREC TECHNOLOGY INC.

## GMB-P58VPA (VER. 1.00)

<b>Device Type</b>	Mainboard
<b>Processor</b>	CX 6X86L/CX 686MX/IBM 6X86MX/CX M2/AM K5/AM K6/AM K6-2/IDT WinCHIP/Pentium/Pentium MMX
<b>Processor Speed</b>	90/100/110/120/133/150/166/180/200/225/233/250/266/300/333/350MHz
<b>Chip Set</b>	VIA
<b>Video Chip Set</b>	ATI
<b>Audio Chip Set</b>	ESS
<b>Maximum Onboard Memory</b>	256MB (EDO & SDRAM supported)
<b>Maximum Video Memory</b>	8MB
<b>Cache</b>	512KB
<b>BIOS</b>	Award
<b>Dimensions</b>	200mm x 270mm
<b>I/O Options</b>	EISA slot, Floppy drive interface, IDE interfaces (2), parallel port, PS/2 mouse port, serial ports (2), VGA feature connector, VGA port, IR connector, USB interfaces (2), ATX power connector, wavetable connector, audio in - CD-ROMs (2), Fast IR connector, Power-on-ring connector, TV-out extension connector



### CONNECTIONS

Purpose	Location	Purpose	Location

ATX power connector	ATX	CPU fan power	J2
PS/2 mouse port	CN1	VGA feature connector	J3
Serial port 2	CN2	TV-out extension connector	J4
Serial port 1	CN3	Power-on-ring connector	J5
LCD connector	CN4	Parallel port	J6
VGA port	CN5	USB interface 1	J7
Floppy drive interface	CN7	USB interface 2	J8
IDE interface 1	CN8	Fast IR connector	J9
IDE interface 2	CN9	Audio in - CD-ROM (Panasonic)	J15
IDE interface LED	J1/Pins 1 & 2	Audio in - CD-ROM (Sony)	J16
Green PC LED	J1/Pins 3 & 4	Wavetable connector	J17
Power switch	J1/Pins 5 & 6	Audio extension connector 1	J18
Reset switch	J1/Pins 9 & 10	Audio extension connector 2	J19
Power LED & Keylock	J1/Pins 11 - 15	IR connector	J26
PC speaker	J1/Pins 17 - 20	EISA extension slot	SL1

### USER CONFIGURABLE SETTINGS

Function		Label	Position
	On board video enabled	JP2	Closed
	On board video disabled	JP2	Open
	CPU overheat alarm enabled	JP4	Pins 2 & 3 closed
	CPU overheat alarm disabled	JP4	Open
	Flash BIOS voltage select 5V	JP5	Pins 1 & 2 closed
	Flash BIOS voltage select 12V	JP5	Pins 2 & 3 closed
	On board sound enabled	JP6	Closed
	On board sound disabled	JP6	Open
»	CMOS memory normal operation	JP7	Pins 1 & 2 closed
	CMOS memory clear	JP7	Pins 2 & 3 closed

	AT power supply	JP12	Closed
	ATX power supply	JP12	Open

### SIMM CONFIGURATION

Size	Bank 0
8MB	(2) 1M x 36
16MB	(2) 2M x 36
32MB	(2) 4M x 36
64MB	(2) 8M x 36
128MB	(2) 16M x 36
Note: Board accepts EDO memory.	

### DIMM CONFIGURATION

Size	Bank 1	Bank 2
8MB	(1) 1M x 64	None
16MB	(1) 1M x 64	(1) 1M x 64
16MB	(1) 2M x 64	None
24MB	(1) 2M x 64	(1) 1M x 64
32MB	(1) 2M x 64	(1) 2M x 64
32MB	(1) 4M x 64	None
40MB	(1) 4M x 64	(1) 1M x 64
48MB	(1) 4M x 64	(1) 2M x 64
64MB	(1) 4M x 64	(1) 4M x 64
64MB	(1) 8M x 64	None
72MB	(1) 8M x 64	(1) 1M x 64
80MB	(1) 8M x 64	(1) 2M x 64
96MB	(1) 8M x 64	(1) 4M x 64
128MB	(1) 8M x 64	(1) 8M x 64

Note: Board supports EDO & SDRAM memory.

### SDRAM CLOCK SELECTION

Setting		JP8	JP11
»	66MHz	Pins 1 & 2 closed	Pins 2 & 3 closed
	Match CPU bus frequency	Pins 2 & 3 closed	Pins 1 & 2 closed

### CPU SPEED SELECTION (CX 6X86L)

CPU speed	Clock speed	Multiplier	SW1/3	SW1/4	SW1/5	SW1/6	SW1/7	SW1/8
150MHz	60MHz	2x	On	Off	Off	On	On	On
166MHz	66MHz	2x	On	Off	Off	On	On	Off
200MHz	75MHz	2x	On	Off	Off	On	On	Off

### CPU SPEED SELECTION (CX 6X86L CON'T)

CPU speed	Clock speed	Multiplier	JP9	JP10
150MHz	60MHz	2x	Pins 2 & 3 closed	Pins 1 & 2 closed
166MHz	66MHz	2x	Pins 2 & 3 closed	Pins 1 & 2 closed
200MHz	75MHz	2x	Pins 1 & 2 closed	Pins 2 & 3 closed

### CPU SPEED SELECTION (CX 6X86MX)

CPU speed	Clock speed	Multiplier	SW1/3	SW1/4	SW1/5	SW1/6	SW1/7	SW1/8
166MHz	60MHz	2.5x	On	On	Off	On	On	On
200MHz	66MHz	2.5x	On	On	Off	Off	On	On
200MHz	75MHz	2x	On	Off	Off	On	On	Off
233MHz	66MHz	3x	Off	On	Off	Off	On	On
233MHz	75MHz	2.5x	On	On	Off	On	On	Off

**CPU SPEED SELECTION (CX 6X86MX CON'T)**

CPU speed	Clock speed	Multiplier	JP9	JP10
166MHz	60MHz	2.5x	Pins 2 & 3 closed	Pins 1 & 2 closed
200MHz	66MHz	2.5x	Pins 2 & 3 closed	Pins 1 & 2 closed
200MHz	75MHz	2x	Pins 1 & 2 closed	Pins 1 & 2 closed
233MHz	66MHz	3x	Pins 2 & 3 closed	Pins 1 & 2 closed
233MHz	75MHz	2.5x	Pins 1 & 2 closed	Pins 1 & 2 closed

**CPU SPEED SELECTION (CX MII)**

CPU speed	Clock speed	Multiplier	SW1/3	SW1/4	SW1/5	SW1/6	SW1/7	SW1/8
300MHz	75MHz	3x	Off	On	Off	On	On	Off
300MHz	66MHz	3.5x	Off	Off	Off	Off	On	On

**CPU SPEED SELECTION (CX MII CON'T)**

CPU speed	Clock speed	Multiplier	JP9	JP10
300MHz	75MHz	3x	Pins 1 & 2 closed	Pins 2 & 3 closed
300MHz	66MHz	3.5x	Pins 2 & 3 closed	Pins 1 & 2 closed

**CPU SPEED SELECTION (IBM 6X86MX)**

CPU speed	Clock speed	Multiplier	SW1/3	SW1/4	SW1/5	SW1/6	SW1/7	SW1/8
266MHz	83MHz	2.5x	On	On	Off	Off	On	Off
300MHz	75MHz	3x	Off	On	Off	On	On	Off
300MHz	66MHz	3.5x	Off	Off	Off	Off	On	On
333MHz	83MHz	3x	Off	On	Off	Off	On	Off

**CPU SPEED SELECTION (IBM 6X86MX CON'T)**

CPU speed	Clock speed	Multiplier	JP9	JP10
266MHz	83MHz	2.5x	Pins 1 & 2 closed	Pins 1 & 2 closed
300MHz	75MHz	3x	Pins 1 & 2 closed	Pins 1 & 2 closed
300MHz	66MHz	3.5x	Pins 2 & 3 closed	Pins 1 & 2 closed
333MHz	83MHz	3x	Pins 1 & 2 closed	Pins 1 & 2 closed

**CPU SPEED SELECTION (AM K5)**

CPU speed	Clock speed	Multiplier	SW1/3	SW1/4	SW1/5	SW1/6	SW1/7	SW1/8
120MHz	60MHz	2x	On	Off	Off	On	On	On
133MHz	66MHz	2x	On	Off	Off	Off	On	On
166MHz	66MHz	2.5x	On	On	Off	Off	On	On

**CPU SPEED SELECTION (AM K5 CON'T)**

CPU speed	Clock speed	Multiplier	JP9	JP10
120MHz	60MHz	2x	Pins 2 & 3 closed	Pins 1 & 2 closed
133MHz	66MHz	2x	Pins 2 & 3 closed	Pins 1 & 2 closed
166MHz	66MHz	2.5x	Pins 2 & 3 closed	Pins 1 & 2 closed

**CPU SPEED SELECTION (AM K6)**

CPU speed	Clock speed	Multiplier	SW1/3	SW1/4	SW1/5	SW1/6	SW1/7	SW1/8
166MHz	66MHz	2.5x	On	On	Off	Off	On	On
200MHz	66MHz	3x	Off	On	Off	Off	On	On
233MHz	66MHz	3.5x	Off	Off	Off	Off	On	On
266MHz	66MHz	4x	On	Off	On	Off	On	On
300MHz	66MHz	4.5x	On	On	On	Off	On	On

### CPU SPEED SELECTION (AM K6 CON'T)

CPU speed	Clock speed	Multiplier	JP9	JP10
166MHz	66MHz	2.5x	Pins 2 & 3 closed	Pins 1 & 2 closed
200MHz	66MHz	3x	Pins 2 & 3 closed	Pins 1 & 2 closed
233MHz	66MHz	3.5x	Pins 2 & 3 closed	Pins 1 & 2 closed
266MHz	66MHz	4x	Pins 2 & 3 closed	Pins 1 & 2 closed
300MHz	66MHz	4.5x	Pins 2 & 3 closed	Pins 1 & 2 closed

### CPU SPEED SELECTION (AM K6-2)

CPU speed	Clock speed	Multiplier	SW1/3	SW1/4	SW1/5	SW1/6	SW1/7	SW1/8
250MHz	100MHz	2.5x	On	On	Off	Off	Off	Off
266MHz	66MHz	4x	On	Off	On	Off	On	On
300MHz	100MHz	3x	Off	On	Off	Off	Off	Off
333MHz	95MHz	3.5x	Off	Off	Off	On	Off	Off
350MHz	100MHz	3.5x	Off	Off	Off	Off	Off	Off

### CPU SPEED SELECTION (AM K6-2 CON'T)

CPU speed	Clock speed	Multiplier	JP9	JP10
250MHz	100MHz	2.5x	Pins 1 & 2 closed	Pins 2 & 3 closed
266MHz	66MHz	4x	Pins 2 & 3 closed	Pins 1 & 2 closed
300MHz	100MHz	3x	Pins 1 & 2 closed	Pins 2 & 3 closed
333MHz	95MHz	3.5x	Pins 1 & 2 closed	Pins 2 & 3 closed
350MHz	100MHz	3.5x	Pins 1 & 2 closed	Pins 2 & 3 closed

### CPU SPEED SELECTION (IDT WINCHIP)

CPU speed	Clock speed	Multiplier	SW1/3	SW1/4	SW1/5	SW1/6	SW1/7	SW1/8
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180MHz	60MHz	3x	Off	On	Off	On	On	On
200MHz	66MHz	3x	Off	On	Off	Off	On	On

CPU SPEED SELECTION (IDT WINCHIP CON'T)				
CPU speed	Clock speed	Multiplier	JP9	JP10
180MHz	60MHz	3x	Pins 2 & 3 closed	Pins 1 & 2 closed
200MHz	66MHz	3x	Pins 2 & 3 closed	Pins 1 & 2 closed

CPU SPEED SELECTION (PENTIUM)								
CPU speed	Clock speed	Multiplier	SW1/3	SW1/4	SW1/5	SW1/6	SW1/7	SW1/8
90MHz	60MHz	1.5x	Off	Off	Off	On	On	On
100MHz	66MHz	1.5x	Off	Off	Off	Off	On	On
120MHz	60MHz	2x	On	Off	Off	On	On	On
133MHz	66MHz	2x	On	Off	Off	Off	On	On
150MHz	60MHz	2.5x	On	On	Off	On	On	On
166MHz	66MHz	2.5x	On	On	Off	Off	On	On
200MHz	66MHz	3x	Off	On	Off	Off	On	On

CPU SPEED SELECTION (PENTIUM CON'T)				
CPU speed	Clock speed	Multiplier	JP9	JP10
90MHz	60MHz	1.5x	Pins 2 & 3 closed	Pins 1 & 2 closed
100MHz	66MHz	1.5x	Pins 2 & 3 closed	Pins 1 & 2 closed
120MHz	60MHz	2x	Pins 2 & 3 closed	Pins 1 & 2 closed
133MHz	66MHz	2x	Pins 2 & 3 closed	Pins 1 & 2 closed
150MHz	60MHz	2.5x	Pins 2 & 3 closed	Pins 1 & 2 closed
166MHz	66MHz	2.5x	Pins 2 & 3 closed	Pins 1 & 2 closed
200MHz	66MHz	3x	Pins 2 & 3 closed	Pins 1 & 2 closed



**CPU SPEED SELECTION (PENTIUM MMX)**

CPU speed	Clock speed	Multiplier	SW1/3	SW1/4	SW1/5	SW1/6	SW1/7	SW1/8
166MHz	66MHz	2.5x	On	On	Off	Off	On	On
200MHz	66MHz	3x	Off	On	Off	Off	On	On
233MHz	66MHz	3.5x	Off	Off	Off	Off	On	On

**CPU SPEED SELECTION (PENTIUM MMX CON'T)**

CPU speed	Clock speed	Multiplier	JP9	JP10
166MHz	66MHz	2.5x	Pins 2 & 3 closed	Pins 1 & 2 closed
200MHz	66MHz	3x	Pins 2 & 3 closed	Pins 1 & 2 closed
233MHz	66MHz	3.5x	Pins 2 & 3 closed	Pins 1 & 2 closed

**CPU VOLTAGE SELECTION**

Voltage	JP1	SW1/1	SW1/2
2.2V	Closed	Off	On
2.8V	Closed	Off	Off
2.9V	Closed	On	Off
3.2V	Open	Off	Off
3.3V	Open	Off	On
3.5V	Closed	On	On