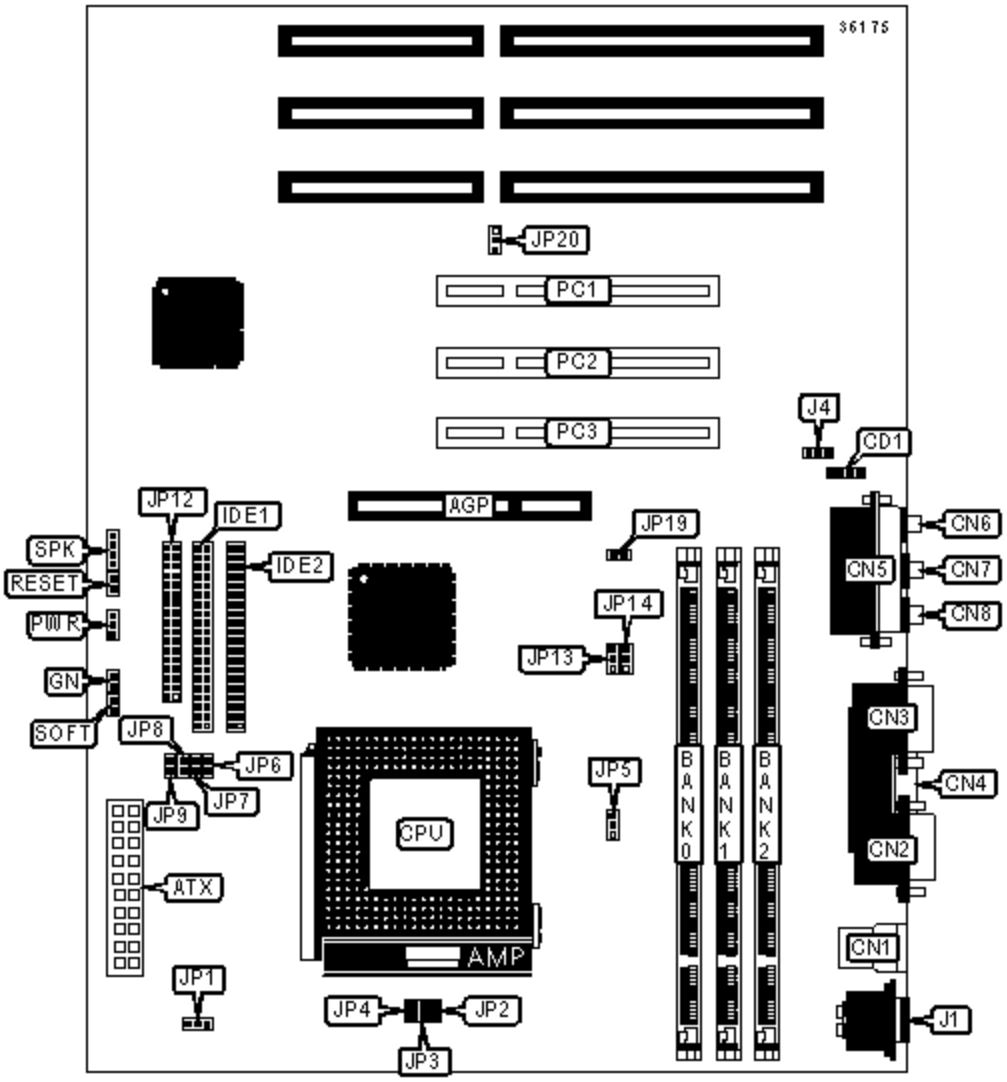
GIGA-BYTE TECHNOLOGY CO., LTD.

GA-586SGM

Device Type	Mainboard
Processor	CX 6X86/IBM 6X86/CX 6X86L/IBM 6X86L/CX 686MX/IBM 6X86MX/AM K5/AM K6/P54CT/P54CTB/Pentium/Pentium MMX
Processor Speed	90/100/120/133/150/166/180/200/233/266MHz
Chip Set	SIS
Audio Chip Set	Unidentified
Maximum Onboard Memory	768MB (EDO and SDRAM supported)
Maximum Audio Memory	Unidentified
Cache	512KB
BIOS	Award
Dimensions	305mm x 170mm
I/O Options (backplane)	32-bit PCI slots (3), floppy drive interface, game port, green PC connector, IDE interfaces (2), parallel port, PS/2 mouse port, serial ports (2), USB connector, ATX power connector, AGP slot, line in, line out, microphone in, audio in – CD-ROM



CONNECTIONS			
Purpose	**Location**	**Purpose**	**Location**
AGP slot	AGP	Green PC connector	GN
ATX power connector	ATX	IDE interface 1	IDE1

Audio in – CD-ROM	CD1	IDE interface 2	IDE2
USB connector	CN1	PS/2 mouse port	J1
Serial port 2	CN2	CPU fan power	JP1
Serial port 1	CN3	Floppy drive interface	JP12
Parallel port	CN4	32-bit PCI slots	PC1-PC3
Game port	CN5	Power LED	PWR
Microphone in	CN6	Reset switch	RESET
Line in	CN7	Soft power switch	SOFT
Line out	CN8	Speaker	SPK
Green PC LED	GD		

USER CONFIGURABLE SETTINGS			
Function		**Label**	**Position**
	Sound enabled	J4	Pins 2 & 3 closed
	Sound disabled	J4	Pins 1 & 2 closed
	Dual voltage enabled	JP5	Pins 1 & 2 closed
	Single voltage enabled	JP5	Pins 2 & 3 closed

DIMM CONFIGURATION			
Size	**Bank 0**	**Bank 1**	**Bank 2**
8MB	(1) 1M x 64	None	None
16MB	(1) 2M x 64	None	None
24MB	(1) 2M x 64	(1) 1M x 64	None
32MB	(1) 4M x 64	None	None
32MB	(1) 2M x 64	(1) 2M x 64	None
40MB	(1) 4M x 64	(1) 1M x 64	None
40MB	(1) 2M x 64	(1) 2M x 64	(1) 1M x 64

48MB	(1) 4M x 64	(1) 2M x 64	None
48MB	(1) 4M x 64	(1) 1M x 64	(1) 1M x 64
48MB	(1) 2M x 64	(1) 2M x 64	(1) 2M x 64
56MB	(1) 4M x 64	(1) 2M x 64	(1) 1M x 64
64MB	(1) 8M x 64	None	None
64MB	(1) 4M x 64	(1) 4M x 64	None
64MB	(1) 4M x 64	(1) 2M x 64	(1) 2M x 64
72MB	(1) 8M x 64	(1) 1M x 64	None
72MB	(1) 4M x 64	(1) 4M x 64	(1) 1M x 64
80MB	(1) 8M x 64	(1) 2M x 64	None
80MB	(1) 4M x 64	(1) 4M x 64	(1) 2M x 64
88MB	(1) 8M x 64	(1) 2M x 64	(1) 1M x 64
96MB	(1) 8M x 64	(1) 4M x 64	None
96MB	(1) 8M x 64	(1) 2M x 64	(1) 2M x 64
104MB	(1) 8M x 64	(1) 4M x 64	(1) 1M x 64
112MB	(1) 8M x 64	(1) 4M x 64	(1) 2M x 64
128MB	(1) 16M x 64	None	None
128MB	(1) 8M x 64	(1) 8M x 64	None
128MB	(1) 8M x 64	(1) 4M x 64	(1) 4M x 64
136MB	(1) 16M x 64	(1) 1M x 64	None
136MB	(1) 8M x 64	(1) 8M x 64	(1) 1M x 64
144MB	(1) 16M x 64	(1) 2M x 64	None
144MB	(1) 8M x 64	(1) 8M x 64	(1) 2M x 64
152MB	(1) 16M x 64	(1) 2M x 64	(1) 1M x 64
160MB	(1) 16M x 64	(1) 4M x 64	None
160MB	(1) 16M x 64	(1) 2M x 64	(1) 2M x 64
160MB	(1) 8M x 64	(1) 8M x 64	(1) 4M x 64
168MB	(1) 16M x 64	(1) 4M x 64	(1) 1M x 64
176MB	(1) 16M x 64	(1) 4M x 64	(1) 2M x 64

176MB	(1) 16M x 64	(1) 4M x 64	(1) 2M x 64
192MB	(1) 16M x 64	(1) 8M x 64	None
192MB	(1) 16M x 64	(1) 4M x 64	(1) 4M x 64
200MB	(1) 16M x 64	(1) 8M x 64	(1) 1M x 64
208MB	(1) 16M x 64	(1) 8M x 64	(1) 2M x 64
224MB	(1) 16M x 64	(1) 8M x 64	(1) 4M x 64
256MB	(1) 16M x 64	(1) 16M x 64	None
256MB	(1) 16M x 64	(1) 8M x 64	(1) 8M x 64
256MB	(1) 32MB x 64	None	None
264MB	(1) 16M x 64	(1) 16M x 64	(1) 1M x 64
264MB	(1) 32M x 64	(1) 1M x 64	None
272MB	(1) 16M x 64	(1) 16M x 64	(1) 2M x 64
272MB	(1) 32M x 64	(1) 2M x 64	None
280MB	(1) 32M x 64	(1) 2M x 64	(1) 1M x 64
288MB	(1) 16M x 64	(1) 16M x 64	(1) 4M x 64
320MB	(1) 16M x 64	(1) 16M x 64	(1) 8M x 64
288MB	(1) 32M x 64	(1) 2M x 64	(1) 2M x 64
288MB	(1) 32M x 64	(1) 4M x 64	None
296MB	(1) 32M x 64	(1) 4M x 64	(1) 1M x 64
304MB	(1) 32M x 64	(1) 4M x 64	(1) 2M x 64
320MB	(1) 32M x 64	(1) 4M x 64	(1) 4M x 64
320MB	(1) 32M x 64	(1) 8M x 64	None
328MB	(1) 32M x 64	(1) 8M x 64	(1) 1M x 64
336MB	(1) 32M x 64	(1) 8M x 64	(1) 2M x 64
352MB	(1) 32M x 64	(1) 8M x 64	(1) 4M x 64
384MB	(1) 32M x 64	(1) 8M x 64	(1) 8M x 64
384MB	(1) 16M x 64	(1) 16M x 64	(1) 16M x 64
384MB	(1) 32M x 64	(1) 16M x 64	None
392MB	(1) 32M x 64	(1) 16M x 64	(1) 1M x 64

400MB	(1) 32M x 64	(1) 16M x 64	(1) 2M x 64
416MB	(1) 32M x 64	(1) 16M x 64	(1) 4M x 64
448MB	(1) 32M x 64	(1) 16M x 64	(1) 8M x 64
512MB	(1) 32M x 64	(1) 16M x 64	(1) 16M x 64
512MB	(1) 32M x 64	(1) 32M x 64	None
520MB	(1) 32M x 64	(1) 32M x 64	(1) 1M x 64
528MB	(1) 32M x 64	(1) 32M x 64	(1) 2M x 64
544MB	(1) 32M x 64	(1) 32M x 64	(1) 4M x 64
576MB	(1) 32M x 64	(1) 32M x 64	(1) 8M x 64
640MB	(1) 32M x 64	(1) 32M x 64	(1) 16M x 64
768MB	(1) 32M x 64	(1) 32M x 64	(1) 32M x 64

CPU SPEED SELECTION (INTEL)						
CPU speed	**Clock Speed**	**Multiplier**	**JP2**	**JP3**	**JP4**	**JP5**
90MHz	60MHz	1.5x	Off	Off	Off	2 & 3
100MHz	66MHz	1.5x	Off	Off	Off	2 & 3
120MHz	60MHz	2x	Off	Off	On	2 & 3
133MHz	66MHz	2x	Off	Off	On	2 & 3
150MHz	60MHz	2.5	Off	On	On	2 & 3
166MHz	66MHz	2.5x	Off	On	On	2 & 3
180MHz	60MHz	3x	Off	On	Off	2 & 3
200MHz	66MHz	3x	Off	On	Off	2 & 3
Note: Pins designated should be in the closed position.						

CPU SPEED SELECTION (INTEL CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP6**	**JP7**	**JP8**	**JP9**
90MHz	60MHz	1.5x	On	On	On	On
100MHz	66MHz	1.5x	On	On	On	On

100MHz	66MHz	1.5x	On	On	On	On
120MHz	60MHz	2x	On	On	On	On
133MHz	66MHz	2x	On	On	On	On
150MHz	60MHz	2.5	On	On	On	On
166MHz	66MHz	2.5x	On	On	On	On
180MHz	60MHz	3x	On	On	On	On
200MHz	66MHz	3x	On	On	On	On

CPU SPEED SELECTION (INTEL CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP13**	**JP14**	**JP19**	**JP20**
90MHz	60MHz	1.5x	1 & 2	1 & 2	On	2 & 3
100MHz	66MHz	1.5x	1 & 2	1 & 2	Off	2 & 3
120MHz	60MHz	2x	1 & 2	1 & 2	On	2 & 3
133MHz	66MHz	2x	1 & 2	1 & 2	Off	2 & 3
150MHz	60MHz	2.5	1 & 2	1 & 2	On	2 & 3
166MHz	66MHz	2.5x	1 & 2	1 & 2	Off	2 & 3
180MHz	60MHz	3x	1 & 2	1 & 2	On	2 & 3
200MHz	66MHz	3x	1 & 2	1 & 2	Off	2 & 3
Note: Pins designated should be in the closed position.						

CPU SPEED SELECTION (INTEL MMX)						
CPU speed	**Clock Speed**	**Multiplier**	**JP2**	**JP3**	**JP4**	**JP5**
150MHz	60MHz	2.5x	Off	On	On	1 & 2
166MHz	66MHz	2.5x	Off	On	On	1 & 2
200MHz	66MHz	3x	Off	On	Off	1 & 2
233MHz	66MHz	3.5x	Off	Off	Off	1 & 2
Note: Pins designated should be in the closed position.						

CPU SPEED SELECTION (INTEL MMX CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP6**	**JP7**	**JP8**	**JP9**
150MHz	60MHz	2.5x	Off	Off	Off	Off
166MHz	66MHz	2.5x	Off	Off	Off	Off
200MHz	66MHz	3x	Off	Off	Off	Off
233MHz	66MHz	3.5x	Off	Off	Off	Off

CPU SPEED SELECTION (INTEL MMX CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP13**	**JP14**	**JP19**	**JP20**
150MHz	60MHz	2.5x	1 & 2	1 & 2	On	2 & 3
166MHz	66MHz	2.5x	1 & 2	1 & 2	Off	2 & 3
200MHz	66MHz	3x	1 & 2	1 & 2	Off	2 & 3
233MHz	66MHz	3.5x	1 & 2	1 & 2	Off	2 & 3
Note: Pins designated should be in the closed position.						

CPU SPEED SELECTION (P54CT)						
CPU speed	**Clock Speed**	**Multiplier**	**JP2**	**JP3**	**JP4**	**JP5**
150MHz	60MHz	2.5x	Off	On	On	1 & 2
166MHz	66MHz	2.5x	Off	On	On	1 & 2
Note: Pins designated should be in the closed position.						

CPU SPEED SELECTION (P54CT CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP6**	**JP7**	**JP8**	**JP9**
150MHz	60MHz	2.5x	Off	Off	Off	On
166MHz	66MHz	2.5x	Off	Off	Off	On

CPU SPEED SELECTION (P54CT CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP13**	**JP14**	**JP19**	**JP20**
150MHz	60MHz	2.5x	1 & 2	1 & 2	On	2 & 3
166MHz	66MHz	2.5x	1 & 2	1 & 2	Off	2 & 3
Note: Pins designated should be in the closed position.						

CPU SPEED SELECTION (P54CTB)						
CPU speed	**Clock Speed**	**Multiplier**	**JP2**	**JP3**	**JP4**	**JP5**
150MHz	60MHz	2.5x	Off	On	On	1 & 2
166MHz	66MHz	2.5x	Off	On	On	1 & 2
180MHz	66MHz	3x	Off	On	Off	1 & 2
200MHz	66MHz	3.5x	Off	On	Off	1 & 2
Note: Pins designated should be in the closed position.						

CPU SPEED SELECTION (P54CTB CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP6**	**JP7**	**JP8**	**JP9**
150MHz	60MHz	2.5x	Off	Off	Off	On
166MHz	66MHz	2.5x	Off	Off	Off	On
180MHz	66MHz	3x	Off	Off	Off	On
200MHz	66MHz	3.5x	Off	Off	Off	On

CPU SPEED SELECTION (P54CTB CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP13**	**JP14**	**JP19**	**JP20**
150MHz	60MHz	2.5x	1 & 2	1 & 2	On	2 & 3
166MHz	66MHz	2.5x	1 & 2	1 & 2	Off	2 & 3
180MHz	66MHz	3x	1 & 2	1 & 2	On	2 & 3
200MHz	66MHz	3.5x	1 & 2	1 & 2	Off	2 & 3

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K5)						
CPU speed	**Clock Speed**	**Multiplier**	**JP2**	**JP3**	**JP4**	**JP5**
133MHz	66MHz	1.5x	Off	Off	On	2 & 3
166MHz	66MHz	2.5x	Off	On	On	2 & 3

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K5 CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP6**	**JP7**	**JP8**	**JP9**
133MHz	66MHz	1.5x	On	On	On	On
166MHz	66MHz	2.5x	On	On	On	On

CPU SPEED SELECTION (AM K5 CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP13**	**JP14**	**JP19**	**JP20**
133MHz	66MHz	1.5x	1 & 2	1 & 2	Off	2 & 3
166MHz	66MHz	2.5x	1 & 2	1 & 2	Off	2 & 3

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K6)						
CPU speed	**Clock Speed**	**Multiplier**	**JP2**	**JP3**	**JP4**	**JP5**
166MHz	66MHz	2.5x	Off	On	On	1 & 2
180MHz	60MHz	3x	Off	On	Off	1 & 2
200MHz	66MHz	3x	Off	On	Off	1 & 2
233MHz	66MHz	3.5x	Off	Off	Off	1 & 2

Note: Indicated pins are in the closed position

CPU SPEED SELECTION (AM K6 CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP6**	**JP7**	**JP8**	**JP9**
166MHz	66MHz	2.5x	On	Off	Off	On
180MHz	60MHz	3x	On	Off	Off	On
200MHz	66MHz	3x	On	Off	Off	On
233MHz	66MHz	3.5x	Off	Off	On	On

CPU SPEED SELECTION (AM K6 CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP13**	**JP14**	**JP19**	**JP20**
166MHz	66MHz	2.5x	1 & 2	1 & 2	Off	2 & 3
180MHz	60MHz	3x	1 & 2	1 & 2	On	2 & 3
200MHz	66MHz	3x	1 & 2	1 & 2	Off	2 & 3
233MHz	66MHz	3.5x	1 & 2	1 & 2	Off	2 & 3
Note: Indicated pins are in the closed position						

CPU SPEED SELECTION (CX/IBM 6X86)						
CPU speed	**Clock Speed**	**Multiplier**	**JP2**	**JP3**	**JP4**	**JP5**
120MHz	60MHz	2x	Off	Off	On	2 & 3
133MHz	66MHz	2x	Off	Off	On	2 & 3
150MHz	60MHz	3.5x	Off	On	On	2 & 3
Note: Pins designated should be in the closed position.						

CPU SPEED SELECTION (CX/IBM 6X86 CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP6**	**JP7**	**JP8**	**JP9**
120MHz	60MHz	2x	On	On	On	On
133MHz	66MHz	2x	On	On	On	On

150MHz	60MHz	3.5x	On	On	On	On

CPU SPEED SELECTION (CX/IBM 6X86 CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP13**	**JP14**	**JP19**	**JP20**
120MHz	60MHz	2x	1 & 2	1 & 2	On	2 & 3
133MHz	66MHz	2x	1 & 2	1 & 2	Off	2 & 3
150MHz	60MHz	3.5x	1 & 2	1 & 2	On	2 & 3

CPU SPEED SELECTION (CX/IBM 6X86L)						
CPU speed	**Clock Speed**	**Multiplier**	**JP2**	**JP3**	**JP4**	**JP5**
150MHz	60MHz	2x	Off	Off	On	1 & 2
166MHz	66MHz	2x	Off	Off	On	1 & 2
200MHz	75MHz	2x	Off	Off	On	1 & 2
Note: Pins designated should be in the closed position.						

CPU SPEED SELECTION (CX/IBM 6X86L CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP6**	**JP7**	**JP8**	**JP9**
150MHz	60MHz	2x	Off	Off	Off	On
166MHz	66MHz	2x	Off	Off	Off	On
200MHz	75MHz	2x	Off	Off	Off	On

CPU SPEED SELECTION (CX/IBM 6X86L CON'T)						
CPU speed	**Clock Speed**	**Multiplier**	**JP13**	**JP14**	**JP19**	**JP20**
150MHz	60MHz	2x	1 & 2	1 & 2	On	2 & 3
166MHz	66MHz	2x	1 & 2	1 & 2	Off	2 & 3
200MHz	75MHz	2x	1 & 2	2 & 3	Off	1 & 2

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (CX/IBM 6X86MX)						
CPU speed	**Clock speed**	**Multiplier**	**JP2**	**JP3**	**JP4**	**JP5**
150MHz	60MHz	2x	Off	Off	On	1 & 2
166MHz	60MHz	2.5x	Off	On	On	1 & 2
166MHz	66MHz	2x	Off	Off	On	1 & 2
200MHz	60MHz	3x	Off	On	Off	1 & 2
200MHz	66MHz	2.5x	Off	On	On	1 & 2
200MHz	75MHz	2x	Off	Off	On	1 & 2
233MHz	66MHz	3x	Off	On	Off	1 & 2
233MHz	75MHz	2.5x	Off	On	On	1 & 2
233MHz	83MHz	2x	Off	Off	On	1 & 2
266MHz	66MHz	3.5x	Off	Off	Off	1 & 2
266MHz	75MHz	3x	Off	On	Off	1 & 2
266MHz	83MHz	2.5x	Off	On	On	1 & 2

Note: Indicated pins are in the closed position

CPU SPEED SELECTION (CX/IBM 6X86MX CON'T)						
CPU speed	**Clock speed**	**Multiplier**	**JP6**	**JP7**	**JP8**	**JP9**
150MHz	60MHz	2x	On	Off	Off	On
166MHz	60MHz	2.5x	On	Off	Off	On
166MHz	66MHz	2x	On	Off	Off	On
200MHz	60MHz	3x	On	Off	Off	On
200MHz	66MHz	2.5x	On	Off	Off	On
200MHz	75MHz	2x	On	Off	Off	On
233MHz	66MHz	3x	On	Off	Off	On

233MHz	75MHz	2.5x	On	Off	Off	On
233MHz	83MHz	2x	On	Off	Off	On
266MHz	66MHz	3.5x	On	Off	Off	On
266MHz	75MHz	3x	On	Off	Off	On
266MHz	83MHz	2.5x	On	Off	Off	On

CPU SPEED SELECTION (CX/IBM 6X86MX CON'T)						
CPU speed	**Clock speed**	**Multiplier**	**JP13**	**JP14**	**JP19**	**JP20**
150MHz	60MHz	2x	1 & 2	1 & 2	On	2 & 3
166MHz	60MHz	2.5x	1 & 2	1 & 2	On	2 & 3
166MHz	66MHz	2x	1 & 2	1 & 2	Off	2 & 3
200MHz	60MHz	3x	1 & 2	1 & 2	On	2 & 3
200MHz	66MHz	2.5x	1 & 2	1 & 2	Off	2 & 3
200MHz	75MHz	2x	1 & 2	2 & 3	Off	1 & 2
233MHz	66MHz	3x	1 & 2	1 & 2	Off	2 & 3
233MHz	75MHz	2.5x	1 & 2	2 & 3	Off	1 & 2
233MHz	83MHz	2x	2 & 3	1 & 2	On	1 & 2
266MHz	66MHz	3.5x	1 & 2	1 & 2	Off	2 & 3
266MHz	75MHz	3x	1 & 2	2 & 3	Off	1 & 2
266MHz	83MHz	2.5x	2 & 3	1 & 2	On	1 & 2
Note: Indicated pins are in the closed position.						