

# Advanced/MA Jumpers and Connectors

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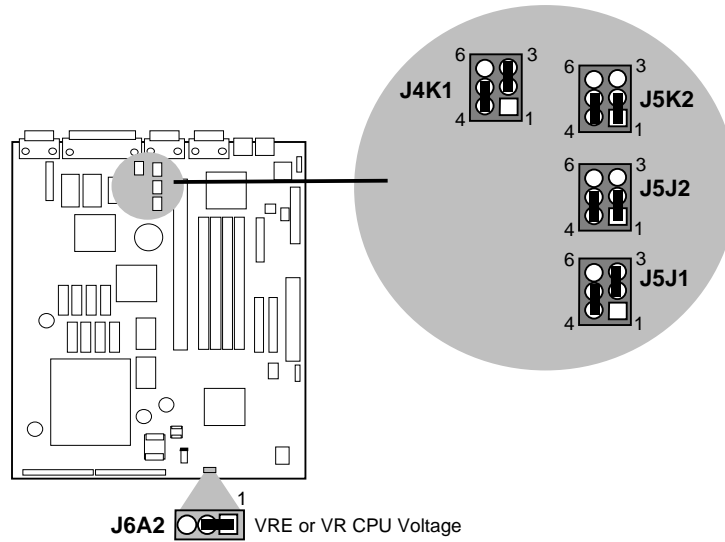


Figure B-1. Configuration jumper locations

Function	Jumper Block	Configuration
Host Bus Speed † (Note: These jumpers also set PCland ISA clock speeds.)	J5J1	See table B-2 below
CPU Speed Ratio †	J5J2	See table B-2 below
CMOS Clear	J5K2	* 1-2 - Normal 2-3 - Clear
Password Clear	J5K2	* 4-5 - Password Enabled 5-6 - Password Clear/Disabled
ISA Clock Speed Override	J4K1	1-2 - 1/3 PCI clk * 2-3 - 1/4 PCI clk
CMOS Setup Access	J4K1	* 4-5 - Enabled 5-6 - Access denied
Processor Voltage †	J6A2	* 1-2 - Standard Voltage (3.3v) 2-3 - VRE

\* Default configuration

†Setting may vary depending on the type of processor installed

Jumper Description	Location I.D.	Function
External Speaker Header/Jumper (last two pins on 1x17 header)	J4A1 pins 16-17	Installed - Enable onboard spkr Removed - Disable onboard spkr

Table B-1. Jumper settings

## CPU CONFIGURATION - J5J1, J5J2

These allow the baseboard to be switched between different speeds of the Pentium processor. These jumpers also affect the PCI and ISA clock speeds according to the following table:

CPU Freq. (MHz)	Host Bus Freq. (MHz)	Host Bus J5J1 pins 1 - 3	Host Bus J5J1 pins 4 - 6	Clock Ratio	Clock Ratio J5J2 pins 1 - 3	Clk Ratio J5J2 pins 4 - 6	PCI Freq. (MHz)
200	66	2-3	5-6	3	1-2	5-6	33
166	66	2-3	5-6	5/2	2-3	5-6	33
150	60	1-2	5-6	5/2	2-3	5-6	30
133	66	2-3	4-5	2	2-3	4-5	33
120	60	1-2	5-6	2	2-3	4-5	30
100 *	66	2-3	4-5	3/2	1-2	4-5	33
90	60	1-2	5-6	3/2	1-2	4-5	30
75	50	1-2	4-5	3/2	1-2	4-5	25
reserved	-	X	X	-	1-2	5-6	-

Table B-2. CPU/System Speed settings (\*default setting)

## CLEAR CMOS - J5K2, PINS 1 - 3

Allows CMOS settings to be reset to default values by moving the jumper from pins 1-2 to pins 2-3 and turning the system on. When the system reports that "NVRAM cleared by jumper", the system can be turned off and the jumper should be returned to the 1-2 position to restore normal operation. This procedure should be done whenever the system BIOS is updated. Default is for this jumper to be on pins 1-2.

## CLEAR PASSWORD - J5K2, PINS 4 - 6

Allows system password to be cleared by moving the jumper from pins 4-5 to pins 5-6 and turning the system on. The system should then be turned off and the jumper should be returned to the 4-5 position to restore normal operation. This procedure should only be done if the user password has been forgotten. The password function is effectively disabled if this jumper is in the 5-6 position. Default is for the password to be enabled (4-5 jumpered).

## ISA CLOCK SPEED - J4K1, PINS 1 - 3

The ISA clock is derived from the PCI bus clock. This jumper setting determines whether the ISA clock is one-third or one-fourth of the PCI clock. Default is for the ISA clock to be equal to the PCI clock divided by 4 (jumper is in the 2-3 position).

PCI Clk Speed	ISA clock speed, J4K1 = 1-2	ISA clock speed, J4K1= 2-3
25 MHz	8.33 MHz	6.25 MHz
30 MHz	10 MHz	7.5 MHz
33 MHz	11 MHz	8.25 MHz

Table B-3. ISA clock settings

## CMOS SETUP ACCESS - J4K1, PINS 4 - 6

Allows access to CMOS Setup utility to be disabled by moving this jumper from the 4-5 position to the 5-6 position. Default is for access to setup to be enabled (4-5 jumpered).

## CPU VOLTAGE - J6A2

Sets the CPU voltage to either VR (standard 3.3v) or VRE (3.6v). The Default setting is for a jumper to connect pin 1-2 for VR voltage. Move the jumper to connect pins 2-3 to select VRE voltage.

# Connectors

## POWER SUPPLY

### PRIMARY POWER (J9E2)

Pin	Name	Function
1	PWRGD	Power Good
2	+5 V	+ 5 volts Vcc
3	+12 V	+ 12 volts
4	-12 V	- 12 volts
5	GND	Ground
6	GND	Ground
7	GND	Ground
8	GND	Ground
9	-5 V	-5 volts
10	+5 V	+ 5 volts Vcc
11	+5 V	+ 5 volts Vcc
12	+5 V	+ 5 volts Vcc

### SOFT-OFF POWER (J9C2)

Pin	Name	Function
1	PS_ON	Remote ON/OFF
2	n/c	no connect
3	PS_COM	Supply presence

### SOFT-OFF SLEEP (J9D1)

Pin	Name
1	SLEEPPU
2	SLEEP
3	PS_ON
4	PS_COMM

### PCI (3.3V) POWER (J9F1)

Pin	Name	Function
1	GND	Ground
2	GND	Ground
3	GND	Ground
4	+3.3 V	+ 3.3 volts
5	+3.3V	+ 3.3 volts
6	+3.3 V	+ 3.3 volts

## FRONT PANEL – (J4A1, J2A1)

### SLEEP/RESUME

Pin	Signal Name
1	Sleep +5 (1K Pullup)
2	Sleep Driver
3	Key

### INFRA-RED

Pin	Signal Name
4	+5V
5	Key
6	IR_RX
7	Ground
8	IR_TX

### CPU FAN

	Signal Name
10	Ground
11	+12V
12	Ground

### SPEAKER CONNECTOR

Pin	Signal Name
14	SPKRHDR
15	Key
16	SPKROUT
17	Ground

### TURBO LED

Pin	Signal Name
1	TURBOPU
2	TURBODRVR

### HARD DRIVE LED (DISK)

Pin	Signal Name
5	+5V
6	Key
7	HD ACTIVE
8	+5V

### POWER LED / KEYLOCK

	Signal Name
10	Ground
11	Key
12	Ground
13	Ground
14	LED Pwr

### RESET CONNECTOR

Pin	Signal Name
16	Ground
17	RESET

## BACK PANEL I/O

### PS/2 KYBD/MOUSE (J8K1, J7K1)

Pin	Signal Name
1	Data
2	No Connect
3	Ground
4	Vcc
5	Clock

### PARALLEL PORT (J3K1)

Signal Name	Pin	Pin	Signal Name
STROBE-	1	14	AUTO FEED-
Data Bit 0	2	15	ERROR-
Data Bit 1	3	16	INIT-
Data Bit 2	4	17	SLCT IN-
Data Bit 3	5	18	Ground
Data Bit 4	6	19	Ground
Data Bit 5	7	20	Ground
Data Bit 6	8	21	Ground
Data Bit 7	9	22	Ground
ACK-	10	23	Ground
BUSY	11	24	Ground
PE (Paper End)	12	25	Ground
SLCT	13	26	N.C.

### SERIAL PORTS (J5K1, J6K1)

Pin	Signal Name
1	DCD
2	Serial In - (SIN)
3	Serial Out - (SOUT)
4	DTR-
5	GND
6	DSR-
7	RTS-
8	CTS-
9	RI

### VIDEO MONITOR PORT (J1K1)

Pin	Signal Name
1	Red
2	Green
3	Blue
4	No Connect
5	Ground
6	Ground
7	Ground
8	Ground
9	No Connect
10	Ground
11	No Connect
12	No Connect
13	Horizontal Sync.
14	Vertical Sync.
15	No Connect

## PERIPHERALS

### IDE CONNECTORS (J9E1, J8E1)

Signal Name	Pin	Pin	Signal Name
Reset IDE	1	2	Ground
Host Data 7	3	4	Host Data 8
Host Data 6	5	6	Host Data 9
Host Data 5	7	8	Host Data 10
Host Data 4	9	10	Host Data 11
Host Data 3	11	12	Host Data 12
Host Data 2	13	14	Host Data 13
Host Data 1	15	16	Host Data 14
Host Data 0	17	18	Host Data 15
Ground	19	20	Key
DDRQ0 (DDRQ1)	21	22	Ground
I/O Write-	23	24	Ground
I/O Read-	25	26	Ground
IOCHRDY	27	28	Vcc pull-up
DDACK0 (DDACK1)-	29	30	Ground
IRQ14 (IRQ15)	31	32	I/O CS16
Addr 1	33	34	N.C.
Addr 0	35	36	Addr 2
Chip Select 1P (1S)-	37	38	Chip Select 3P (3S)-
Activity-	39	40	Ground

### FLOPPY CONNECTOR (J8G1)

Signal Name	Pin	Pin	Signal Name
Ground	1	2	DENSEL
Ground	3	4	Reserved
Key	5	6	FDEDIN
Ground	7	8	Index-
Ground	9	10	Motor Enable A-
Ground	11	12	Drive Select B-
Ground	13	14	Drive Select A-
Ground	15	16	Motor Enable B-
MSEN1	17	18	DIR-
Ground	19	20	STEP-
Ground	21	22	Write Data-
Ground	23	24	Write Gate-
Ground	25	26	Track 00-
MSEN0	27	28	Write Protect-
Ground	29	30	Read Data-
Ground	31	32	Side 1 Select-
Ground	33	34	Diskette Change-

## MULTIMEDIA

### AUDIO I/O CONNECTOR (J9H2)

Signal Name	Pin	Pin	Signal Name
+5 V	1	2	+5 V
JoyStick But0	3	4	JoyStick But2
JoyStick X1	5	6	JoyStick X2
Ground	7	8	MIDI Out
Ground	9	10	JoyStick Y2
JoyStick Y1	11	12	JoyStick But3
JoyStick But1	13	14	MIDI In
+5 V	15	16	Key
Key	17	18	Key
Line Out Right	19	20	Ground
Right Speaker	21	22	Ground
Left Speaker	23	24	Key
Line Out Left	25	26	Ground
Line In Right	27	28	-12 V
Line In Left	29	30	Ground
Mic In	31	32	+12 V
Ground	33	34	Ground

### WAVE TABLE UPGRADE (J9H1)

Pin	Signal Name
1	Wave Right
2	Ground
3	Wave Left
4	Ground
5	Key
6	Ground
7	N.C.
8	MIDI_OUT

### VESA FEATURE CONN. (J1J1)

Signal Name	Pin	Pin	Signal Name
Ground	1	2	Data 0
Ground	3	4	Data 1
Ground	5	6	Data 2
Data enable	7	8	Data 3
Sync enable	9	10	Data 4
PCLK enable	11	12	Data 5
N.C.	13	14	Data 6
Ground	15	16	Data 7
Ground	17	18	PCLK
Ground	19	20	BLANK
Ground	21	22	HSYNC
N.C.	23	24	VSYNC

### CD-ROM AUDIO INTERFACE (J9K1)

Pin	Signal Name
1	Ground
2	CD-Left
3	Ground
4	CD-Right

### MIDI/GAME PORT (AUDIO RISER)

Pin	Signal Name
1	Vcc
2	JSBUT0
3	JSX1R
4	GND
5	GND
6	JSY1R
7	JSBUT1
8	Vcc
9	Vcc
10	JSBUT2
11	JSX2R
12	MIDI-OUT-R
13	JSY2R
14	JSBUT3
15	MIDI-IN-R

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## PCI/ISA RISER (J6F2)

Signal Name	Pin	Pin	Signal Name
IOCHK-	A1	B1	GND
SD7	A2	B2	RSTDRV
SD6	A3	B3	Vcc
SD5	A4	B4	IRQ9
SD4	A5	B5	-5V
SD3	A6	B6	DRQ2
SD2	A7	B7	-12V
SD1	A8	B8	0WS-
SD0	A9	B9	+12V
IOCHRDY	A10	B10	GND
AEN	A11	B11	SMEMW-
SA19	A12	B12	SMEMR-
SA18	A13	B13	IOW-
SA17	A14	B14	IOR-
SA16	A15	B15	DACK3-
SA15	A16	B16	DRQ3
SA14	A17	B17	DACK1-
SA13	A18	B18	DRQ1
SA12	A19	B19	REFRESH-
SA11	A20	B20	SYSCLK
SA10	A21	B21	IRQ7
SA9	A22	B22	IRQ6
SA8	A23	B23	IRQ5
SA7	A24	B24	IRQ4
SA6	A25	B25	IRQ3
SA5	A26	B26	DACK2-
SA4	A27	B27	TC
SA3	A28	B28	BALE
SA2	A29	B29	Vcc
SA1	A30	B30	OSC
SA0	A31	B31	GND
SBHE-	C1	D1	MEMCS16-
LA23	C2	D2	IOCS16-
LA22	C3	D3	IRQ10
LA21	C4	D4	IRQ11
LA20	C5	D5	IRQ12
LA19	C6	D6	IRQ15
LA18	C7	D7	IRQ14
LA17	C8	D8	DACK0-
MEMR-	C9	D9	DRQ0
MEMW-	C10	D10	DACK5-
SD8	C11	D11	DRQ5
SD9	C12	D12	DACK6-
SD10	C13	D13	DRQ6
SD11	C14	D14	DACK7-
SD12	C15	D15	DRQ7
SD13	C16	D16	Vcc
SD14	C17	D17	MASTER-
SD15	C18	D18	GND

Signal Name	Pin	Pin	Signal Name
GND	E1	F1	GND
GND	E2	F2	GND
PCIINT1-	E3	F3	PCIINT3-
PCIINT2-	E4	F4	PCIINT4-
Vcc	E5	F5	Vcc
Key	E6	F6	Key
Vcc	E7	F7	Vcc
PCIRST-	E8	F8	PCLKF
GNT0-	E9	F9	GND
REQ0-	E10	F10	GNT1-
GND	E11	F11	GND
PCLKE	E12	F12	REQ1-
GND	E13	F13	AD31
AD30	E14	F14	AD29
3.3V	E15	F15	3.3V
Key	E16	F16	Key
3.3V	E17	F17	3.3V
AD28	E18	F18	AD27
AD26	E19	F19	AD25
AD24	E20	F20	CBE3-
AD22	E21	F21	AD23
AD20	E22	F22	AD21
AD18	E23	F23	AD19
3.3V	E24	F24	3.3V
Key	E25	F25	Key
3.3V	E26	F26	3.3V
AD16	E27	F27	AD17
FRAME-	E28	F28	IRDY-
CBE2-	E29	F29	DEVSEL-
TRDY-	E30	F30	PLOCK-
STOP-	E31	F31	PERR-
SDONE	G1	H1	SERR-
SBO-	G2	H2	AD15
CBE1-	G3	H3	AD14
PAR	G4	H4	AD12
GND	G5	H5	GND
Key	G6	H6	Key
GND	G7	H7	GND
AD13	G8	H8	AD10
AD11	G9	H9	AD8
AD9	G10	H10	AD7
CBE0-	G11	H11	AD5
AD6	G12	H12	AD3
AD4	G13	H13	AD1
AD2	G14	H14	AD0
Key	G15	H15	Key
Vcc	G16	H16	Vcc
Vcc	G17	H17	Vcc
GND	G18	H18	GND
GND	G19	H19	GND