Advanced/ATX Jumpers and Connectors

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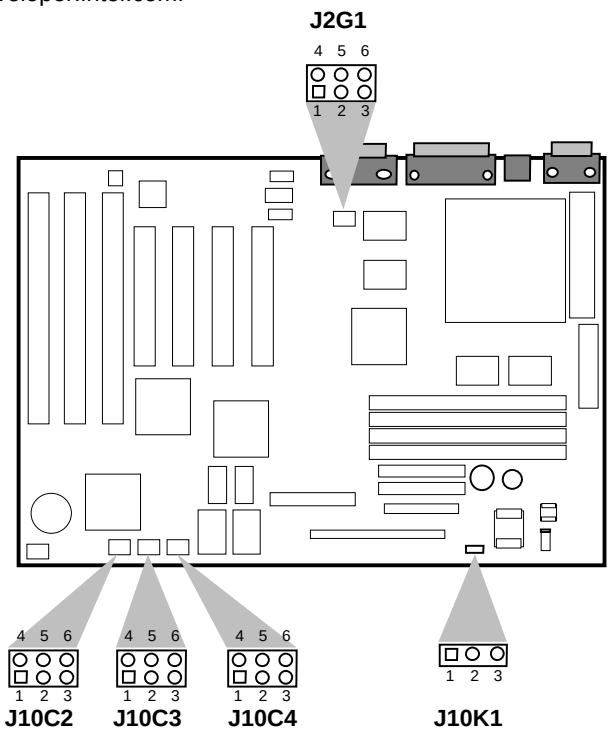


Figure B-1. Jumper locations

EXTERNAL CPU CLOCK SPEED - 50/60/66 MHZ (J2G1)

This jumper block sets the CPU's external operating frequency to memory at 50, 60, or 66 Mhz. Default setting depends on the specific product code and type of Pentium processor installed.

External Bus Freq.	*PCI Bus Freq.*	*Jumpers*
50 MHz	25 MHz	1-2, 5-6
60 MHz	30 MHz	1-2, 4-5
66 MHz	33 MHz	2-3, 5-6
Reserved	na	2-3, 4-5

Table B-1 External Bus Frequency

INTERNAL CPU CLOCK SPEED (J10C2)

These jumpers sets the internal CPU clock speed to either 1.5x, 2x, or 2.5x that of the external CPU clock speed. These jumpers should be configured dependent on the speed of the processor.

CPU Clock Multiplier	*J10C2*
1.5x	2-3,4-5
2.0x	1-2,4-5
2.5x	1-2,5-6
3.0x	2-3,5-6

Table B-2 CPU Clock Multiplier

ISA BUS CLOCK (J10C4)

This jumper changes the clock frequency of the ISA bus. The effect of this jumper on the ISA clock depends upon the setting of the CPU clock speed jumpers. The default setting for this jumper is 2-3. In general, this jumper should only be set to 1-2 if higher ISA performance is required, and the ISA expansion cards can handle the faster

bus clock. (A clock frequency of greater than 8.33 MHz violates the ISA specification, although many ISA cards are designed to support higher clock frequencies.)

Bus Frequency	*Jumper J10C4*	*ISA Bus Speed*
50 MHz	1-2 or 2-3	8.33 MHz
60 MHz	1-2	10 MHz
	2-3	7.5 MHz
66 MHz	1-2	11 MHz
	2-3	8.25 MHz

Table B-3 ISA Bus Clock Speed

The following table summarizes the possible combinations of the clock and bus speed related jumpers.

Processor	*ISA Bus Speed*	*Jumpers*				
		J2G1		*J10C2*		*J10C4*
75 MHz	8.33 MHz	1-2	5-6	2-3	4-5	1-2 or 2-3
90 MHz	10 MHz	1-2	4-5	2-3	4-5	1-2
	7.5 MHz	1-2	4-5	2-3	4-5	2-3
100 MHz	11 MHz	2-3	5-6	2-3	4-5	1-2
	8.25 MHz	2-3	5-6	2-3	4-5	2-3
120 MHz	10 MHz	1-2	4-5	1-2	4-5	1-2
	7.5 MHz	1-2	4-5	1-2	4-5	2-3
133 MHz	11 MHz	2-3	5-6	1-2	4-5	1-2
	8.25 MHz	2-3	5-6	1-2	4-5	2-3
150 MHz	10 MHz	1-2	4-5	1-2	5-6	1-2
	7.5 MHz	1-2	4-5	1-2	5-6	2-3
166 MHz	11 MHz	2-3	5-6	1-2	5-6	1-2
	8.25 MHz	2-3	5-6	1-2	5-6	2-3
200 MHz	11 MHz	2-3	5-6	2-3	5-6	1-2
	8.25 MHz	2-3	5-6	2-3	5-6	2-3

Table B-4 Clock Summary

DISABLE / ENABLE SETUP (J10C4)

Allows access to CMOS Setup Utility to be disabled by jumpering pins 4-5 in J10C4. Default is for access to setup to be enabled, which requires jumpers on 5-6 in J10C4.

CLEAR CMOS (J10C3)

Allows CMOS settings to be reset to default values by jumpering pins 1-2 in J10C3. This will also clear out all plug and play configuration information stored in the ESCD area. The system should then be turned off and the jumper returned to pins 2-3 to restore normal operation.

PASSWORD CLEAR (J10C3)

Allows system password to be cleared by jumpering pins 4-5 in J10C3 and turning the system on. The system should then be turned off and the jumper should be returned to 5-6 in J10C3 to restore normal operation. This procedure should only be done if the user password has been forgotten.

VR / VRE (J10K1)

This jumper block changes the output of the on-board voltage regulator. Pins 2-3 should be jumpered for processors that require standard voltage regulation, pins 1-2 should be jumpered for processors that require the VRE specification. This jumper should not be changed by the user unless changing to a new processor type. Some upgrade processors may require a different setting, check the processor's documentation for the correct setting.

Connectors

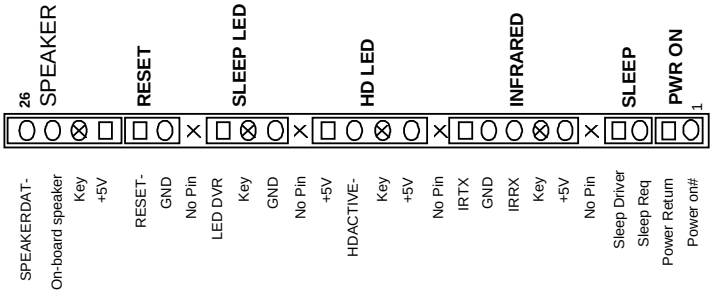
POWER SUPPLY CONNECTOR

PRIMARY POWER (J5M1)

Function	*Name*	*Pin*
+ 3.3 V for PCI slots	3.3 V	11
- 12 volts	-12 V	12
Ground	GND	13
Power Supply remote ON/OFF control	PS-ON*	14
Ground	GND	15
Ground	GND	16
Ground	GND	17
-5 volts	-5 V	18
+ 5 volts Vcc	+5 V	19
+ 5 volts Vcc	+5 V	20

Pin	*Name*	*Function*
1	3.3 V	+ 3.3 V for PCI slots
2	3.3 V	+ 3.3 V for PCI slots
3	GND	Ground
4	+5 V	+ 5 volts Vcc
5	GND	Ground
6	+5 V	+ 5 volts Vcc
7	GND	Ground
8	PWR	Power Good
9	+5	+ 5 volts Stand By for RTC
10	+12 V	+ 12 volts

FRONT PANEL CONNECTORS – (J10H1, J10A1)



SPEAKER CONNECTOR

Pin	*Signal Name*
26	SPKR_DAT
25	Piezo SPKR DAT
24	Key
23	+5V

INFRA-RED

Pin	*Signal Name*
10	IR_TX
9	Ground
8	IR_RX
7	Key
6	+5V

RESET CONNECTOR

Pin	*Signal Name*
22	RESET
21	Ground

SLEEP/RESUME

Pin	*Signal Name*
4	Sleep Pull Up
3	Sleep Req

POWER/SLEEP LED

	Signal Name
19	LED_PWR
18	Key
17	Ground

REMOTE ON/OFF

Pin	*Signal Name*
2	Power Return
1	Power on

HARD DRIVE LED (DISK)

Pin	*Signal Name*
15	+5V
14	HD ACTIVE
13	Key
12	+5V

CARD SLOT FAN POWER (J10A1)

Fast Pin	*Slow Pin*	*Signal Name*
1	4	Ground
2	5	+12 V
3	6	Ground

BACK PANEL CONNECTORS

SERIAL PORTS

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

PS/2 KEYBOARD & MOUSE PORTS

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

VIDEO MONITOR PORT

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	DDC DAT
13	Horizontal Sync.
14	Vertical Sync.
15	DDC Clock

PARALLEL PORT

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		

MIDI/GAME PORT

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

INTERNAL I/O HEADERS

IDE CONNECTORS (J8H1, J8H2)

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	No Connect
Addr 1	33	34	No Connect
Addr 0	35	36	Addr 2
CS 1P (1S)-	37	38	CS 3P (3S)-
Activity-	39	40	Ground

Note: Signals in parenthesis are for the sec. IDE connector.

FLOPPY CONNECTOR (J9G1)

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	Disk Change-

VESA FEATURE CONNECTOR (J8G1)

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
No Connect	13	14	Data 6
Ground	15	16	Data 7
Ground	17	18	PCLK
Ground	19	20	BLANK
Ground	21	22	HSYNC
No Connect	23	24	VSYNC
No Connect	25	26	Ground
key	27	28	key
Ground	29	30	IIC CLK
No Connect	31	32	IIC DAT
EN1	33	34	EN0

CD-ROM AUDIO INTERFACE (J1F1)

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

WAVETABLE UPGRADE INTERFACE (J1F2)

Pin	*Signal Name*
1	Wave Right
2	Ground
3	Wave Left
4	Ground
5	No Connect
6	Ground
7	No Connect
8	MIDI_OUT

VOICE MODEM AUDIO INTERFACE (J1F3)

Pin	*Signal Name*
1	Ground
2	Tel In
3	Ground
4	Tel Out

EXPANSION CARD CONNECTORS

ISA CONNECTORS

Signal Name	*Pin*	*Pin*	*Signal Name*
GND	B1	A1	IOCHK-
RSTDRV	B2	A2	SD7
Vcc	B3	A3	SD6
IRQ9	B4	A4	SD5
-5V	B5	A5	SD4
DRQ2	B6	A6	SD3
-12V	B7	A7	SD2
0WS-	B8	A8	SD1
+12V	B9	A9	SD0
GND	B10	A10	IOCHRDY
SMEMW-	B11	A11	AEN
SMEMR-	B12	A12	SA19
IOW-	B13	A13	SA18
IOR-	B14	A14	SA17
DACK3-	B15	A15	SA16
DRQ3	B16	A16	SA15
DACK1-	B17	A17	SA14
DRQ1	B18	A18	SA13
REFRESH-	B19	A19	SA12
SYSCLK	B20	A20	SA11
IRQ7	B21	A21	SA10
IRQ6	B22	A22	SA9
IRQ5	B23	A23	SA8
IRQ4	B24	A24	SA7
IRQ3	B25	A25	SA6

Signal Name	*Pin*	*Pin*	*Signal Name*
DACK2-	B26	A26	SA5
TC	B27	A27	SA4
BALE	B28	A28	SA3
Vcc	B29	A29	SA2
OSC	B30	A30	SA1
GND	B31	A31	SA0
	KEY	KEY	
MEMCS16-	D1	C1	SBHE-
IOCS16-	D2	C2	LA23
IRQ10	D3	C3	LA22
IRQ11	D4	C4	LA21
IRQ12	D5	C5	LA20
IRQ15	D6	C6	LA19
IRQ14	D7	C7	LA18
DACK0-	D8	C8	LA17
DRQ0	D9	C9	MEMR-
DACK5-	D10	C10	MEMW-
DRQ5	D11	C11	SD8
DACK6-	D12	C12	SD9
DRQ6	D13	C13	SD10
DACK7-	D14	C14	SD11
DRQ7	D15	C15	SD12
Vcc	D16	C16	SD13
Master-	D17	C17	SD14
GND	D18	C18	SD15

PCI CONNECTORS

Signal Name	*Pin*	*Pin*	*Signal Name*
TRST- (Vcc)	A1	B1	-12V
+12V	A2	B2	TCK
TMS (Vcc)	A3	B3	GND
TDI (Vcc)	A4	B4	TDO (No Connect)
Vcc	A5	B5	Vcc
PCIINTA-	A6	B6	Vcc
PCIINTC-	A7	B7	PCIINTB-
Vcc	A8	B8	PCIINTD-
Reserved	A9	B9	PRSNT1- (No Connect)
Vcc	A10	B10	Reserved
Reserved	A11	B11	PRSNT2- (No Connect)
GND	A12	B12	GND
GND	A13	B13	GND
Reserved	A14	B14	Reserved
SPCIRST-	A15	B15	GND
Vcc	A16	B16	PCLKE
AGNT-	A17	B17	GND
GND	A18	B18	REQA-
Reserved	A19	B19	Vcc
AD30	A20	B20	AD31
3.3V	A21	B21	AD29
AD28	A22	B22	GND
AD26	A23	B23	AD27
GND	A24	B24	AD25
AD24	A25	B25	3.3V
IDSEL	A26	B26	CBE3-
3.3V	A27	B27	AD23
AD22	A28	B28	GND
AD20	A29	B29	AD21
GND	A30	B30	AD19
AD18	A31	B31	3.3V

Signal Name	*Pin*	*Pin*	*Signal Name*
AD16	A32	B32	AD17
3.3V	A33	B33	CBE2-
FRAME-	A34	B34	GND
GND	A35	B35	IRDY-
TRDY-	A32	B32	3.3V
GND	A37	B37	DEVSEL-
STOP-	A38	B38	GND
3.3V	A39	B39	PLOCK-
SDONE	A40	B40	PERR-
SBO-	A41	B41	3.3V
GND	A42	B42	SERR-
PAR	A43	B43	3.3V
AD15	A44	B44	CBE1-
3.3V	A45	B45	AD14
AD13	A46	B46	GND
AD11	A47	B47	AD12
GND	A48	B48	AD10
AD9	A49	B49	GND
KEY	A50	B50	KEY
KEY	A51	B51	KEY
CBEO-	A52	B52	AD8
3.3V	A53	B53	AD7
AD6	A54	B54	3.3V
AD4	A55	B55	AD5
GND	A56	B56	AD3
AD2	A57	B57	GND
AD0	A58	B58	AD1
Vcc	A59	B59	Vcc
SREQ64-	A60	B60	SACK64-
Vcc	A61	B61	Vcc
Vcc	A62	B62	Vcc