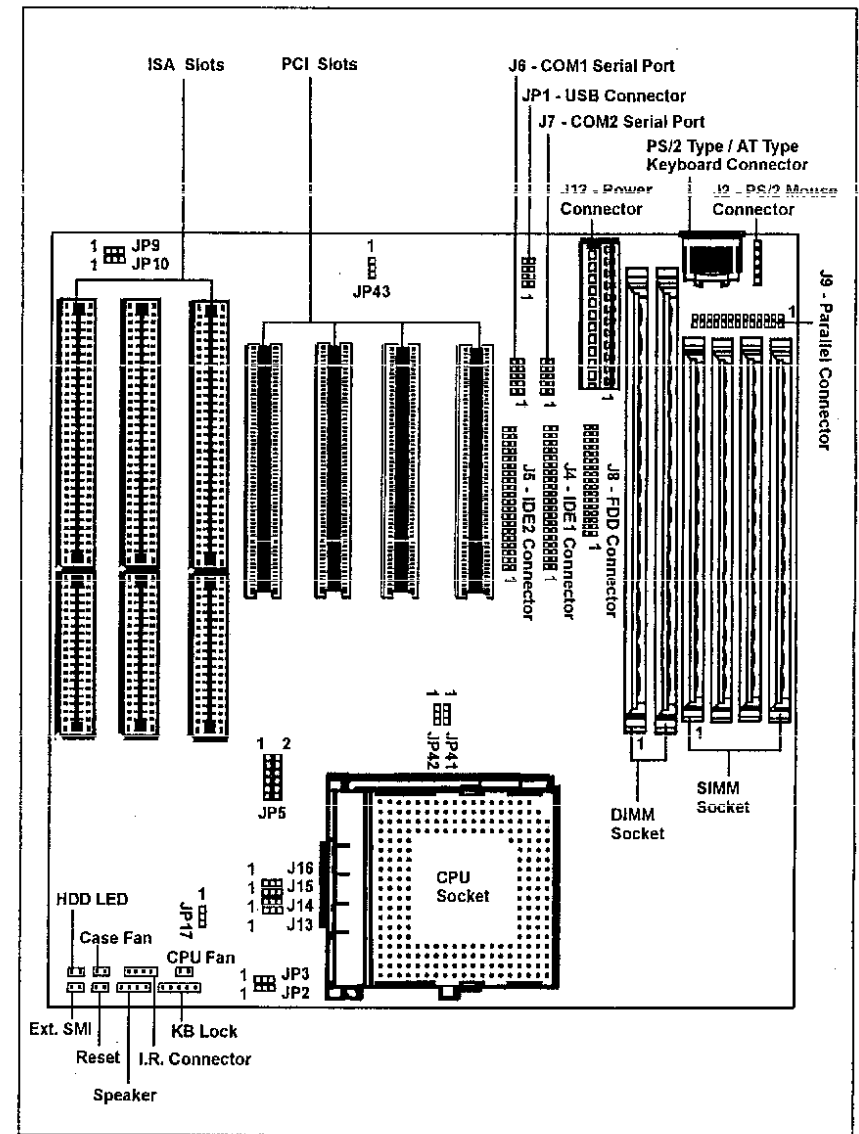


# MB520NH 35-8320-01

## Motherboard Layout

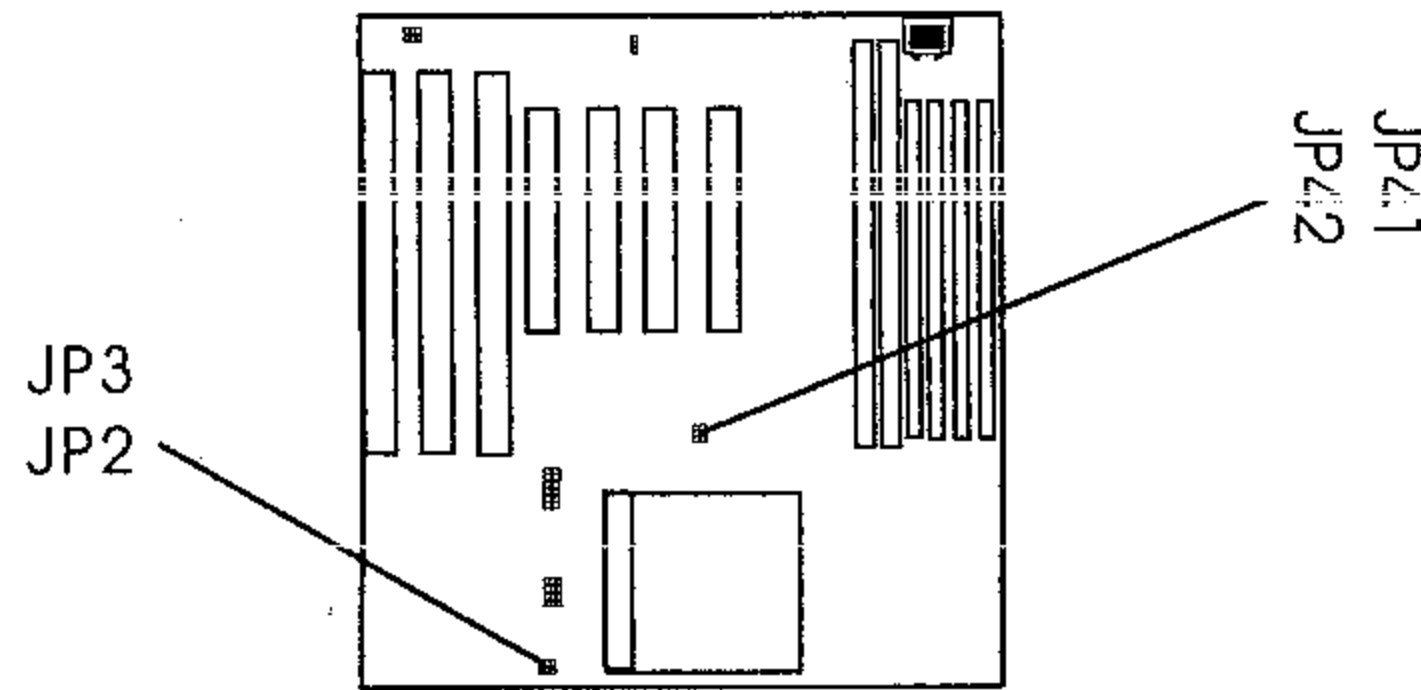
The following diagrams show the relative positions of the jumpers, connectors, major components and banks on the motherboard.



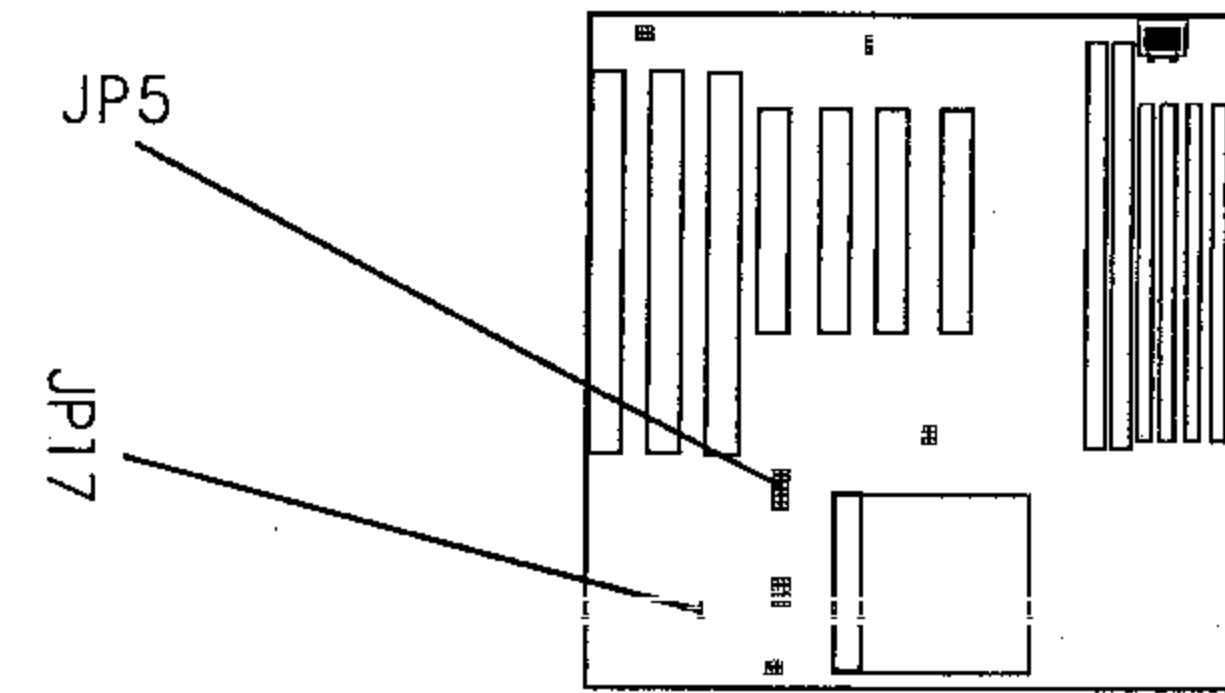
## Jumper Settings

This chapter explains how to configure the motherboard's hardware. Before using your computer, make sure all jumpers and DRAM modules are set correctly. Refer to this chapter whenever in doubt.

### JP2, JP3, JP41, JP42 - CPU Type Selection



	CPU Type & Speed	Bus Clock	JP41	JP42	JP2	JP3
	Intel Pentium-75	50MHz	2-3	2-3	1-2	1-2
	Intel Pentium-90	60MHz	1-2	2-3	1-2	1-2
K6 -233	Intel Pentium-100 / 233	66MHz	1-2	1-2	1-2	1-2
	Intel Pentium-120	60MHz	1-2	2-3	1-2	2-3
	Intel Pentium-133	66MHz	1-2	1-2	1-2	2-3
	Intel Pentium-150	60MHz	1-2	2-3	2-3	2-3
K6 -166	Intel Pentium-166	66MHz	1-2	1-2	2-3	2-3
	Intel Pentium-180	60MHz	1-2	2-3	2-3	1-2
K6 -200	Intel Pentium-200	66MHz	1-2	1-2	2-3	1-2
	Cyrix 6x86-P120+ 100MHz	50MHz	2-3	2-3	1-2	2-3
	Cyrix 6x86-P133+ 110MHz	55MHz	2-3	1-2	1-2	2-3
	Cyrix 6x86-P150+ 120MHz	60MHz	1-2	2-3	1-2	2-3
	Cyrix 6x86-P166+ 133MHz	66MHz	1-2	1-2	1-2	2-3
	Cyrix 6x86-P200+ 150MHz	50MHz	2-3	2-3	1-2	1-2
	AMD-K5-PR75	50MHz	2-3	2-3	1-2	1-2
	AMD-K5-PR90	60MHz	1-2	2-3	1-2	1-2
	AMD-K5-PR100	66MHz	1-2	1-2	1-2	1-2
	AMD-K5-PR120	60MHz	1-2	2-3	1-2	1-2
	AMD-K5-PR133	66MHz	1-2	1-2	1-2	1-2
	AMD-K5-PR150	60MHz	1-2	2-3	2-3	2-3
	AMD-K5-PR166	66MHz	1-2	1-2	2-3	2-3
	AMD-K5-PR200	66MHz	1-2	1-2	2-3	1-2



### JP5 - CPU Core-Voltage Select

JP5	Core Voltage	CPU Examples
1-2	2.50V	AMD K5 ("K" marking)
3-4	2.70V	AMD K5 ("J" marking)
5-6	2.80V	Intel P55C or Cyrix 6x86L
7-8	2.93V	AMD K5 ("H" marking)
9-10	3.38V	AMD K5 ("C" or "F" marking)
11-12*	3.52V	Intel P54C or AMD K5 ("B" marking) or Cyrix 6x86

Note: Cyrix 6x86 is a single-voltage CPU while Cyrix 6x86L is a dual-voltage version.

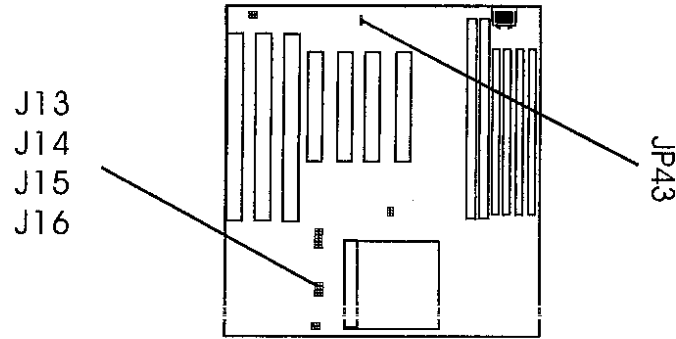
### JP17 - CPU Bus-Voltage Select

JP17	Bus-Voltage	CPU Examples
1-2*	3.52V	Intel P55C
2-3	3.38V	AMD K5 ("H", "J", "K" marking) or Cyrix 6x86L

For Intel P54C, Cyrix 6x86 and AMD K5 ("B", "C", "F" marking), JP17 is NOT used. Simply set JP17 to 1-2.

### JP9, JP10 - Reserved Jumpers

Reserved jumpers are pre-installed in factory. They should NOT be altered by the users.



**J13, J14, J15, J16 - Power Selection for the CPU Bus Section**

J13, J14, J15, J16	CPU
2-3	Intel P54C
1-2	Intel P55C
2-3	Cyrix 6x86
1-2	Cyrix 6x86L
2-3	AMD K5 ("B", "C", "F" marking)
1-2	AMD K5 ("H", "J", "K" marking)

Remark: Example of AMD marking : "AMD-K5-PR100ABQ"

In the above tables, the AMD marking refers to the 2nd character - (B in the example) after P-rating (PR100 in the example).

**JP43 - CMOS Clear**

JP43	CMOS
2-3	Normal operation
1-2	Clear

**Memory Configuration**

Table 1 and 2 show the possible memory combinations. The motherboard will support both Fast Page DRAM or EDO DRAM SIMMs and SDRAM DIMMs

**Notice:**

1. Don't mix the Fast Page DRAM and EDO DRAM within the same memory bank. If Fast Page DRAM and EDO DRAM SIMMs are installed in separate banks, each bank will be optimized for maximum performance.
2. Never populate the DIMM sockets and the SIMM sockets at the same time.

**Table 1 (SIMM Configurations)**

SIMM1 (Bank 0)	SIMM2 (Bank 0)	SIMM3 (Bank 1)	SIMM4 (Bank 1)	Total
Empty	Empty	4MB	4MB	8MB
Empty	Empty	8MB	8MB	16MB
Empty	Empty	16MB	16MB	32MB
Empty	Empty	32MB	32MB	64MB
4MB	4MB	Empty	Empty	8MB
4MB	4MB	4MB	4MB	16MB
4MB	4MB	8MB	8MB	24MB
4MB	4MB	16MB	16MB	40MB
4MB	4MB	32MB	32MB	72MB
8MB	8MB	Empty	Empty	16MB
8MB	8MB	4MB	4MB	24MB
8MB	8MB	8MB	8MB	32MB
8MB	8MB	16MB	16MB	48MB
8MB	8MB	32MB	32MB	80MB
16MB	16MB	Empty	Empty	32MB
16MB	16MB	4MB	4MB	40MB
16MB	16MB	8MB	8MB	48MB
16MB	16MB	16MB	16MB	64MB
16MB	16MB	32MB	32MB	96MB
32MB	32MB	Empty	Empty	64MB
32MB	32MB	4MB	4MB	72MB
32MB	32MB	8MB	8MB	80MB
32MB	32MB	16MB	16MB	96MB
32MB	32MB	32MB	32MB	128MB

**Table 2 (DIMM Configurations)**

DIMM1	DIMM2	Total
8MB	None	8MB
8MB	8MB	16MB
8MB	16MB	24MB
8MB	32MB	40MB
None	8MB	8MB
16MB	8MB	24MB
32MB	8MB	40MB
16MB	None	16MB
16MB	16MB	32MB
16MB	32MB	48MB
None	16MB	16MB
32MB	16MB	48MB
32MB	None	32MB
32MB	32MB	64MB
None	32MB	32MB