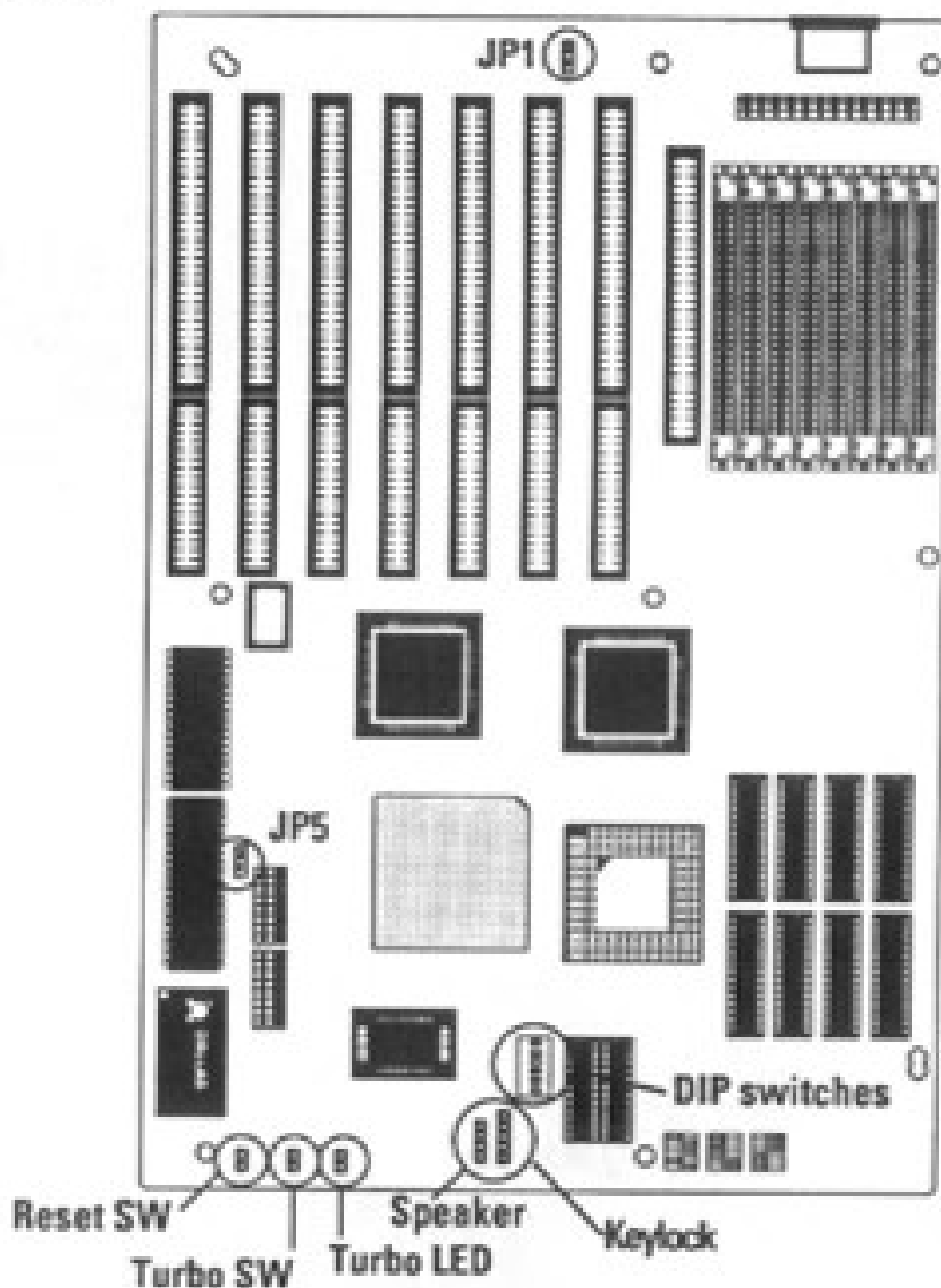# ISA-486S User's Manual

There are two user-adjustable jumpers on the main board: JP1 and JP5. See the locations of these and the system case feature connectors marked on the diagram below.

Jumper and connecctor locations

JP1

JP5

DIP switches

Reset SW

Turbo SW

Turbo LED

Speaker

Keylock

Power Good Source Selector Jumper JP1

Jumper JP1 selects the type of "Power Good" signal used. An on-board or an external power supply "Power Good" signal can be selected. The default setting is "EXT" for an external "Power Good" signal.

You should leave JP1 on the default setting unless you know your power supply doesn't generate a "power good" signal.

Video Display Selector Jumper JP5

Jumper JP5 selects the type of video display you are using. The choices are between "CGA" and "MONO". "CGA" is only for a CGA display. "MONO" is for all other displays including EGA, VGA and MONO. The default setting is "MONO".
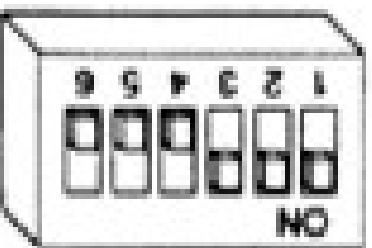
Remember : The MONO setting is for all color or monochrome display cards except CGA .
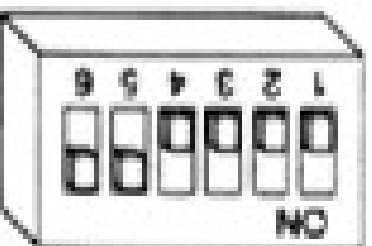
The CPU Selector Switch

SW1 is a bank of six small DIP switches which allow the ISA-486S Mainboard to be used with a variety of CPU's. Follow the diagrams printed in the lower right corner of the board to determine the proper arrangement for the CPU you are using.
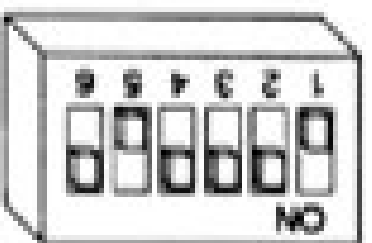
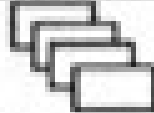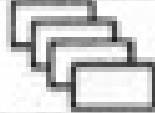CPU Selection
switches

486DX-25/33
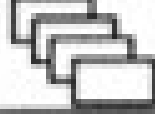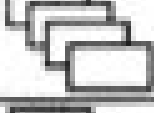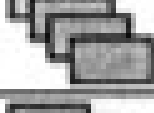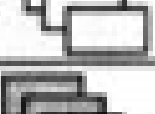
486SX-25/20

487SX-25/20

Set the switches according to which CPU is installed on the board.

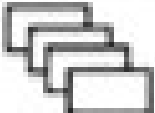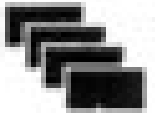| Total Memory	On board		On card		Total Memory
	Bank 0	Bank 1	Bank 2	Bank 3	
1MB*	Four 256K SIMMs	o	Four 256K SIMMs		1MB
2MB*	Four 256K SIMMs	Four 256K SIMMs	Four 256K SIMMs	Four 256K SIMMs	2MB
5MB	Four 256K SIMMs	Four 1MB SIMMs	Four 1MB SIMMs		4MB
17MB	Four 256K SIMMs	Four 4MB SIMMs	Four 1MB SIMMs	Four 1MB SIMMs	8MB
4MB*	Four 1MB SIMMs	o	Four 4MB SIMMs		16MB
5MB	Four 1MB SIMMs	Four 256K SIMMs	Four 4MB SIMMs	Four 4MB SIMMs	32MB*
8MB*	Four 1MB SIMMs	Four 1MB SIMMs			
20MB	Four 1MB SIMMs	Four 4MB SIMMs			
16MB*	Four 4MB SIMMs	o			
17MB	Four 4MB SIMMs	Four 256K SIMMs			
20MB	Four 4MB SIMMs	Four 1MB SIMMs			
32MB*	Four 4MB SIMMs	Four 4MB SIMMs			

Note:
Combined Memory Total =
Bank 0/1 total + Bank 2/3 total

* Common memory configurations.

o No memory in Banks 2/3

IMPORTANT!:
With four banks installed, the SIMMs in Banks 2 & 3 must be the same size.

Four 256K SIMMs = 1MB   Four 1MB SIMMs = 4MB   Four 4MB SIMMs = 16MB

Cache SRAM specifications and settings

(1) 64KB Cache RAM
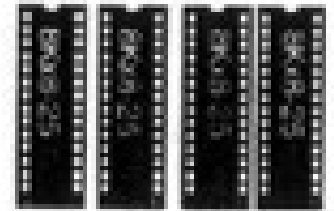
Select 64KB cache RAM size
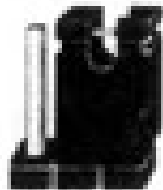
256K CJ1
128K CJP
64K CJB

| Zero Ohm | Zero Ohm |

3

CJB

TP7

2-3: 2-1-1-1 64K/ 256K

1 2 3

Bank 0, Bank 1
all insert
8Kx8-25
SRAM 8 pieces

U28 U27

Insert 8Kx8-25
SRAM one piece
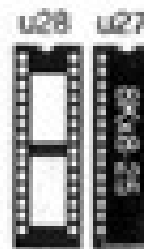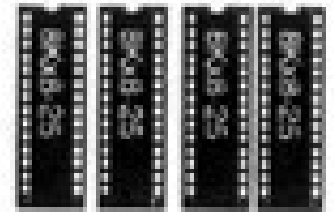
Tag RAM

(2) 128KB Cache RAM

select 128KB cache RAM size

256K CJ1
128K CJP
64K CJB

| Zero Ohm | Zero Ohm |

3

CJB

TP7

1-2: 3-2-2-2 128K

1 2 3

Bank 0 insert
32Kx8-25 SRAM
4 pieces

U28 U27
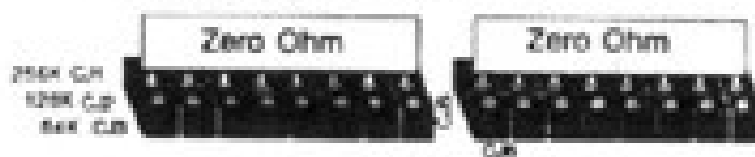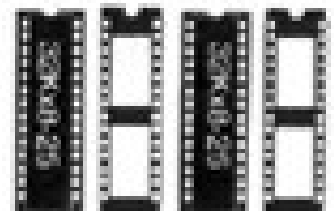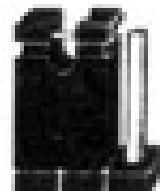
Insert 8Kx8-25
SRAM one piece
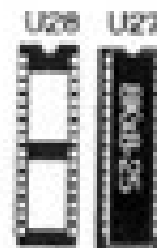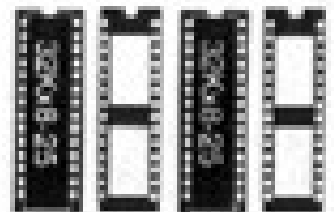
Tag RAM

(3) 256KB Cache RAM

select 256KB cache RAM size

256K CJ1
128K CJP
64K CJB

| Zero Ohm | Zero Ohm |

3

CJB

TP7

2-3: 2-1-1-1 64K/ 256K

1 2 3

Bank 0, Bank 1
all insert
32Kx8-25
SRAM 8 pieces

U28 U27
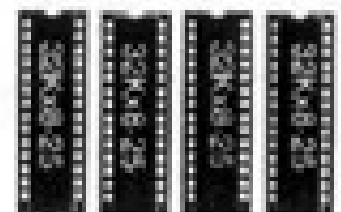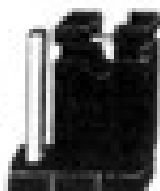
Insert 8Kx8-25
SRAM two pieces

(or Insert 32KB-25 SRAM
one piece in U27)

Tag RAM

Note: For Rev 1.4 or earlier version please refer to the last page.

Cache SRAM specifications and settings

(For Rev 1.4 or earlier version)

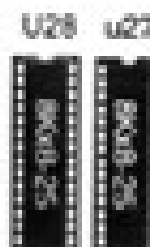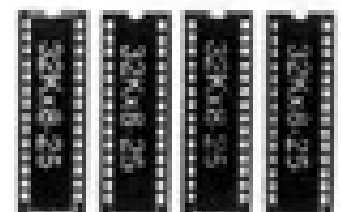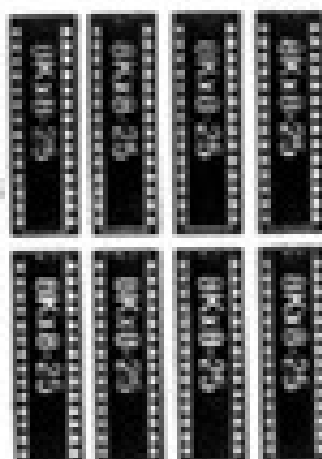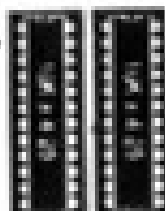Jumper Setting

Bank 0 Bank 1
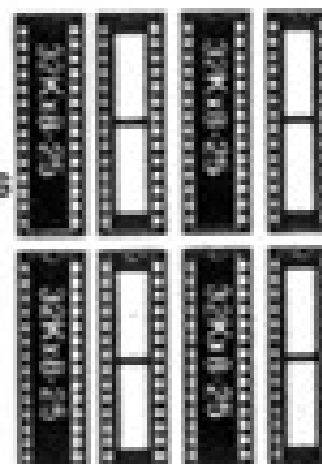all insert
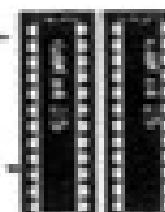8Kx8-25
SRAM 8 Pieces

Insert 16Kx4-25 SRAM —

Tag RAM

Cache RAM

Bank 0
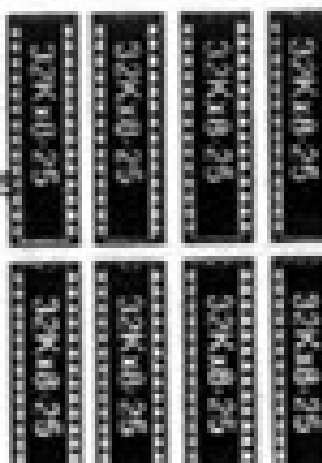insert
32Kx8-25
SRAM 4 Pieces
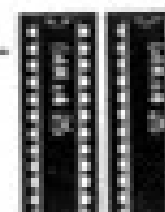
Insert 64Kx4-25 SRAM —

Tag RAM

Cache RAM

Bank 0 Bank 1
insert
32Kx8-25
SRAM 8 Pieces

Insert 64Kx4-25 SRAM —

Tag RAM

Cache RAM