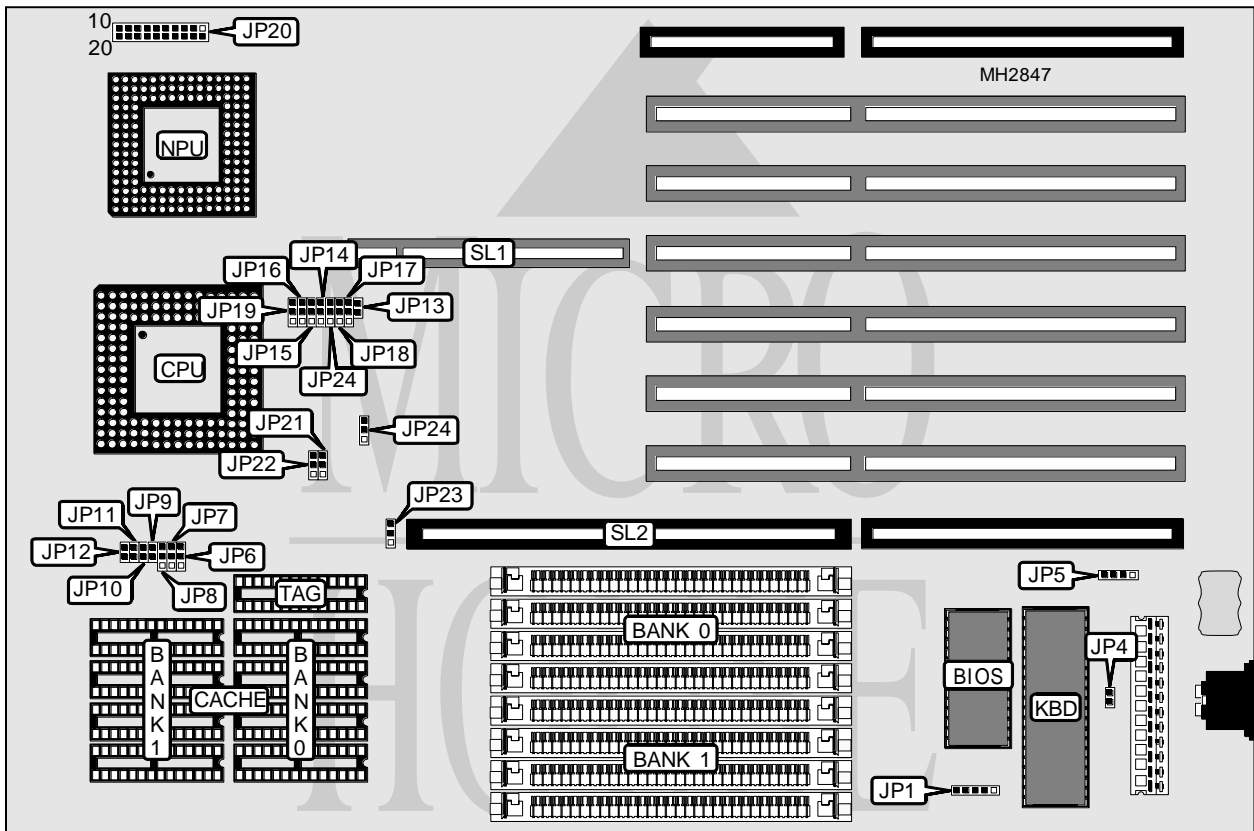


MICRO-STAR INTERNATIONAL CO., LTD.

MS-4116 VER. 2.0

Processor	80486SX/80487SX/80486DX/80486DX2
Processor Speed	25/33/50(internal)/50/66(internal)MHz
Chip Set	Unidentified
Max. Onboard DRAM	128MB
Cache	64/128/256KB
BIOS	Unidentified
Dimensions	330mm x 218mm
I/O Options	32-bit external memory card, 32-bit VESA local bus slot
NPU Options	4167



CONNECTIONS			
Purpose	Location	Purpose	Location
Auxiliary keyboard connector	JP1	Turbo switch	JP20 pins 15 - 17
External battery	JP5	Reset switch	JP20 pins 19 & 20
Power LED & keylock	JP20 pins 1 - 5	32-bit VESA local bus slot	SL1
Speaker	JP20 pins 7 - 10	32-bit external memory card	SL2
Turbo LED	JP20 pins 12 & 13		

Continued on next page...

MICRO-STAR INTERNATIONAL CO., LTD.
MS - 4116 VER. 2.0

... continued from previous page

USER CONFIGURABLE SETTINGS		
Function	Jumper	Position
í Monitor type select color	JP4	Closed
Monitor type select monochrome	JP4	Open
í Battery type select internal	JP5	pins 2 & 3 closed
Battery type select external	JP5	Closed
í Factory configured - do not alter	JP14	pins 2 & 3 closed
í Factory configured - do not alter	JP15	pins 2 & 3 closed
í Factory configured - do not alter	JP16	pins 2 & 3 closed
í Factory configured - do not alter	JP21	N/A
í Factory configured - do not alter	JP22	N/A
í Factory configured - do not alter	JP23	N/A
í Factory configured - do not alter	JP24	N/A

DRAM CONFIGURATION		
Size	Bank 0	Bank 1
1MB	(4) 256K x 9	NONE
2MB	(4) 256K x 9	(4) 256K x 9
4MB	(4) 1M x 9	NONE
5MB	(4) 256K x 9	(4) 1M x 9
8MB	(4) 1M x 9	(4) 1M x 9
16MB	(4) 4M x 9	NONE
17MB	(4) 256K x 9	(4) 4M x 9
20MB	(4) 1M x 9	(4) 4M x 9
32MB	(4) 4M x 9	(4) 4M x 9
64MB	(4) 16M x 9	NONE

Note: In order to use 128MB, an external memory card must be installed. It uses the same configuration as above.

CACHE CONFIGURATION			
Size	Bank 0	Bank 1	TAG
64KB	(4) 8K x 8	(4) 8K x 8	(1) 8K x 8
128KB	(4) 32K x 8	NONE	(1) 8K x 8
256KB	(4) 32K x 8	(4) 32K x 8	(1) 32K x 8

CACHE JUMPER CONFIGURATION							
Size	JP6	JP7	JP8	JP9	JP10	JP11	JP12
64KB	1 & 2	1 & 2	2 & 3	Open	Open	Open	Open
128KB	1 & 2	2 & 3	2 & 3	Closed	Open	Closed	Open
256KB	2 & 3	2 & 3	2 & 3	Closed	Closed	Closed	Closed

Note: Pins designated should be in the closed position.

Continued on next page...

MICRO-STAR INTERNATIONAL CO., LTD.
MS-4116 VER. 2.0

... continued from previous page

CPU TYPE CONFIGURATION			
Type	JP13	JP17	JP18
80486SX	Open	pins 2 & 3 closed	Open
80487SX	Closed	pins 1 & 2 closed	pins 2 & 3 closed
80486DX	Closed	pins 1 & 2 closed	pins 1 & 2 closed
80486DX2	Closed	pins 1 & 2 closed	pins 1 & 2 closed

CPU SPEED CONFIGURATION	
Speed	JP24
25MHz	pins 2 & 3 closed
33MHz	pins 2 & 3 closed
50iMHz	pins 2 & 3 closed
50MHz	pins 1 & 2 closed
66iMHz	pins 2 & 3 closed

BUS SPEED CONFIGURATION	
CPU speed	JP19
<= 33MHz	pins 2 & 3 closed
> 33MHz	pins 1 & 2 closed