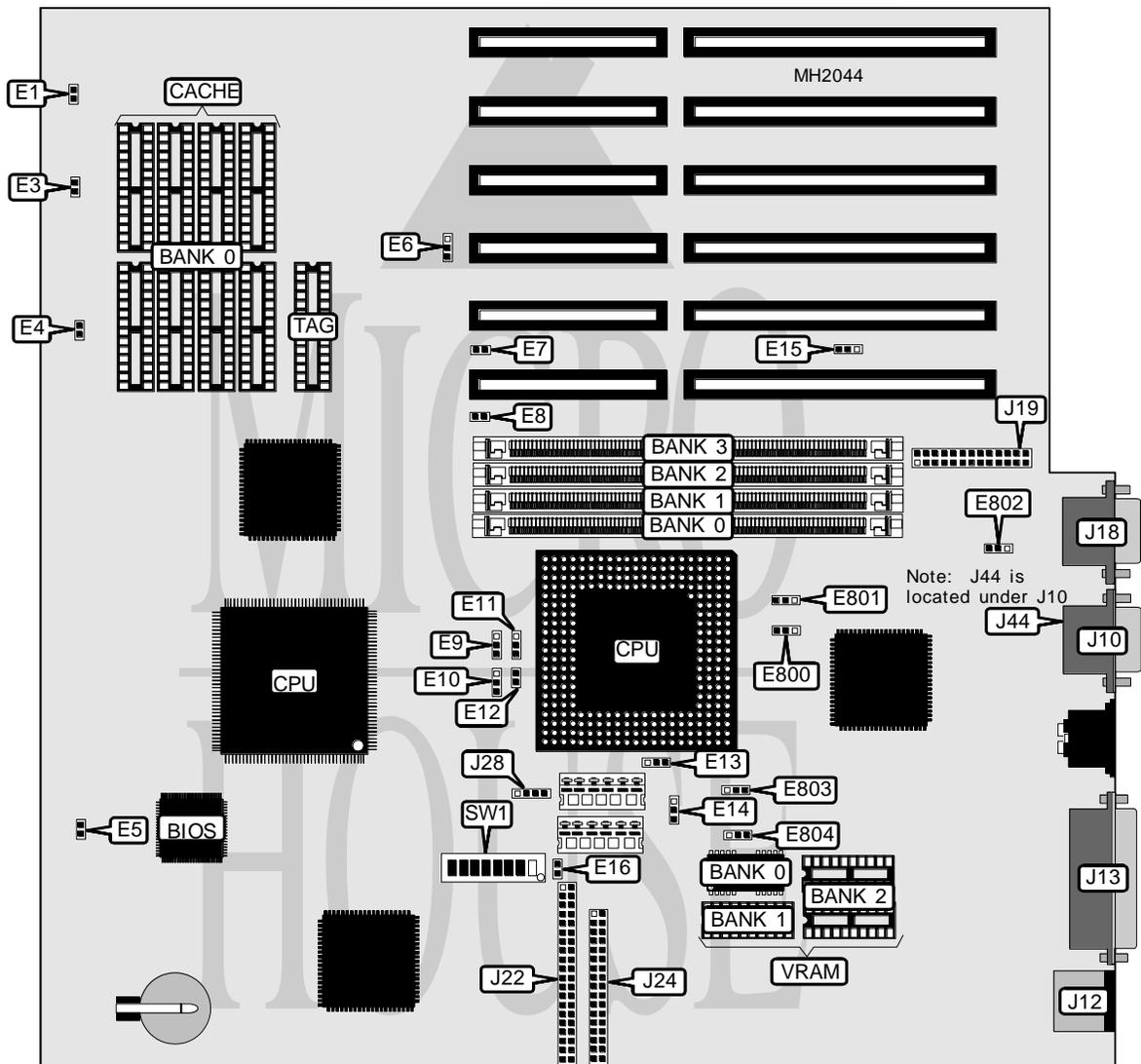


# AST RESEARCH, INC. BRAVO MT (20528-XXX)

<b>Processor</b>	80486SX/80487SX/80486DX/ODP486SX/80486DX2/Pentium Overdrive
<b>Processor Speed</b>	25/33/50(internal)/66(internal)MHz
<b>Chip Set</b>	AST
<b>Max. Onboard DRAM</b>	64MB
<b>Cache</b>	64/256KB
<b>BIOS</b>	AST
<b>Dimensions</b>	330mm x 218mm
<b>I/O Options</b>	Floppy drive interface, IDE interface, parallel port, PS/2 mouse port, serial ports (2), VGA feature connector, VGA port
<b>NPU Options</b>	None



Continued next page...

**AST RESEARCH, INC.**  
**BRAVO MT (20528-XXX)**

... continued from previous page.

CONNECTIONS			
Purpose	Location	Purpose	Location
Power LED & keylock	E1	VGA port	J18
Reset switch	E3	VGA feature connector	J19
IDE interface LED	E4	IDE interface	J22
PS/2 mouse port	J12	Floppy drive interface	J24
Parallel port	J13	Chassis fan power	J28
Serial ports (2)	J10 & J44		
Note: Serial port J44 is located under J10.			

USER CONFIGURABLE SETTINGS		
Function	Jumper/Switch	Position
í CMOS memory normal operation	E5	Open
CMOS memory clear	E5	Closed
í Factory configured - do not alter	E14	pins 1 & 2 closed
í Parallel port IRQ select IRQ7	E15	pins 1 & 2 closed
Parallel port IRQ select IRQ5	E15	pins 2 & 3 closed
í Factory configured - do not alter	E800	pins 1 & 2 closed
í Factory configured - do not alter	E801	pins 2 & 3 closed
í Power management enabled	E802	pins 1 & 2 closed
Power management disabled	E802	pins 2 & 3 closed
í Factory configured - do not alter	E803	pins 1 & 2 closed
í Factory configured - do not alter	E804	pins 1 & 2 closed
í On board video enabled	SW1/1	Off
On board video disabled	SW1/1	On
í POST type select normal	SW1/2	Off
POST type select test loop	SW1/2	On
í Boot type select normal	SW1/3	Off
Boot type select flash BIOS update	SW1/3	On
í Password enabled	SW1/4	Off
Password disabled	SW1/4	On
í Monitor type select color	SW1/5	On
Monitor type select monochrome	SW1/5	Off
í Factory configured - do not alter	SW1/6	Off
í Factory configured - do not alter	SW1/7	Off
í System setup type select allow access	SW1/8	Off
System setup type select deny access	SW1/8	On

Continued next page...

# AST RESEARCH, INC.

## BRAVO MT (20528-XXX)

... continued from previous page.

DRAM CONFIGURATION				
Size	Bank 0	Bank 1	Bank 2	Bank 3
1MB	(1) 256K x 36	NONE	NONE	NONE
2MB	(1) 256K x 36	(1) 256K x 36	NONE	NONE
3MB	(1) 256K x 36	(1) 256K x 36	(1) 256K x 36	NONE
4MB	(1) 256K x 36			
4MB	(1) 1M x 36	NONE	NONE	NONE
5MB	(1) 1M x 36	(1) 256K x 36	NONE	NONE
6MB	(1) 1M x 36	(1) 256K x 36	(1) 256K x 36	NONE
7MB	(1) 1M x 36	(1) 256K x 36	(1) 256K x 36	(1) 256K x 36
8MB	(1) 1M x 36	(1) 1M x 36	NONE	NONE
9MB	(1) 1M x 36	(1) 1M x 36	(1) 256K x 36	NONE
10MB	(1) 1M x 36	(1) 1M x 36	(1) 256K x 36	(1) 256K x 36
12MB	(1) 1M x 36	(1) 1M x 36	(1) 1M x 36	NONE
13MB	(1) 1M x 36	(1) 1M x 36	(1) 1M x 36	(1) 256K x 36
16MB	(1) 1M x 36			
16MB	(1) 4M x 36	NONE	NONE	NONE
17MB	(1) 4M x 36	(1) 256K x 36	NONE	NONE
18MB	(1) 4M x 36	(1) 256K x 36	(1) 256K x 36	NONE
19MB	(1) 4M x 36	(1) 256K x 36	(1) 256K x 36	(1) 256K x 36
20MB	(1) 4M x 36	(1) 1M x 36	NONE	NONE
21MB	(1) 4M x 36	(1) 1M x 36	(1) 256K x 36	NONE
22MB	(1) 4M x 36	(1) 1M x 36	(1) 256K x 36	(1) 256K x 36
24MB	(1) 4M x 36	(1) 1M x 36	(1) 1M x 36	NONE
25MB	(1) 4M x 36	(1) 1M x 36	(1) 1M x 36	(1) 256K x 36
28MB	(1) 4M x 36	(1) 1M x 36	(1) 1M x 36	(1) 1M x 36
32MB	(1) 4M x 36	(1) 4M x 36	NONE	NONE
33MB	(1) 4M x 36	(1) 4M x 36	(1) 256K x 36	NONE
34MB	(1) 4M x 36	(1) 4M x 36	(1) 256K x 36	(1) 256K x 36
36MB	(1) 4M x 36	(1) 4M x 36	(1) 1M x 36	NONE
37MB	(1) 4M x 36	(1) 4M x 36	(1) 1M x 36	(1) 256K x 36
40MB	(1) 4M x 36	(1) 4M x 36	(1) 1M x 36	(1) 1M x 36
48MB	(1) 4M x 36	(1) 4M x 36	(1) 4M x 36	NONE
49MB	(1) 4M x 36	(1) 4M x 36	(1) 4M x 36	(1) 256K x 36
52MB	(1) 4M x 36	(1) 4M x 36	(1) 4M x 36	(1) 1M x 36
64MB	(1) 4M x 36			

CACHE CONFIGURATION		
Size	Bank 0	TAG
64KB	(8) 8K x 8	(1) 8K x 8
256KB	(8) 32K x 8	(1) 32K x 8

CACHE JUMPER CONFIGURATION			
Size	E6	E7	E8
64KB	pins 1 & 2 closed	Open	Open
256KB	pins 2 & 3 closed	Closed	Closed

Note: Some later versions have omitted jumper E6.

**AST RESEARCH, INC.**  
**BRAVO MT (202528-XXX)**

... continued from previous page.

CPU UPGRADE CONFIGURATION					
Type	E9	E10	E11	E12	E13
None	N/A	N/A	N/A	N/A	2 & 3
80486SX	Open	2 & 3	2 & 3	2 & 3	1 & 2
80487SX	Closed	1 & 2	1 & 2	2 & 3	1 & 2
80486DX/DX2	Closed	2 & 3	1 & 2	2 & 3	2 & 3
Overdrive (ODPR)	Closed	2 & 3	1 & 2	2 & 3	1 & 2
Overdrive (ODP)	Closed	1 & 2	1 & 2	2 & 3	2 & 3
Overdrive (P24T)	Closed	1 & 2	1 & 2	1 & 2	2 & 3

Note: Pins designated should be in the closed position.

CPU SPEED CONFIGURATION	
Speed	E16
25MHz	Open
33MHz	Closed
50iMHz	Open
66iMHz	Closed

VIDEO MEMORY CONFIGURATION			
Size	Bank 0	Bank 1	Bank 2
512KB	(1) 256K x 16	NONE	NONE
1MB	(1) 256K x 16	(1) 256K x 16	NONE
2MB	(1) 256K x 16	(1) 256K x 16	(2) 256K x 16

Note: Bank 0 is factory installed and is not configurable.