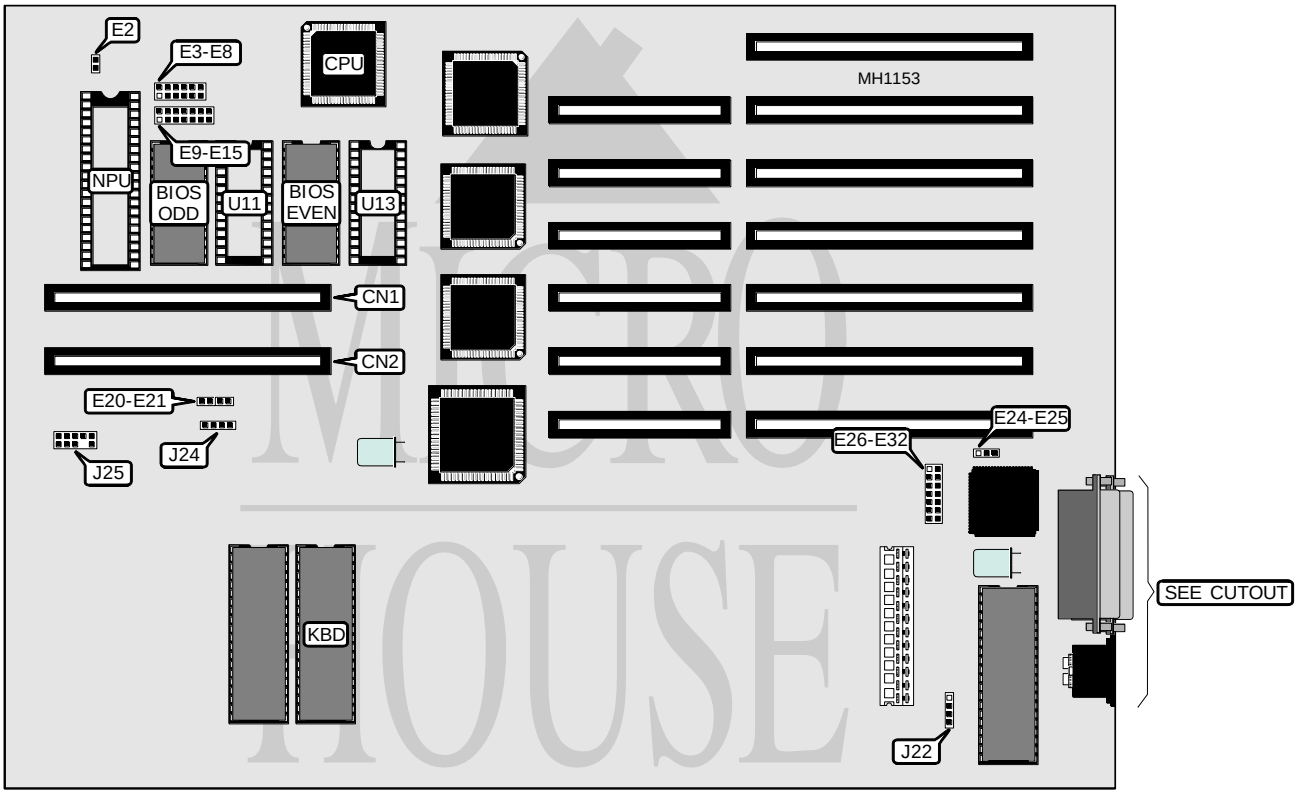
AST RESEARCH, INC.
PREMIUM/286
(MODELS 202143-001 & 202143-002)

Processor	80286DX
Processor Speed	10MHz
Chip Set	AST
Max. Onboard DRAM	None (2/4 or 8/16MB on external memory card(s))
Cache	None
BIOS	AST
Dimensions	330mm x 218mm
I/O Options	32-bit external memory/CPU card slot (2), parallel port, serial port
NPU Options	80287



CONNECTIONS			
Purpose	Location	Purpose	Location
32-bit external memory/CPU card	CN1	Front panel switches & LEDs	J25
32-bit external memory/CPU card	CN2	Optional ROM (odd)	U11
External battery	J22	Optional ROM (even)	U13
Speaker	J24		

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P R E M I U M / 2 8 6
(M O D E L S 2 0 2 1 4 3 - 0 0 1 & 2 0 2 1 4 3 - 0 0 2)

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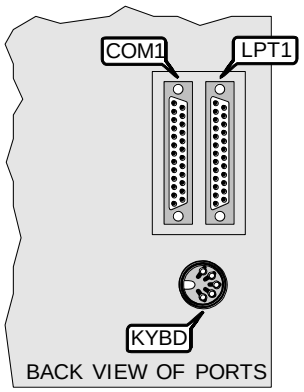

CONNECTIONS			
Purpose	Location	Purpose	Location
Serial port 1	COM1	Keyboard	KYBD
Parallel port	LPT1		

SERIAL PORT CONFIGURATION			
Serial Port (COM1)	Jumper E24-E25	Jumper E31	Jumper E32
COM1: using IRQ4	pins 1 & 2 closed	closed	open
COM2: using IRQ3	pins 2 & 3 closed	open	closed

PARALLEL PORT CONFIGURATION				
Parallel Port (LPT)	Jumper E27	Jumper E28	Jumper E29	Jumper E30
LPT1: using IRQ7	closed	open	closed	open
LPT2: using IRQ7	open	closed	open	closed

BIOS TYPE CONFIGURATION			
BIOS Type	Jumper E4	Jumper E5	Jumper E6
27128	open	open	closed
27256	closed	closed	open

OPTIONAL ROM TYPE CONFIGURATION					
ROM Type	Address	Jumper E10	Jumper E11	Jumper E12	Jumper E13
27128	F000-F7FFh	open	open	closed	open
27128	E800-EFFFh	open	open	open	closed
27256	E000-EFFFh	closed	closed	open	open

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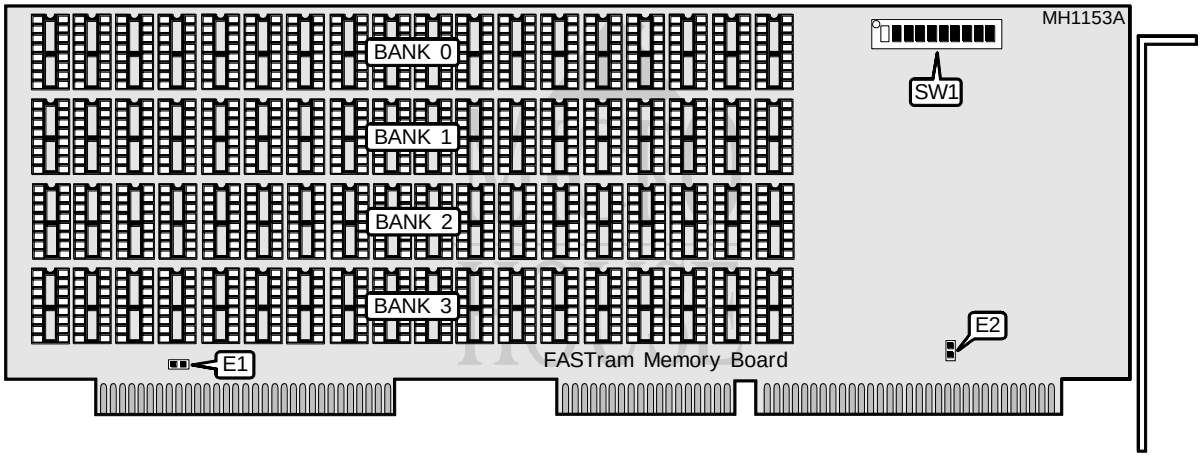
USER CONFIGURABLE SETTINGS		
Function	Jumper	Position
í Factory configured - do not alter	E2	open
í BIOS wait state select one	E3	open
BIOS wait states select zero	E3	closed
í Latched PROM BIOS disabled	E7	open
Latched PROM BIOS enabled	E7	closed
í Latched PROM BIOS (for optional ROMs) disabled	E8, E14 & E15	open
Latched PROM BIOS (for optional ROMs) enabled	E8, E14 & E15	closed
í Optional ROM wait state select one	E9	open
Optional ROM wait states select zero	E9	closed
í I/O bus wait states select two (at 10MHz operation)	E20	closed
I/O bus wait state select one (at 10MHz operation)	E20	open
í Factory configured - do not alter	E21	open



USER CONFIGURABLE SETTINGS FOR FASTRAM MEMORY BOARD		
Function	Jumper/Switch	Position
í Parity check enabled	E1	closed
Parity check disabled	E1	open
í Wait states select zero	E2	closed
Wait state select one	E2	open
í Page mode disabled	SW1/switch 5	closed
Page mode enabled	SW1/switch 5	open
í Board installed select first FASTram board installed	SW1/switch 6	closed
Board installed select second FASTram board installed	SW1/switch 6	open

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DRAM CONFIGURATION FOR FASTRAM MEMORY BOARD				
Size	Bank 0	Bank 1	Bank 2	Bank 3
512KB	(18) 41256	NONE	NONE	NONE
1MB	(18) 41256	(18) 41256	NONE	NONE
1.5MB	(18) 41256	(18) 41256	(18) 41256	NONE
2MB	(18) 41256	(18) 41256	(18) 41256	(18) 41256

DRAM SWITCH CONFIGURATION FOR FASTRAM MEMORY BOARD				
Recognized by System	SW1/switch 1	SW1/switch 2	SW1/switch 3	SW1/switch 4
128KB	closed	closed	closed	closed
256KB	open	closed	closed	closed
384KB	closed	open	closed	closed
512KB	open	open	closed	closed
640KB	closed	closed	open	closed
768KB	open	closed	open	closed
896KB	closed	open	open	closed
1024KB	open	open	open	closed
1152KB	closed	closed	closed	open
1280KB	open	closed	closed	open
1408KB	closed	open	closed	open
1536KB	open	open	closed	open
1664KB	closed	closed	open	open
1792KB	open	closed	open	open
1920KB	closed	open	open	open
2048KB	open	open	open	open

BASE I/O ADDRESS CONFIGURATION FOR FASTRAM MEMORY BOARD				
Base I/O Address	SW1/switch 7	SW1/switch 8	SW1/switch 9	SW1/switch 10
0208h	closed	closed	closed	closed
0218h[1]	open	closed	closed	closed
0258h[2]	open	closed	open	closed
0268h	closed	open	open	closed
02A8h	closed	open	closed	open
02B8h	open	open	closed	open
02E8h	closed	open	open	open

Note [1] : This setting is recommended when this is the first FASTram Memory Board installed.
Note [2] : This setting is recommended when this is the second FASTram Memory Board installed.

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P R E M I U M / 2 8 6
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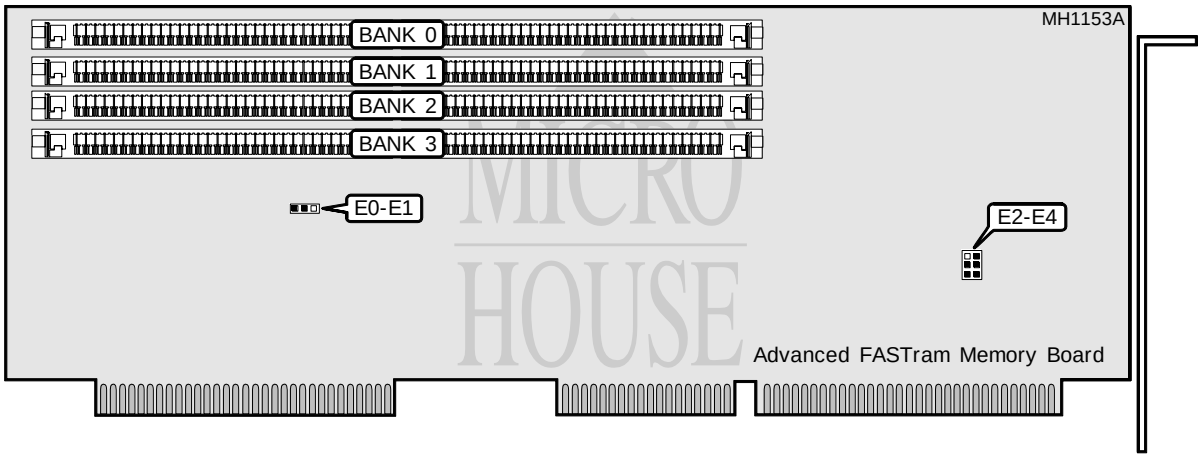

USER CONFIGURABLE SETTINGS FOR ADVANCED FASTRAM MEMORY BOARD		
Function	Jumper	Position
í Factory configured - do not alter	E0-E1	pins 2 & 3 closed
í Board installed select first FASTram board installed	E2 E4	open closed
Board installed select second FASTram board installed	E2 E4	closed open
í Memory installed select as expanded	E3	closed
Memory installed select as paged	E3	open
Note: Parity, wait states, size, and base I/O address are set using the software configuration utility.		

DRAM CONFIGURATION FOR ADVANCED FASTRAM MEMORY BOARD				
Size	Bank 0	Bank 1	Bank 2	Bank 3
512KB	(2) 256K x 9	NONE	NONE	NONE
1MB	(2) 256K x 9	(2) 256K x 9	NONE	NONE
1.5MB	(2) 256K x 9	(2) 256K x 9	(2) 256K x 9	NONE
2MB	(2) 256K x 9	(2) 256K x 9	(2) 256K x 9	(2) 256K x 9
2MB	(2) 1M x 9	NONE	NONE	NONE
3MB	(2) 256K x 9	(2) 256K x 9	(2) 1M x 9	NONE
4MB	(2) 1M x 9	(2) 1M x 9	NONE	NONE
5MB	(2) 256K x 9	(2) 256K x 9	(2) 1M x 9	(2) 1M x 9
6MB	(2) 1M x 9	(2) 1M x 9	(2) 1M x 9	NONE
8MB	(2) 1M x 9	(2) 1M x 9	(2) 1M x 9	(2) 1M x 9