AMPRO COMPUTERS, INC.

LITTLE BOARD/486-II

Device Type	Single Board Computer
Processor	80486DX2/80486DX4
Processor Speed	66/100MHz
Chip Set	Unidentified
Maximum Onboard Memory	32MB
Cache	Unidentified
BIOS	Award
Dimensions	204mm x 146mm
I/O Options	Floppy drive interface, IDE interface, keyboard interface, parallel interface, PC/104 interfaces (2), SCSI interface, serial interfaces (2), utility interface

CONNECTIONS			
Purpose	**Location**	**Purpose**	**Location**
Power connector	J1	SCSI interface	J7
Serial interface 2	J2	Floppy drive interface	J8
Serial interface 1	J3	IDE interface	J11
Utility interface	J4	PC/104 interface (8-bit)	P1
Keyboard interface	J5	PC/104 interface (16-bit)	P2
Parallel interface	J6		

USER CONFIGURABLE SETTINGS			
Function		**Label**	**Position**
»	SCSI chip select enabled	W1	Closed
	SCSI chip select disabled	W1	Open
»	Factory configured - do not alter	W10	Unidentified
»	Factory configured - do not alter	W11	Pins 1 & 2, 3 & 4 closed
»	Factory configured - do not alter	W18	Unidentified
»	Factory configured - do not alter	W19	Open
»	Factory configured - do not alter	W21	Unidentified
»	Powerfail NMI disabled	W23	Open
	Powerfail NMI enabled	W23	Closed

»	Factory configured - do not alter	W26	Open
»	SCSI termination enabled	W28	Closed
	SCSI termination disabled	W28	Open

SIMM CONFIGURATION		
Size	**Bank 0**	**Bank 1**
512KB	(2) 256K x 9	None
1MB	(2) 256K x 9	(2) 256K x 9
2MB	(2) 1M x 9	None
4MB	(2) 1M x 9	(2) 1M x 9
8MB	(2) 4M x 9	None
16MB	(2) 4M x 9	(2) 4M x 9
16MB	(2) 8M x 9	None
32MB	(2) 8M x 9	(2) 8M x 9
Note: Fast Page DRAM modules of 70ns or lower are supported.		

EPROM CONFIGURATION (S0)		
EPROM	**W8**	**W9**
32K (27C256)	Open	7 & 8, 10 & 11
64K (27C512)	Open	1 & 4, 7 & 8, 10 & 11
128K (27C010)	Open	1 & 4, 2 & 5, 6 & 9, 7 & 8
256K (27C020)	Open	1 & 4, 2 & 5, 6 & 9, 7 & 8, 11 & 12
512K (27C040)	Open	1 & 4, 2 & 3, 6 & 9, 7 & 8, 11 & 12
1MB (27C080)	Closed	1 & 4, 2 & 3, 7 & 8, 11 & 12
Note: Pins designated should be in the closed position.		

SRAM CONFIGURATION (S0)		
SRAM	**W8**	**W9**
32K (62256)	Open	4 & 7, 5 & 8, 10 & 11

| 128K (628128) | Open | 1 & 2, 4 & 7, 5 & 8, 10 & 11 |
| 512K (434000) | Open | 1 & 2, 3 & 6, 4 & 7, 5 & 8, 11 & 12 |

Note: Pins designated should be in the closed position.

FLASH EPROM CONFIGURATION (S0)		
Flash EPROM	**W8**	**W9**
256K (28F256)	Open	2 & 5, 6 & 9, 7 & 8
512K (28F512)	Open	1 & 4, 2 & 5, 6 & 9, 7 & 8
128K (28F010)	Open	1 & 4, 2 & 5, 6 & 9, 7 & 8
256K (28F020)	Open	1 & 4, 2 & 5, 6 & 9, 7 & 8, 11 & 12
512K (28F040)	Open	1 & 4, 2 & 5, 3 & 6, 7 & 8, 11 & 12

Note: Pins designated should be in the closed position.

EPROM CONFIGURATION (S1)	
EPROM	**W14**
128K	Pins 3 & 4, 5 & 6 closed
256K	Pins 3 & 4, 5 & 6 closed
512K	Pins 3 & 4, 5 & 6 closed
1MB	Pins 1 & 2, 5 & 6 closed

FLASH EPROM CONFIGURATION (S1)	
Flash EPROM	**W14**
+12 volt 32K	Pins 3 & 4, 5 & 6 closed
+12 volt 64K	Pins 3 & 4, 5 & 6 closed
+12 volt 128K	Pins 3 & 4, 5 & 6 closed
+12 volt 256K	Pins 3 & 4, 5 & 6 closed
+5 volt 128K	Pins 3 & 7, 5 & 6 closed
+5 volt 256K	Pins 3 & 7, 5 & 6 closed
+5 volt 512K	Pins 3 & 7, 5 & 6 closed

EPROM CONFIGURATION (S2)

EPROM	W15
128K	Pins 3 & 4, 5 & 6 closed
256K	Pins 3 & 4, 5 & 6 closed
512K	Pins 3 & 4, 5 & 6 closed
1MB	Pins 1 & 2, 5 & 6 closed

FLASH EPROM CONFIGURATION (S2)

Flash EPROM	W15
+12 volt 32K	Pins 3 & 4, 5 & 6 closed
+12 volt 64K	Pins 3 & 4, 5 & 6 closed
+12 volt 128K	Pins 3 & 4, 5 & 6 closed
+12 volt 256K	Pins 3 & 4, 5 & 6 closed
+5 volt 128K	Pins 3 & 7, 5 & 6 closed
+5 volt 256K	Pins 3 & 7, 5 & 6 closed
+5 volt 512K	Pins 3 & 7, 5 & 6 closed

FLASH PROGRAMMING SELECTION

	Setting	W7	W16
»	+12 volt Flash programming power disabled	Open	Open
	+12 volt Flash programming power enabled	Closed	Closed

WATCHDOG TIMER CONFIGURATION

	Setting	W17
»	Watchdog timer is disabled	Open
	Alarm causes I/O channel check	Pins 1 & 2 closed
	Alarm causes reset	Pins 2 & 3 closed

FLOPPY INTERFACE SELECTION

Setting		W20	W27
»	Floppy interface enabled	Pins 1 & 2, 3 & 4 closed	Closed
	Floppy interface disabled	Open	Open

PARALLEL PORT INTERRUPT SELECTION	
IRQ	**W24**
» IRQ7	Pins 1 & 2 closed
IRQ5	Pins 2 & 3 closed
None	Open

SRAM BATTERY BACKUP SELECTION			
Setting		**W2**	**W25**
»	Battery backup to S0 disabled	Pins 2 & 3 closed	Pins 1 & 2 closed
	Battery backup to S0 enabled	Pins 1 & 2 closed	Pins 2 & 3 closed

Note: The battery backup disabled setting makes the SRAM in S0 non-volatile. If an EPROM or Flash EPROM is used in S0, use the battery backup disabled setting which sets the power to S0 as Vcc.

TERMINATION POWER SELECTION	
Setting	**W6**
» Termination power disabled	Open
TERMPWR supplied by SCSI interface pin 26	Closed

UTILITY CONNECTOR (J4) PIN CONFIGURATION		
Pin	**Signal Name**	**Function**
1	Speaker	Audio signal
2	Speaker	Ground
3	Ground	To one side of Reset button
4	Reset	To other side of Reset button
5	LED Cathode	Ground return

6	LED anode	Current source (+5v through 330 ohms)
7	Ground	Ground return
8	+12V power	Connected to J9 pin B9
9	-5V power	Connected to J9 pin B5
10	-12V power	Connected to J9 pin B7
11	Ground	Ground return
12	POWERGOOD	Power supply status