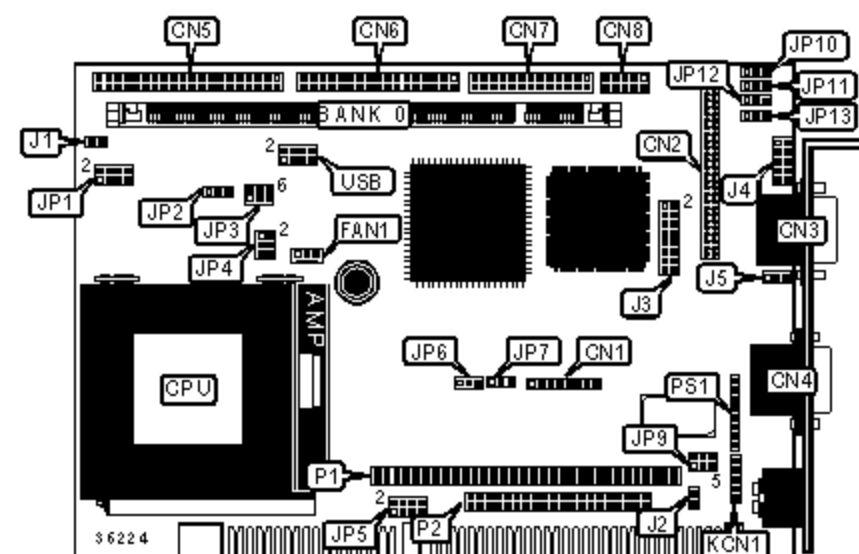


# LANNER ELECTRONICS, INC.

## AP-545L

<b>Device Type</b>	Single board computer
<b>Processor</b>	CX 6X86/CX MII/AM K5/AM K6/Pentium/Pentium MMX
<b>Processor Speed</b>	75/90/100/120/133/150/166/200/233MHz
<b>Chip Set</b>	SIS 5582
<b>Video Chip Set</b>	SMI
<b>Maximum Onboard Memory</b>	128MB (SDRAM supported)
<b>Maximum Video Memory</b>	2MB
<b>Video Resolution</b>	1280 x 1024
<b>Cache</b>	512KB
<b>BIOS</b>	AMI
<b>Dimensions</b>	185mm x 122mm
<b>I/O Options</b>	Floppy drive interface, IDE interface, parallel port, PS/2 mouse port, serial ports (2), VGA port, LCD panel connector, USB interface (2), PC/104 connectors (2)



### CONNECTIONS

Purpose	Location	Purpose	Location
Program ISP GAL connector	CN1	IDE interface LED	J1
LCD panel connector	CN2	Reset switch	J2
Serial port 1	CN3	VGA port 2	J4
VGA port 1	CN4	Power LED connector	J5
IDE interface	CN5	Auxiliary keyboard connector	KCN1
Floppy drive interface	CN6	PC/104 connector	P1
Parallel port	CN7	PC/104 connector	P2
Serial port 2	CN8	Power connector	PS1
CPU fan connector	FAN1	USB connector (ports 1 & 2)	USB

## USER CONFIGURABLE SETTINGS

	Function	Label	Position
»	On board video enabled	JP2	Pins 2 & 3 closed
	On board video disabled	JP2	Pins 1 & 2 closed
»	TFT LCD display enabled	J3	Pins 1 & 2 closed
	STN LCD display enabled	J3	Pins 1 & 2 open
»	XCLK enabled	J3	Pins 3 & 4 closed
	XCLKN enabled	J3	Pins 3 & 4 open

### SIMM CONFIGURATION

Size	Bank 0
8MB	(1) 1M x 64
16MB	(1) 2M x 64
32MB	(1) 4M x 64
64MB	(1) 8M x 64
128MB	(1) 16M x 64

Note: Board accepts SDRAM memory.

### CACHE CONFIGURATION

Note: The location of the cache is unidentified.

### CPU SPEED SELECTION (CX 6X86)

CPU speed	Clock speed	Multiplier	JP3	JP4
120MHz	50MHz	2x	1 & 2, 3 & 4, 5 & 6	1 & 2
150MHz	60MHz	2x	1 & 2	1 & 2

166MHz	66MHz	2x	Open	1 & 2
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Note: Pins designated should be in the closed position.

### CPU SPEED SELECTION (CX MII)

CPU speed	Clock speed	Multiplier	JP3	JP4
200MHz	60MHz	3x	1 & 2	3 & 4
200MHz	66MHz	2.5x	Open	1 & 2, 3 & 4
233MHz	66MHz	3x	Open	3 & 4
233MHz	75MHz	2.5x	3 & 4, 5 & 6	1 & 2, 3 & 4

Note: Pins designated should be in the closed position.

### CPU SPEED SELECTION (AM K5)

CPU speed	Clock speed	Multiplier	JP3	JP4
75MHz	50MHz	1.5x	1 & 2, 3 & 4, 5 & 6	Open
90MHz	60MHz	1.5x	1 & 2	Open
100MHz	66MHz	1.5x	Open	Open
120MHz	60MHz	2x	1 & 2	1 & 2
133MHz	66MHz	2x	Open	1 & 2
166MHz	66MHz	2.5x	Open	1 & 2, 3 & 4

Note: Pins designated should be in the closed position.

### CPU SPEED SELECTION (AM K6)

CPU speed	Clock speed	Multiplier	JP3	JP4
166MHz	66MHz	2.5x	Open	1 & 2, 3 & 4
200MHz	66MHz	3x	Open	3 & 4
233MHz	66MHz	3.5x	Open	Open

Note: Pins designated should be in the closed position.

Note: Pins designated should be in the closed position.

### CPU SPEED SELECTION (INTEL)

CPU speed	Clock speed	Multiplier	JP3	JP4
75MHz	50MHz	1.5x	1 & 2, 3 & 4, 5 & 6	Open
90MHz	60MHz	1.5x	1 & 2	Open
100MHz	66MHz	1.5x	Open	Open
120MHz	60MHz	2x	1 & 2	1 & 2
133MHz	66MHz	2x	Open	1 & 2
150MHz	60MHz	2.5x	1 & 2	1 & 2, 3 & 4
166MHz	66MHz	2.5x	Open	1 & 2, 3 & 4
200MHz	66MHz	3x	Open	3 & 4

Note: Pins designated should be in the closed position.

### CPU SPEED SELECTION (INTEL MMX)

CPU speed	Clock speed	Multiplier	JP3	JP4
166MHz	66MHz	2.5x	Open	1 & 2, 3 & 4
200MHz	66MHz	3x	Open	3 & 4
233MHz	66MHz	3.5x	Open	Open

Note: Pins designated should be in the closed position.

### SERIAL PORT 4 SELECTION

Setting	JP9	JP10	JP11	JP12	JP13
» RS-232	1 & 2	1 & 2	1 & 2	1 & 2	1 & 2
RS-422	3 & 4	2 & 3	2 & 3	2 & 3	2 & 3
RS-485	5 & 6	2 & 3	2 & 3	2 & 3	2 & 3

Note: Pins designated should be in the closed position.

### VIDEO RESOLUTION SELECTION

	Setting	J3/Pins 5 & 6	J3/Pins 7 & 8
»	640 x 480	Closed	Closed
	800 x 600	Open	Closed
	1024 x 768	Closed	Open
	1280 x 1024	Open	Open

### BIT SIZE SELECTION (TFT LCD DISPLAY)

Setting	J3/Pins 9 & 10	J3/Pins 11 & 12	J3/Pins 13 & 14
9 bit	Closed	Closed	Closed
12 bit	Open	Closed	Closed
18 bit	Closed	Open	Closed
24 bit	Open	Open	Closed
12 x 2 bit	Closed	Closed	Open
Analog	Open	Closed	Open
18 x 2 bit	Closed	Open	Open

### BIT SIZE SELECTION (STN LCD DISPLAY)

Setting	J3
16 bit	Closed
24 bit	Open

### ISP GAL SELECTION

	Setting	JP6	JP7
»	Watchdog enabled	Pins 2 & 3	Pins 2 & 3

**BIOS ADDRESS SELECTION**

Address	JP5
D0000	Pins 1 & 2, 5 & 6 closed
D4000	Pins 3 & 4, 7 & 8 closed
D8000	Pins 3 & 4, 5 & 6 closed
DC000	Pins 3 & 4, 7 & 8 closed

**CPU VOLTAGE SELECTION**

Voltage	JP1
2.0v	Open
2.1v	Pins 1 & 2 closed
2.2v	Pins 3 & 4 closed
2.3v	Pins 1 & 2, 3 & 4 closed
2.4v	Pins 5 & 6 closed
2.5v	Pins 1 & 2, 5 & 6 closed
2.6v	Pins 3 & 4, 5 & 6 closed
2.7v	Pins 1 & 2, 3 & 4, 5 & 6 closed
» 2.8v	Pins 7 & 8 closed
2.9v	Pins 1 & 2, 7 & 8 closed
3.0v	Pins 3 & 4, 7 & 8 closed
3.1v	Pins 1 & 2, 3 & 4, 7 & 8 closed
3.2v	Pins 5 & 6, 7 & 8 closed
3.3v	Pins 1 & 2, 5 & 6, 7 & 8 closed
3.4v	Pins 3 & 4, 5 & 6, 7 & 8 closed
3.5v	Pins 1 & 2, 3 & 4, 5 & 6, 7 & 8 closed

3.5V

Pins 1 & 2, 3 & 4, 5 & 6, 7 & 8 closed