LANNER ELECTRONICS, INC.

A P - 5 6 0

Device Type	Single board computer
Processor	CX 6X86/CX 686MX/AM K5/AM K6/Pentium/Pentium MMX
Processor Speed	75/90/100/120/133/150/166/200/233MHz
Chip Set	VIA
Video Chip Set	Unidentified
Maximum Onboard Memory	256MB
Maximum Video Memory	Unidentified
Cache	512KB
BIOS	Award
Dimensions	338mm x 122mm
I/O Options	Ethernet 10Base100 connector, floppy drive interface, IDE interfaces (2), Wide
	Ultra SCSI interface, parallel port, PS/2 mouse port, serial ports (2), VGA port, IR
	connector, USB connector, PC/104 connectors (2)
NPU Options	None



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CONNECTIONS			
Purpose	Location	Purpose	Location
Chassis fan power	C1	Serial port 2	CN11
Ultra Wide SCSI interface	CN1	Auxiliary keyboard connector	CN12
IDE interface 1	CN2	PC/104 connector	CN13
IDE interface 2	CN3	PC/104 connector	CN14
Floppy drive interface	CN4	IR connector	IR1
Front panel connector	CN5	Power LED & keylock	J1
Ethernet 10Base100 connector	CN6	Speaker	J2
VGA port	CN7	IDE interface LED	J3
PS/2 mouse port	CN8	Green PC LED	J4
Serial port 1	CN9	USB connector	USB
Parallel port	CN10		

USER CONFIGURABLE SETTINGS			
Function	Label	Position	
í Factory configured - do not alter	JP1	Pins 1 & 2 closed	
í Factory configured - do not alter	J5	Unidentified	
í Flat panel voltage select 5v	JP2	Pins 1 & 2 closed	
Flat panel voltage select 3.3v	JP2	Pins 2 & 3 closed	
í CMOS memory normal operation	JP5	Pins 1 & 2 closed	
CMOS memory clear	JP5	Pins 2 & 3 closed	
í Factory configured - do not alter	JP11	Pins 1 & 2 closed	
í Factory configured - do not alter	JP16	Pins 1 & 2 closed	
í Factory configured - do not alter	JP17	Unidentified	

SIMM CONFIGURATION		
Size	Bank 0	
8MB	(2) 1M x 36	
16MB	(2) 2M x 36	
32MB	(2) 4M x 36	
64MB	(2) 8M x 36	
128MB	(2) 16M x 36	
256MB	(2) 32M x 36	

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	DIMM CONFIGURATION	
Size	Bank 1	Bank 2
8MB	(1) 1M x 64	None
16MB	(1) 2M x 64	None
16MB	(1) 1M x 64	(1) 1M x 64
24MB	(1) 2M x 64	(1) 1M x 64
32MB	(1) 4M x 64	None
32MB	(1) 2M x 64	(1) 2M x 64
40MB	(1) 4M x 64	(1) 1M x 64
48MB	(1) 4M x 64	(1) 2M x 64
64MB	(1) 8M x 64	None
64MB	(1) 4M x 64	(1) 4M x 64
72MB	(1) 8M x 64	(1) 1M x 64
80MB	(1) 8M x 64	(1) 2M x 64
96MB	(1) 8M x 64	(1) 4M x 64
128MB	(1) 16M x 64	None
128MB	(1) 8M x 64	(1) 8M x 64
136MB	(1) 16M x 64	(1) 1M x 64
144MB	(1) 16M x 64	(1) 2M x 64
160MB	(1) 16M x 64	(1) 4M x 64
192MB	(1) 16M x 64	(1) 8M x 64
256MB	(1) 16M x 64	(1) 16M x 64

CACHE CONFIGURATION

Note: 512KB cache is factory installed and is not configurable. The location is unidentified.

VIDEO MEMORY CONFIGURATION

Note: The size and location is unidentified.

CPU SPEED SELECTION (CX 6X86)				
CPU speed	Clock speed	Multiplier	JP3	JP15
120MHz	50MHz	2x	1 & 2, 3 & 4, 5 & 6	1&2
150MHz	60MHz	2x	1 & 2	1 & 2
166MHz	66MHz	2x	Open	1 & 2
Note: Pins designated should be in the closed position.				

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CPU SPEED SELECTION (CX 6X86MX)				
CPU speed	Clock speed	Multiplier	JP3	JP15
166MHz	66MHz	2x	Open	1 & 2
200MHz	66MHz	2x	Open	1&2
233MHz	75MHz	2x	3 & 4, 5 & 6	1&2
Note: Pins designated should be in the closed position.				

CPU SPEED SELECTION (AM K5)				
CPU speed	Clock speed	Multiplier	JP3	JP15
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
Note: Pins designated should be in the closed position.				

CPU SPEED SELECTION (AM K6)				
CPU speed	Clock speed	Multiplier	JP3	JP15
166MHz	66MHz	2.5x	Open	1 & 2, 3 & 4
200MHz	66MHz	Зx	Open	3 & 4
233MHz	66MHz	3.5x	Open	Open
Note: Pins designated should be in the closed position.				

CPU SPEED SELECTION (INTEL)				
CPU speed	Clock speed	Multiplier	JP3	JP15
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.				

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CPU SPEED SELECTION (INTEL MMX)				
CPU speed	Clock speed	Multiplier	JP3	JP15
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.				

CPU TYPE SELECTION		
Туре	JP6	
í Single voltage	Pins 2 & 3 closed	
í Dual voltage	Pins 1 & 2 closed	

CPU VOLTAGE SELECTION				
Voltage	JP4			
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			
í 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			

SERIAL PORT 2 SELECTION						
Туре	JP9	JP10	JP12	JP13	JP14	
í RS-232	1 & 2	1&2	1&2	1&2	1 & 2	
RS-422	2 & 3	2 & 3	2&3	2&3	3 & 4	
RS-485	2 & 3	2 & 3	2 & 3	2&3	5&6	
Note: Pins designated should be in the closed position.						

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FLASH BIOS ADDRESS SELECTION				
Address	JP8			
D000	Pins 3 & 4, 7 & 8 closed			
D400	Pins 3 & 4, 9 & 10 closed			
D800	Pins 5 & 6, 7 & 8 closed			
DC00	Pins 5 & 6, 9 & 10 closed			

WATCH DOG TIMER SELECTION							
Seconds	JP7A	JP7B	JP7C	JP7D			
.5	Pins 1 & 2 closed	Open	Open	Open			
1	Open	Pins 1 & 2 closed	Open	Open			
2	Open	Open	Pins 1 & 2 closed	Open			
4	Open	Open	Open	Pins 1 & 2 closed			
8	Open	Open	Open	Pins 2 & 3 closed			
16	Open	Open	Pins 2 & 3 closed	Open			
32	Open	Pins 2 & 3 closed	Open	Open			
64	Pins 2 & 3 closed	Open	Open	Open			