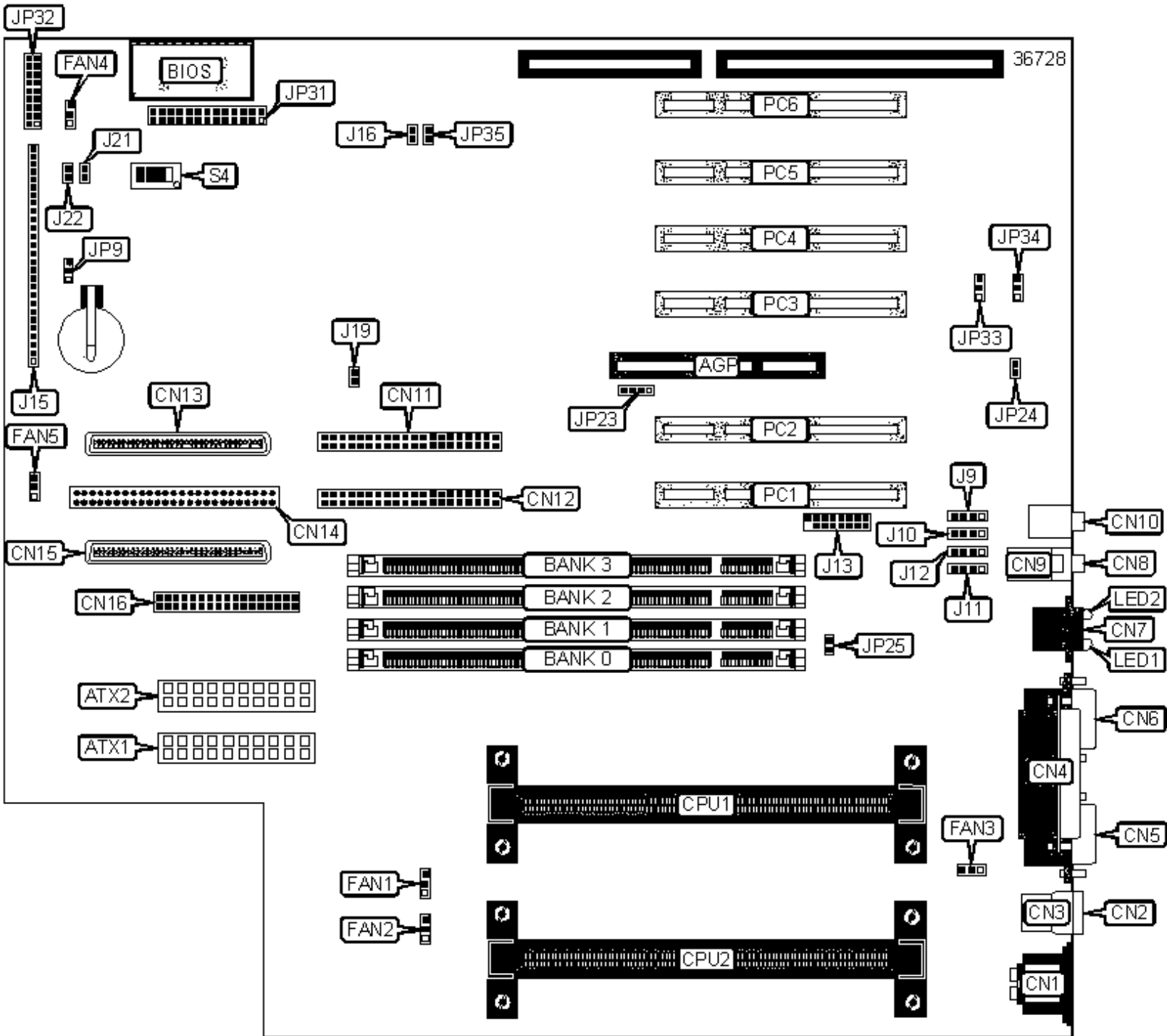


# TYAN COMPUTER CORPORATION

## S1837UN (THUNDERBOLT) (REV. 1.10)

<b>Device Type</b>	Mainboard
<b>Processor</b>	Celeron/Pentium II/Pentium III
<b>Processor Speed</b>	233/266/300/333/350/366/400/433/450/466/500/533/550MHz
<b>Chip Set</b>	Intel 440BX
<b>Audio Chip Set</b>	Creative Labs
<b>Maximum Onboard Memory</b>	1GB (SDRAM supported)
<b>Maximum Audio Memory</b>	Unidentified
<b>Cache</b>	0/128/256/512KB (located on the CPU)
<b>BIOS</b>	AMI
<b>Dimensions</b>	330mm x 305mm
<b>I/O Options</b>	32-bit PCI slots (6), AGP slot, ATX power connectors (2), audio in - CD-ROM, audio in - MPEG, Ethernet connector, floppy drive interface, game interface, IDE interfaces (2), IR connector, line out, line in, microphone in, modem audio connector, parallel port, PS/2 mouse port, SCSI Narrow interface, SCSI Wide interfaces (2), serial ports (2), TV card (video) connector, USB ports (2), Wake-on-LAN connector, Wake-on-modem connector



### CONNECTIONS

Purpose	Location	Purpose	Location
AGP slot	AGP	System fan power	FAN3
ATX power connector	ATX1	System fan power	FAN4
ATX power connector	ATX2	Fan connector header	FAN5
PS/2 mouse port	CN1	Audio in - MPEG (DVD/TV card)	J9
USB port 1	CN2	Modem audio connector	J10
USB port 2	CN3	TV card (video) connector	J11
Parallel port	CN4	Audio in - CD-ROM	J12

Serial port 1	CN5	Game interface	J13
Serial port 2	CN6	Power switch	J15/Pins 1 & 2
RJ-45 Ethernet connector	CN7	IR connector	J15/Pins 6-10
Line out	CN8	IDE interface LED	J15/Pins 13-16
Line in	CN9	Power LED	J15/Pins 18-20
Microphone in	CN10	Reset switch	J15/Pins 22 & 23
IDE interface 2	CN11	Speaker	J15/Pins 24-27
IDE interface 1	CN12	Chassis intrusion connector	J16
Ultra2 Wide SCSI interface (channel B)	CN13	SCSI LED	JP23/Pins 1 & 2
Narrow SCSI interface (channel B)	CN14	Server management (EXTSMI) connector	JP31
Ultra2 Wide SCSI interface (channel A)	CN15	Front panel connector	JP32
Floppy drive interface	CN16	Wake-on modem connector	JP33
CPU 1 fan power	FAN1	Wake-on LAN connector	JP34
CPU 2 fan power	FAN2	32-bit PCI slots	PC1 - PC6

### USER CONFIGURABLE SETTINGS

Function		Label	Position
»	Onboard SCSI enabled	J19	Open
	Onboard SCSI disabled	J19	Closed
	Fan 3 not monitored	J21	Open
	Fan 3 monitored by software application	J21	Closed
	Fan 4 not monitored	J22	Open
	Fan 4 monitored by software application	J22	Closed
»	CMOS memory normal operation	JP9	Pins 1 & 2 closed
	CMOS memory clear	JP9	Pins 2 & 3 closed
»	Onboard sound enabled	JP24	Open
	Onboard sound disabled	JP24	Closed

»	Onboard LAN enabled	JP25	Open
	Onboard LAN disabled	JP25	Closed
»	Factory configured - do not alter	JP35	Open

### DIMM CONFIGURATION

Size	Bank 0	Bank 1	Bank 2	Bank 3
8MB	(1) 1M x 64	None	None	None
16MB	(1) 1M x 64	(1) 1M x 64	None	None
16MB	(1) 2M x 64	None	None	None
24MB	(1) 1M x 64	(1) 1M x 64	(1) 1M x 64	None
32MB	(1) 1M x 64	(1) 1M x 64	(1) 1M x 64	(1) 1M x 64
32MB	(1) 2M x 64	(1) 2M x 64	None	None
32MB	(1) 4M x 64	None	None	None
48MB	(1) 2M x 64	(1) 2M x 64	(1) 2M x 64	None
64MB	(1) 2M x 64	(1) 2M x 64	(1) 2M x 64	(1) 2M x 64
64MB	(1) 4M x 64	(1) 4M x 64	None	None
64MB	(1) 8M x 64	None	None	None
80MB	(1) 4M x 64	(1) 4M x 64	(1) 1M x 64	(1) 1M x 64
96MB	(1) 4M x 64	(1) 4M x 64	(1) 4M x 64	None
96MB	(1) 4M x 64	(1) 4M x 64	(1) 2M x 64	(1) 2M x 64
128MB	(1) 4M x 64	(1) 4M x 64	(1) 4M x 64	(1) 4M x 64
128MB	(1) 8M x 64	(1) 8M x 64	None	None
128MB	(1) 16M x 64	None	None	None
144MB	(1) 8M x 64	(1) 8M x 64	(1) 1M x 64	(1) 1M x 64
160MB	(1) 8M x 64	(1) 8M x 64	(1) 2M x 64	(1) 2M x 64
192MB	(1) 8M x 64	(1) 8M x 64	(1) 8M x 64	None
192MB	(1) 8M x 64	(1) 8M x 64	(1) 4M x 64	(1) 4M x 64
256MB	(1) 8M x 64	(1) 8M x 64	(1) 8M x 64	(1) 8M x 64
256MB	(1) 16M x 64	(1) 16M x 64	None	None

256MB	(1) 32M x 64	None	None	None
272MB	(1) 16M x 64	(1) 16M x 64	(1) 1M x 64	(1) 1M x 64
288MB	(1) 16M x 64	(1) 16M x 64	(1) 2M x 64	(1) 2M x 64
320MB	(1) 16M x 64	(1) 16M x 64	(1) 4M x 64	(1) 4M x 64
384MB	(1) 16M x 64	(1) 16M x 64	(1) 16M x 64	None
384MB	(1) 16M x 64	(1) 16M x 64	(1) 8M x 64	(1) 8M x 64
512MB	(1) 16M x 64	(1) 16M x 64	(1) 16M x 64	(1) 16M x 64
512MB	(1) 32M x 64	(1) 32M x 64	None	None
528MB	(1) 32M x 64	(1) 32M x 64	(1) 1M x 64	(1) 1M x 64
544MB	(1) 32M x 64	(1) 32M x 64	(1) 2M x 64	(1) 2M x 64
576MB	(1) 32M x 64	(1) 32M x 64	(1) 4M x 64	(1) 4M x 64
640MB	(1) 32M x 64	(1) 32M x 64	(1) 8M x 64	(1) 8M x 64
768MB	(1) 32M x 64	(1) 32M x 64	(1) 32M x 64	None
768MB	(1) 32M x 64	(1) 32M x 64	(1) 16M x 64	(1) 16M x 64
1024MB	(1) 32M x 64	(1) 32M x 64	(1) 32M x 64	(1) 32M x 64
Note: Board supports SDRAM memory.				
Note: Registered and nonregistered SDRAM can not be mixed.				

### CPU FREQUENCY SELECTION

CPU speed	Clock speed	Multiplier	S4/1	S4/2	S4/3	S4/4
300MHz	66MHz	4.5x	Off	On	Off	On
333MHz	66MHz	5.0x	Off	Off	On	On
350MHz	100MHz	3.5x	On	Off	Off	On
366MHz	66MHz	5.5x	Off	Off	Off	On
400MHz	66MHz	6.0x	On	On	On	Off
400MHz	100MHz	4.0x	Off	On	On	On
433MHz	66MHz	6.5x	On	On	Off	Off
450MHz	100MHz	4.5x	Off	On	Off	On

466MHz	66MHz	7.0x	On	Off	On	Off
500MHz	100MHz	5.0x	Off	Off	On	On
550MHz	100MHz	5.5x	Off	Off	Off	On
600MHz	100MHz	6.0	On	On	On	Off

<b>DIAGNOSTIC LED(S)</b>			
<b>LED</b>	<b>Color</b>	<b>Status</b>	<b>Condition</b>
LED1	Yellow	On	Network connected at 100Mbps
LED1	Yellow	Off	Network connected at 10Mbps
LED2	Green	On	Network connection is good
LED2	Green	Off	Network connection is broken