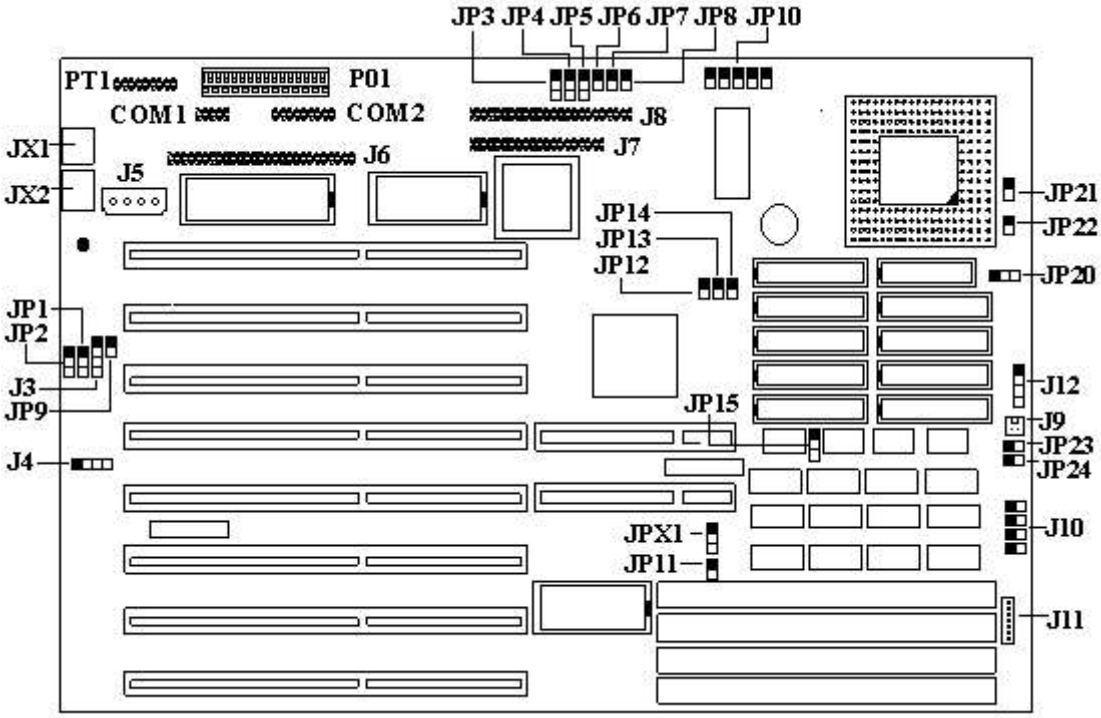
Acer V10 Motherboard

Jumper and Connector Layout



Note - The blackened pin of a jumper represents pin 1.

The Motherboard is designed on a four-layer 220x310mm printed circuit board. All system chipsets, Glue Logic Chips and other components as listed below are on the Motherboard.

- PQFP CPU -- FOR 80486SX AND 80486DX
- PGA CPU -- Intel 80486SX, 80486DX, 80486DX2
- System Control Chipset -- Acer M1419 A2
- System Data Buffer Chipset -- Acer M1421
- Video Chipset -- Cirrus Logic GD5424 OR GD5426
- VESA VL-BUS Controller -- Two 16R6Bs and One 16LB PALs
- System I/O Chipset -- Acer M5105 A4
- EPA Chipset -- Acer M6357
- Keyboard Controller -- 8042
- Real Time Clock -- DS12885
- Battery -- BR1225-IVC, 3.0V
- System ROM -- 27010-15/28F010-15

- System Cache Data -- 8K BY 8 AND 32K BY 8 20NS 28-PIN DIP SRAM
- System Cache TAG -- 8K BY 8 28-PIN AND 16K BY 4 20NS 24-PIN DIP SRAM
- Video DRAM -- 256K BY 16, 70NS IN SMD AND 256K BY 4, 70NS IN DIP
- System SIMMS -- (4 SIMM Sockets)
    - 256K x 36BIT, 72 Pin 70ns, Single Sided
    - 1M x 36BIT, 72 Pin 70ns, Single Sided
    - 2M x 36BIT, 72 Pin 70ns, Double Sided
    - 4M x 32BIT, 72 Pin 70ns, Single Sided
- Slot Connectors -- One 2R 98P ST D2.54MM
- HDD Connector -- ML 2R39P ST D2.54 L7
- FDD Connector -- ML 2R33P ST D2.54 L7
- Parallel Port: Bi-Directional or Uni-Directional
- COM1/2 -- ML 2R 9P RT HOOK GF
- Feature Connector -- ML 2R26P ST D2.54MM
- VGA Connector -- FML 3R 15P RT HOOK GF

Jumpers & Connectors

Jumpers

Jumper	Setting	Function
JP1	1-2	Enable Password Check
	2-3	Disable Password Check
JP3	1-2	IRQ10 (SCSI IRQ Channel Select)
	2-3	IRQ11 (SCSI IRQ Channel Select)
	OPEN	Disable SCSI
JP4/JP5	1-2/1-2	Select SCSI DMA Channel 5
	2-3/2-3	Select SCSI DMA Channel 6
	OPEN/OPEN	Disable DMA
JP6	OPEN	SCSI I/O Address 340h - 35Fh
	CLOSED	SCSI I/O Address 140h - 15Fh
JP7	OPEN	Disable On-board M5105 Function
	CLOSED	Enable On-board M5105 Function
JP8*	OPEN	Enable Parallel Port Bi-Direction Function
	CLOSE	Enable Parallel Port Bi-Direction Function
JP9	OPEN	Use External Battery Connector
	CLOSE	Use On-board Battery
JP10	1-6	20MHZ CPU Speed
	2-7	25MHZ CPU Speed
	3-8	33MHZ CPU Speed
	4-9	40MHZ CPU Speed

	5-10	50MHZ CPU Speed
JP11	OPEN	Zero Wait Write Cycle for Vesa
	CLOSE	One Wait Write Cycle for Vesa
JP15	1-2	Enable On-board 4MB Dram
	2-3	Disable On-board 4MB Dram
JP23	OPEN	Disable Reset Button Function
	CLOSE	Enable Reset Button Function
JP24	OPEN	Enable Keylock Function
	CLOSE	Disable Keylock Function

* Note: This system uses the older 5105 chip set and therefore does not support a wide variety of applications that use a bi-directional mode. There is no work around and eaccording to Acer applications will either work or they won't.

Connectors

Connector	Function
J1	AT Keyboard Connector
JX1	PS/2 Keyboard Connector
JX2	PS/2 Mouse Connector
J3	External Battery
J4	VGA Control For EPA
J5	HDD/FDD Power
J6	SCSI Connector
J7	FDD Connector
J8	IDE HDD Connector
J9	Fan Power
J10	LED Board
J11	PS/2 Keyboard/Mouse
J12	HDD/LED
P01	Power Connector
PT1	Parallel Port Connector
COM1	COM1 Port Connector
COM2	COM2 Port Connector

Memory

The system comes standard with 4MB of memory on-board and four empty 72-pin SIMM sockets. The on-board memory is the same as having 4MB of memory in Bank 0, so if the 4MBs of onboard memory is enabled DO NOT put any SIMMs in Bank 0. The board accepts 4-/16-MB Simms, recommend 72 Pin, 70ns, Parity, Fast Page Mode

SIMMS with gold tips upto a maximum of 64MB . NOTE: The V10 shipped with parity SIMMs, but you can use non-parity as long as they are all non-parity.

Cache

The V10 is upgradable to 64KB, 128KB, or 256KB Cache.

	Cache Sizes		
Cache Socket	**64KB**	**128KB X 8**	**256KB X 8**
U59 (TAG)*	32KB X 8	32KB X 8	32KB X 8
U60,U62,U79,U81	8KB X 8	32KB X 8	32KB X 8
U61,U63,U80,U82	8KB X 8	N/A	32KB X 8

*In most cases the TAG chip is soldered down. Some systems may have an empty socket.

Use **ONLY** 20ns Chips

Cache Size	JP20	JP21	JP22
64KB	2-3	OPEN	OPEN
128KB	1-2	CLOSE	OPEN
256KB	2-3	CLOSE	CLOSE