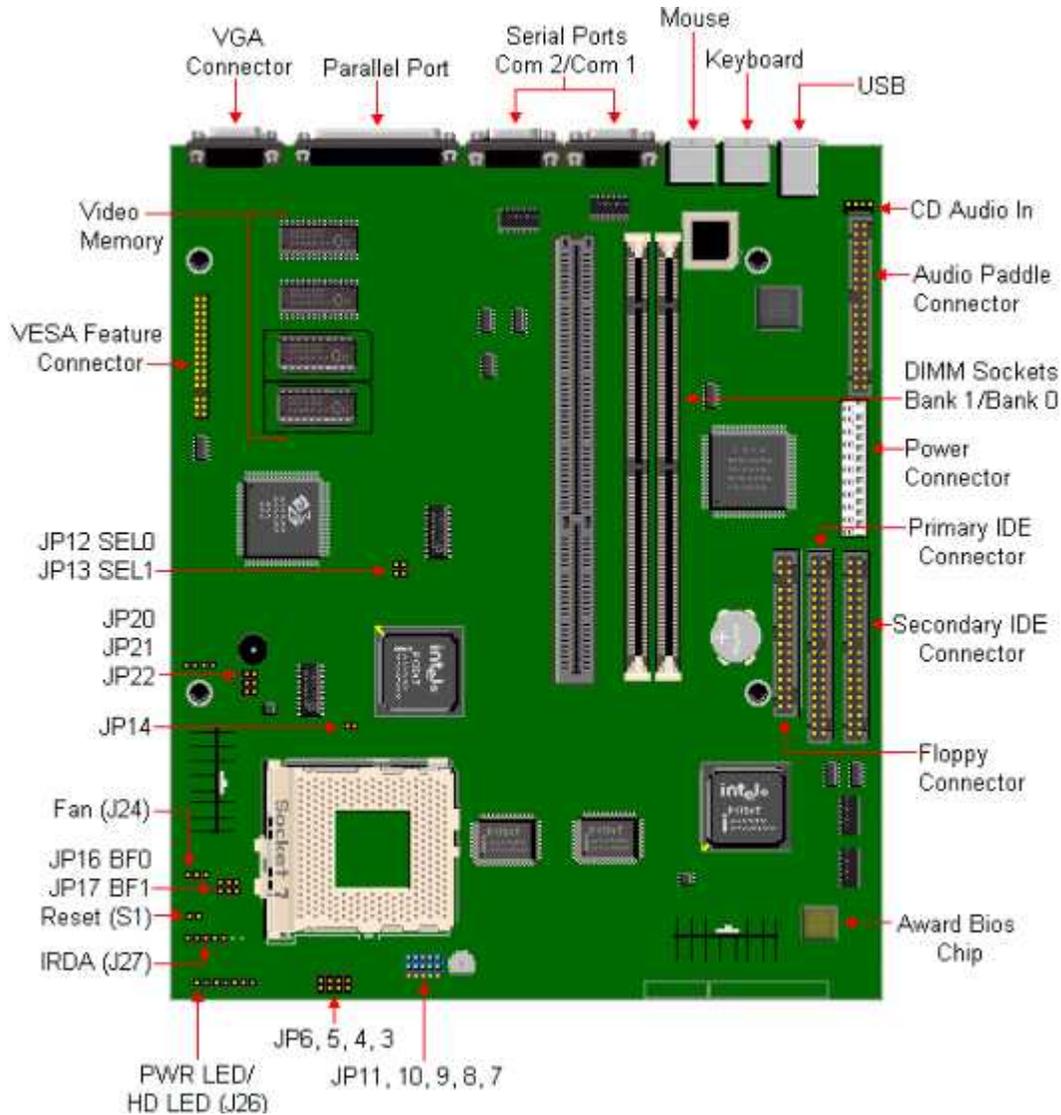


Packard Bell 810/820 M/Board



Installing a video expansion card will automatically disable the on board video controller.

Specification

- **Sound :**
 - Crystal CS4237B, Enhanced Audio
 - 16-Bit Stereo
 - Yamaha OPL3 Compatible
 - Crystal CS9236 Wavetable
 - SRS Labs 3D Sound Solution
- **Battery :** Lithium 3V.
- **BIOS :** 1 MBit Flash EPROM. System BIOS by Award. Video BIOS by S3.
- **Bus Architecture :** One EISA riser slot for ISA and PCI Buses. 66MHz maximum bus speed.
- **Cache :** 0, 256 or 512KB, Write Back or Write Through Pipeline Burst (Soldered On).
- **Chipset :**
 - Intel® 82438VX Data Path (TDX).
 - Intel® 82437VX Triton system Controller (TVX).
 - Intel® 82371SB PCI Shipset (PIIX3).

- **CPU** : This motherboard supports the following processors:
 - Intel® Pentium™ processor with MMX™ technology
 - AMD or Cyrix M II™ processor
- **Form Factor** : LPX.
- **Interfaces** :
 - Two Serial Ports (9 pin).
 - One 5 pin IrDA/ASKIR Port.
 - One 25 Pin Parallel Port.
 - One PS/2 Keyboard Port.
 - One PS/2 Mouse Port.
 - VGA Port.
 - USB Port.
- **RAM** : 4MB (Max. 128MB)
- **Video** : S3 Trio64V+ PCI 2d Accelerator.

Jumpers

Password Clear Jumper

Jumper	Configuration
JP6	Open - Password Enabled (Default) Close - Password Clear

Processor Bus/Core Speed Select

Bus Speed	JP16	JP17
2/3 Bus/Core Frequency Ratio	1-2	1-2
1/2 Bus/Core Frequency Ratio	2-3	1-2
2/5 Bus/Core Frequency Ratio	2-3	2-3
1/3 Bus/Core Frequency Ratio	1-2	2-3

Processor Interface Voltage Select

CPU Type	JP7	JP8	JP9	JP10	JP11
P54C	1-2	1-2	1-2	1-2	1-2
P55C	2-3	2-3	2-3	2-3	2-3
MII	1-2	1-2	1-2	1-2	1-2

Processor Core Voltage Select

Description	CPU Voltage	JP20	JP21	JP22
VR	3.3V Default	ON	OFF	OFF
VRE	3.52V for 200MHz CPU	OFF	OFF	OFF
P55C	2.8V for P55C CPU	OFF	OFF	ON
Cyrix M II	2.9V	OFF	ON	OFF

Battery

The RTC battery is upgraded by removing and replacing it with a Lithium 3v CR2032 or its equivalent battery in socket BT8J1.

To remove the battery, locate BT8J1 battery socket on the motherboard. Use an index finger and thumb from one hand, grip the battery at opposite points. Lift the battery out of the socket.

Take the upgrade battery, insure that the flat surface is facing up. Snap it into the battery socket. Note - + Positive side faces up.

Cache Upgrade

The cache is not upgradeable.

CPU Upgrades

This motherboard utilizes the Socket 7 (U25), which is a staggered 321 pin Zero Insertion Force (ZIF) socket. This motherboard is designed to be upgradeable with any pin-compatible Intel® Pentium™ processor, AMD or Cyrix M II™ processor, including, but not limited to, the following:

- Intel P54C 200/66, 166/66, 150/60, 133/66, 120/60MHz
- Intel P55C-MMX
- Cyrix 6x86 150 and 166MHz
- AMD PR 100, 120, 133, 150, 166MHz
- AMD K6

The AMD K6-266 and above require a CPU voltage setting of 2.2 volts. This voltage setting is not supported on this motherboard. Do NOT attempt to upgrade the CPU on this motherboard with any AMD K6 processor 266 or above.

The Cyrix M II 266 is NOT a 266MHz processor. Use the settings listed for a 200MHz processor. These settings are also printed on the surface of the processor itself.

Processor Freq.(MHz)	SEL0 JP12	SEL1 JP13	JP14	BF0 JP16	BF1 JP17	Host Bus Freq.(MHz)
133	ON	OFF	OFF	2-3	1-2	66
150	OFF	ON	ON	2-3	2-3	60
166	ON	OFF	OFF	2-3	2-3	66
200	ON	OFF	OFF	1-2	2-3	60
* 233	ON	OFF	OFF	1-2	1-2	66
* 266	ON	OFF	OFF	1-2	2-3	66

* PB810 Only

RAM Upgrades

The Motherboard has two DIMM sockets configured as two (0-1) banks. The system memory is upgradeable to 128MB. The 168-pin DIMM sockets will accept both 3.3V as well as 3.5V 1MBx64 (8MB), 2MBx64 (16MB), 4MBx64 (32MB), and 8MBx64 (64MB) fast page DRAM DIMM's or extended data out DRAM DIMM's with the recommended access speed of 60ns or faster. This motherboard will accept either single or double sided DIMM's. Memory type, size, and speed can vary between sockets. This motherboard will not accept 36 bit

DIMM modules (parity). Due to the nature of the VX controller chipset, this motherboard will not support 128MB DIMM modules.

The only 64MB DIMM that is approved for the 810 is Packard Bell part number 965174.

Video Memory Upgrades

PB810 - The Motherboard has 2 MB Video Memory, and is not upgradable.

PB820 - Can be upgraded by installing another 1MB of Video Ram.