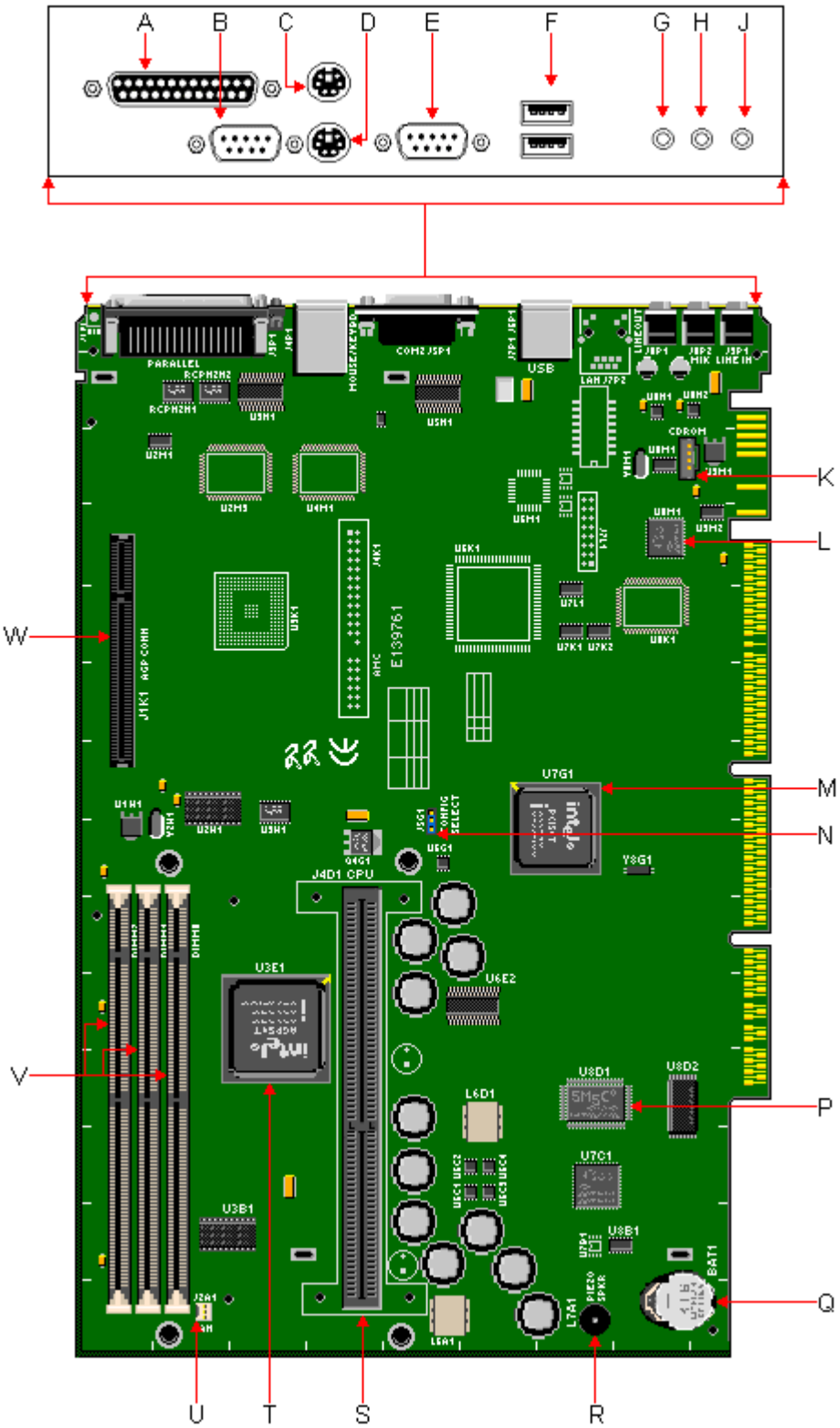
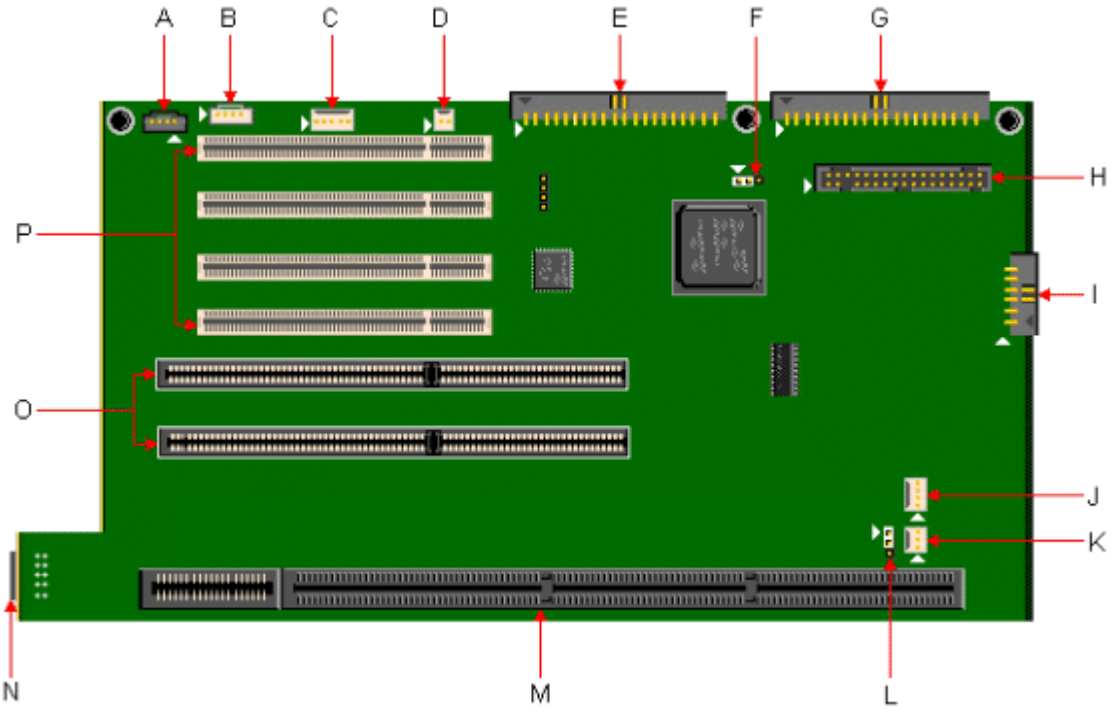
Packard Bell 1010 M/Board



Item	Description	Item	Description
A	Parallel Port	M	Intel 82371EB PIIX4E
B	Serial Port 1	N	Configuration Jumper (J5G1)
C	PS/2 Mouse Connector	P	SMC FDC37C777

D	PS/2 Keyboard Connector	Q	CR-2032 Battery
E	Serial Port 2	R	Piezo Speaker
F	USB Connectors	S	Slot 1 Connector
G	Line Out	T	Intel 82440BX PAC
H	MIC In	U	Fan Connector
J	Line In	V	DIMM sockets
K	CD-ROM Header	W	AGP Connector
L	Crystal Audio 4235		

This motherboard MUST be used in conjunction with an NLX form factor riser card. An example of such a riser card appears below.



Item	Description	Item	Description
A	CD Audio Header	I	Front Panel Connector
B	Modem TAD Connector	J	Speaker
C	Wake On Lan Connector	K	Fan Connector
D	Tamper Detection	L	2 Cable/ 3 Cable Fan Connector Jumper (JP3)
E	Primary IDE	M	Riser Card Gold Finger Edge Connector
F	3 COM LAN Jumper (JP7)	N	RJ45 Network Interface Connector
G	Secondary IDE	O	ISA Slots
H	Floppy Connector	P	PCI Slots

Specification

- **Audio Options :** Crystal Semiconductor CS4235 Controller (optional)
- **Battery :** Lithium 3V (CR-2032)
- **BIOS :** Intel 4 MBit Flash EPROM. System BIOS by Phoenix
- **Bus :** PCI/ISA based system bus. 66MHz bus and 100MHz bus speed

- **Cache :** Maximum of 32K level 1 cache and 512 KB level 2 cache contained in the Single Edge Contact cartridge.
- **Chipset :** Intel 82440BX PCI AGP Controller (PAC). Intel 82371EB chipset (PllX4E)
- **CPU :** This motherboard supports the following processors:
  - Intel Pentium III processor operating from 450 to 500 MHz (100MHz front-side bus).
  - Intel Pentium II processor operating at 350, 400 or 450 MHz (100MHz front-side bus).
  - Intel Pentium II processor operating at 266, 300 or 333 MHz (66MHz front-side bus).
  - Intel Celeron processor operating from 266 to 450 MHz.
- **Form Factor :** NLX ver. 1.2
- **I/O :** SMC FDC37C777 I/O Controller.
- **Interfaces :**
  - 2 DB-9 Serial ports
  - 1 DB-25 Parallel port
  - 1 PS/2 keyboard port
  - 1 PS/2 mouse port
  - 2 USB connector
  - 3 Stereo mini-jacks for Line In, Line Out & Mic
- **RAM :** 3 168-pin DIMM sockets, upgradeable to 384MB total SDRAM. If a processor with a 100MHz front-side bus is being used, then 100MHz SDRAM should be used. Processors with a 66MHz front-side bus can be paired with either 66MHZ or 100MHz SDRAM.

Jumpers

Jumper	Function	Pins	Description
J5G1	Normal	1-2	The BIOS uses current configuration information and passwords for booting.
	Configure	2-3	After POST, CMOS Setup runs automatically. The maintenance menu is displayed.
	Recovery	None	The BIOS attempts to recover the BIOS information. A recovery diskette is required.

Upgrades

- **Cache Upgrade**. Each Intel Pentium II and Pentium III CPU has 32K level 1 cache and 512 KB level 2 cache contained in the Single Edge Contact cartridge. Each Intel Celeron processor can come with either 0, 128K, 256K or 512K Level 2 cache. The cache is non-upgradeable.

- **CPU Upgrade**. This motherboard can accommodate the following CPUs:
  - Intel Pentium III processor operating from 450 to 500 MHz (100MHz front-side bus).
  - Intel Pentium II processor operating at 350, 400 or 450 MHz (100MHz front-side bus).
  - Intel Pentium II processor operating at 266, 300 or 333 MHz (66MHz front-side bus).
  - Intel Celeron processor operating from 266 to 450 MHz. Single Edge Contact (SEC) cartridge.
  - Uses the SLOT1 CPU socket. Not keyboard switchable. Disable cache to slow down the system.

- **RAM Upgrade**. The 1010 motherboard has three DIMM sockets configured as three (0-2) banks. The upgrade memory is upgradeable to 384MB. The 168-pin DIMM sockets will accept 4Mbx64 (32MB), 8Mbx64 (64MB) and 16Mbx64 (128MB) SDRAM DIMMs with gold-plated contacts, operating voltage of 3.3V and an operating frequency of 66 or 100 MHz . Non-ECC (64-bit) and ECC (72-bit) SDRAM are both supported, but it is not recommended that non-ECC memory be used. This motherboard will accept either single or double sided DIMMs. Memory type and size can vary between sockets. This motherboard will not accept 36 bit DIMM modules (parity).

Issues

Sound Blaster Live! causes modems to lockup on Powermate 8100 series. To solve this, download BIOS upgrade version P15 from Packard Bell's support site. This revision was written specifically to resolve this issue.