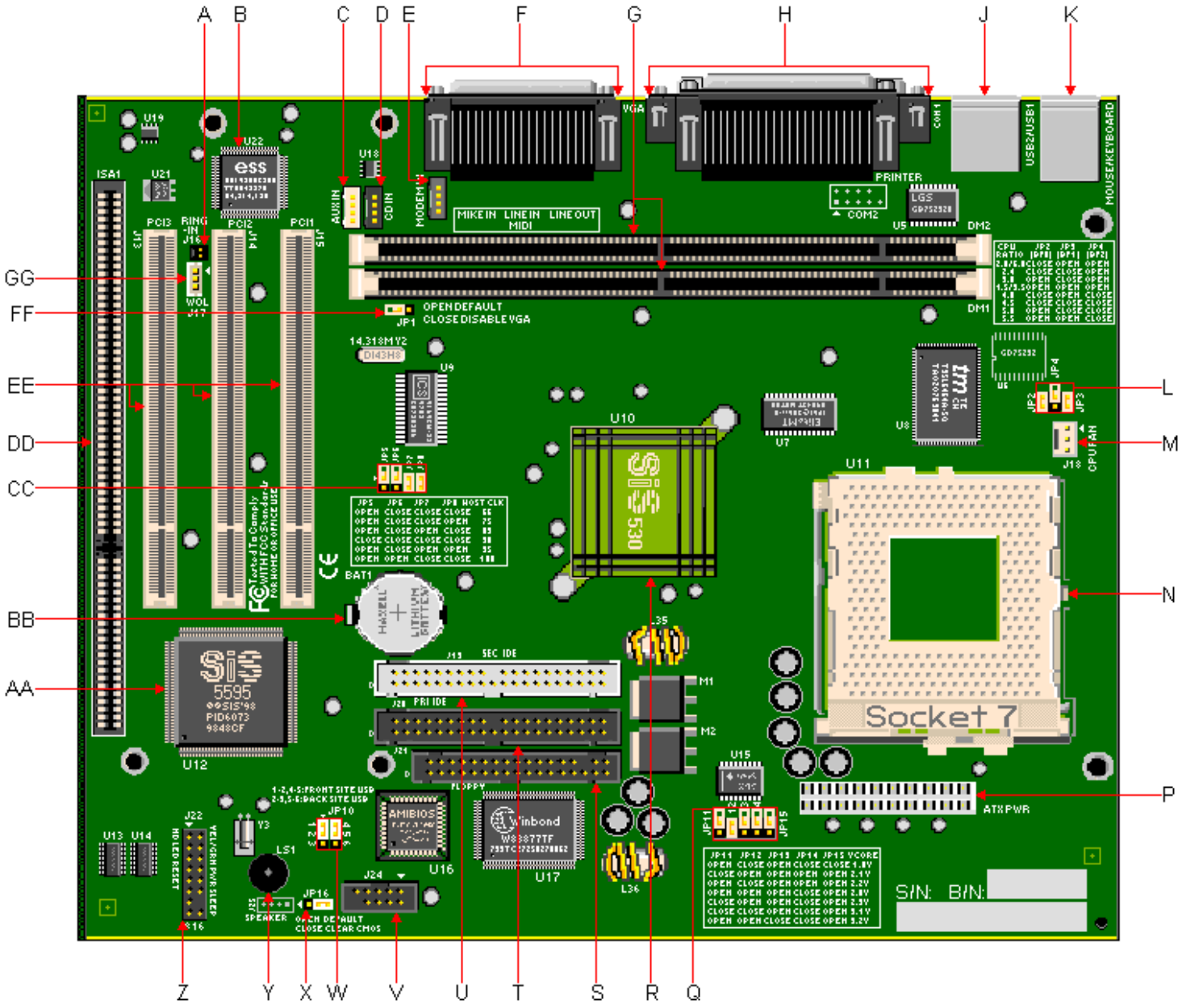
Packard Bell 980 M/Board



Item	Description	Item	Description
A	Ring-In Header	S	FDD Connector
B	ESS1938 Audio Controller Chip	T	Primary IDE Connector
C	Aux In Connector	U	Secondary IDE Connector
D	CD In Connector	V	Front USB Connector (J24)
E	Modem In Connector	W	Jumper Block JP10
F	MIDI/Game Port & Audio Jacks	X	CMOS Clear Jumper (JP16)
G	DIMM Slots	Y	Piezo Speaker
H	Parallel, Serial & VGA Ports	Z	Front Panel Connector Header
J	Dual USB Ports	AA	SiS 5595 AGP/PCI/ISA Controller Chipset
K	PS/2 Keyboard & Mouse Ports	BB	Battery
L	Jumpers - JP2, JP3, JP4	CC	Jumpers - JP5, JP6, JP7, JP8

M	CPU Fan Power Connector	DD	ISA Slot
N	CPU ZIF Socket (Socket 7)	EE	PCI Slots
P	Primary Power Connector	FF	Jumper JP1
Q	Jumpers - JP11, JP12, JP13, JP14, JP15	GG	Wake-On-LAN Header
R	SiS 530 AGP Graphics Chipset		

Specification

- **Audio :** ESS Solo 1
- **Battery :** Socketed 3 volt Lithium coin cell battery
- **BIOS :** Flash EEPROM. System BIOS by AMI
- **Bus :** PCI 2.2/ISA based system bus. Supports CPU bus clock 55/60/66/75MHz. Supports 27.5/30/33MHz PCI bus speed
- **Cache :** 16K level 1 cache. 512K level 2 cache, non-upgradeable
- **Chipset :** SiS 530/5595 AGP/PCI/ISA Controller Chipset
- **CPU :** This motherboard utilizes a 321-pin ZIF socket (Socket 7) and supports the following CPUs:
  - Pentium P55C 166 - 233MHz
  - Cyrix 6x86L, PR120+ - 200+
  - Cyrix 6x86MX, PR133 - PR350
  - Cyrix 6x86 MII 266 - 350
  - AMD-K5/K6/K6-2/K6-3 166 - 400MHz
- **Interfaces :**
  - 1 DB-9 Serial port
  - 1 DB-25 Parallel port
  - 1 DB-15S VGA Video port
  - 1 PS/2 keyboard port
  - 1 PS/2 mouse port
  - 2 USB ports
  - 3 Stereo mini-jacks for Speaker Out, Line In & Mic In
  - 1 DB-15 MIDI/Game port
- **RAM :** 2 168-pin DIMM sockets, upgradeable to 256MB total SDRAM Supports PC66/PC100 Synchronous DRAM (Non-ECC/Parity)
- **Video :** Integrated in the SiS 530/5595 AGP/PCI/ISA Controller Chipset
- **Video RAM :** Intgrated VGA controller supports 2, 4 and 8MB SDRAM

Jumpers

Jumper	Function	Configuration
JP16	CMOS/Password Clear	Open - Normal Operation Closed - Clear CMOS Data

Front/Back USB Port Select Jumper Block (JP10)

USB Port	JP10 Settings
Front (J24)	1-2 Closed 4-5 Closed
Back (J5-1)	2-3 Closed 5-6 Closed

CPU/DRAM Clock Selection

CPU/DRAM Clock (MHz)	JP5	JP6	JP7	JP8
66	Open	Closed	Closed	Closed
75	Open	Closed	Open	Open
83	Open	Closed	Open	Closed
90	Closed	Closed	Closed	Closed
95	Open	Closed	Open	Open
100	Open	Open	Closed	Closed

CPU/Bus Speed Ratio Select

Intel CPU/Bus	JP2	JP3	JP4
X1.5/X3.5	Open	Open	Open
X2.0/X6.0	Closed	Open	Open
X2.5	Closed	Closed	Open
X3.0	Open	Closed	Open
X4.0	Closed	Open	Closed
X4.5	Closed	Closed	Closed
X5.0	Open	Closed	Closed
X5.5	Open	Open	Closed

Processor Core Voltage Select (VCORE)

Vcore	JP11	JP12	JP13	JP14	JP15
1.8v	Open	Closed	Open	Closed	Closed
2.1v	Closed	Open	Open	Open	Open
2.2v	Open	Closed	Open	Open	Open
2.8v	Open	Open	Open	Closed	Open
2.9v	Closed	Open	Open	Closed	Open
3.1v	Closed	Closed	Open	Closed	Open
3.2v	Open	Open	Closed	Closed	Open

Upgrades

- **Cache Upgrade**. The 980 motherboard comes with 0 or 512K Level 2 cache. The cache is not upgradeable.
- **CPU Upgrade**. Zero Insertion Force (ZIF) socket. Uses the 321-pin Type 7 CPU Socket. Not keyboard switchable. Disable cache to slow down the system.This motherboard can accommodate the following CPUs:
  - Pentium P55C 166 - 233MHz
  - Cyrix 6x86L, PR120+ - 200+
  - Cyrix 6x86MX, PR133 - PR350
  - Cyrix 6x86 MII 266 - 350
  - AMD-K5/K6/K6-2/K6-3 166 - 400MHz
- **RAM Upgrade**. Maximum on Motherboard: 256MB. Uses 8/16/32/64/128 MB DIMMs, 60ns or faster EDO SDRAM DIMMs. Supports only non-parity DIMM modules. The 168-pin DIMM sockets will support

PC66/PC100 unbuffered 3.3V 1MBx64 (8MB), 2MBx64 (16MB), 4MBx64 (32MB), and 8MBx64 (64MB) and 16MBx64 (128MB) SDRAM DIMMs. Bank 1 will be populated as the default from the factory. No configuration jumpers: BIOS detects memory size, and memory type. This motherboard will not accept 36-bit DIMM modules (parity).

Issues

Installing A Third Party Video Card

There is a jumper on the motherboard, located near the DIMM sockets. This jumper is labelled JP1 and has the words Open Default and Closed Disable VGA. This will disable the onboard video when the 2 pins of the jumper are covered.

Portions Of The Display Are Blocky When Playing 3D Games

There is no resolution to this situation. This is a hardware limitation.