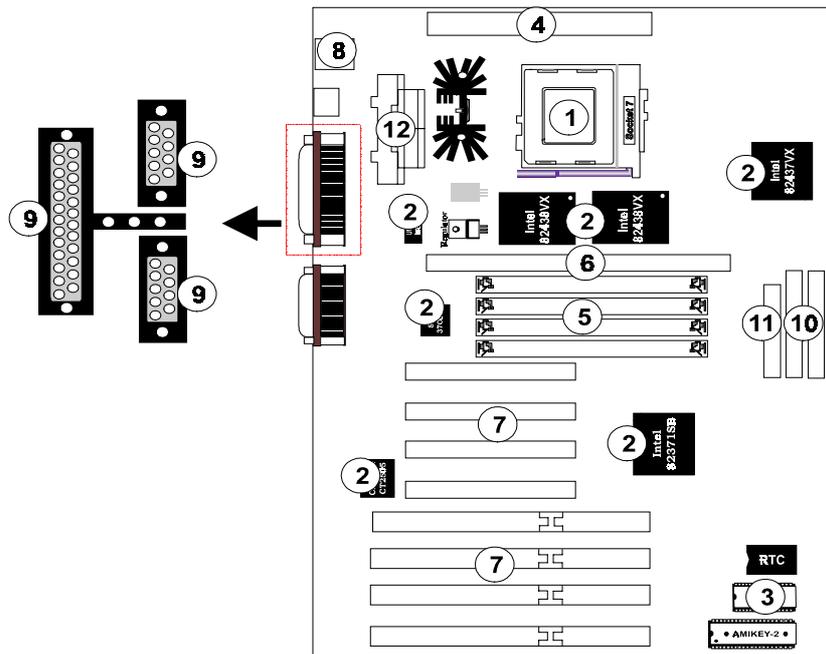


# 1 Introduction

## Mainboard Description



- |                      |                             |
|----------------------|-----------------------------|
| ① Processor          | ⑦ Expansion Slots           |
| ② Chipset            | ⑧ PS/2 Mouse & Keyboard Set |
| ③ System BIOS        | ⑨ Serial / Parallel Ports   |
| ④ L2 Cache Module    | ⑩ PCI IDE Connectors        |
| ⑤ SIMM Socket        | ⑪ FDD Connector             |
| ⑥ DIMM Memory Socket | ⑫ Power Supply Connectors   |

## *P5VX-A*

P5VX-A is a Pentium PCI mainboard using Intel TVX (82437VX), TDX(82438VX) and PIIX3 (82371SB) system chipset, built in PCI IDE controller. The super I/O is SMC669. There are 4 ISA Bus slots and 4 PCI Bus slots. P5VX-A also supports 2 banks DRAM and 1 Bank Synchronous DRAM with total memory size up to 128MB. One Pipelined Burst SRAM cache module up to 512KB which is compatible with COAST 2.1 specification. The audio chipset use 16-bit full duplex Creative's "ViBRA 16C - CT2505". The USB function is included.

### **1. Processor:**

Intel 75/90/100/120/133/150/166/200 MHz (P54C)  
Intel Pentium OverDrive Processors  
Intel P55C (Optional)  
Non-Intel series CPUs. (e.g. : Cyrix, AMD.....)(Please refer to [Appendix](#) for detailed settings.)

### **2. Chipset:**

Intel	82437VX (System Controller)
	82438VX (DATA Buffer)
	82371SB (PCI IDE ISA Xcelerator)
SMC	37C669 (Super I/O Controller)
UMC	8667 (I/O TTL Integration)
Creative	ViBRA 16C-CT2505 (16-Bit Audio Chip)

### **3. System BIOS:**

Award BIOS with full Green function, PnP and DMI V2.0.

### **4. L2 Cache Module :**

Support cache module connector (160 pins)

### **5. SIMM System Memory Socket:**

Support 4MB to 128MB

### **6. DIMM Memory Socket:**

A DIMM socket is provided in the motherboard to support up to 32MB synchronous DRAM (SDRAM). The DIMM Socket is in compliance with JEDEC specifications for 3.3V unbuffered SDRAM Module.

### **7. Expansion Slot:**

4 ISA Bus Slots.  
4 PCI Bus Slots. (One ISA-PCI Shared Slot)

### **8. AT K/B or PS/2 Mouse & Keyboard Set:**

Provides Connectors for PS/2 Keyboards & PS/2 Mouse.

**9. Serial / Parallel Port:**

Provides two serial ports and one parallel port.

**10. PCI IDE Connector:**

2 Enhanced PCI IDE up to 4 IDE Device Connectors.

**11. FDD Connector:**

Provides an on-board FDD Connector which supports 360KB/720KB/1.2MB/1.44MB/2.88MB type drives.

**12. Power Supply Connectors:**

Provides the connectors for standard PC power supply or ATX power supply for option.

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## Features

θ **CPU:**

- One Socket 7 supports Pentium 75/90/100/120/133/150/166/200 MHz CPU.
- Upgradable to Intel Pentium OverDrive processors.
- Supports Pentium P55C CPU ( Manufacture Optional).
- Supports Non-Intel series CPUs. (e.g.: Cyrix , AMD.....) (**Please refer to Appendix for detaied settings.**)

θ **BIOS:**

- Award BIOS with true Green Flash ROM , DMI, and CDROM boot function .
- Comply with Intel and Windows 95 PnP.
  - ⌘ PnP specification V1.0a
  - ⌘ APM specification V1.2.

θ **Cache:**

- Supports the CPU's internal first level (L1) cache and external secondary level (L2) cache.
  - > **16KB Level 1 Cache inside Pentium:**
    - ⌘ Data Cache: supports 8KB Write-Through and Write-Back policy.
    - ⌘ Code Cache: supports 8KB Write-Through policy.

> **160-pin Cache Module Socket for Level 2 Cache:**

- Supports Pipelined Burst SRAM Module with 256KB/512KB.
- Compatible with COAST2.1 specification.

⊖ **Memory:**

- Supports 4 pieces of 72-pin SIMM sockets and 1 piece of 168-pin DIMM socket with total memory size from 4MB to 128MB.
- Supports EDO/ Fast Page Mode DRAM. (6-2-2-2 Reads@66MHz Host Clock)
- Supports 3.3V unbuffered SDRAM. (x-1-1-1 @66MHz Host Clock)

⊖ **Slots:**

- 4 16-bit ISA slots with 100% ISA compatible function.
- 4 32-bit PCI slots all support PCI master.
  - PCI specification version 2.1. (5V compliant)

⊖ **IDE:**

- Build-in Intel 82371SB chip 32-bit PCI IDE interface with 2 IDE channels.
  - Supports PIO and Bus master IDE
  - Supports up to PIO mode 4 timings

⊖ **FDD:**

- Two floppy drives support 360K/720K/1.2MB/1.44MB/2.88MB and 3D mode floppy drives.

⊖ **I/O:**

- one multi-mode parallel port with chip-protect circuitry supports standard, enhanced (EPP), high speed (ECP) mode.
- Two high speed 16550 compatible UARTS.

⊖ **Audio:**

- Sound Blaster TM 16 compatible.
- Supports Plug and Play.
- Integrated Music Synthesis and DAC.
- Compatible with Roland MPU401 VART mode.
- Fully Compatible with MPC. MPC II .
- Supports APX (All Position Expansion) 3D-Sound.