
Chapter 1

Overview

The AP57 is a high-performance Pentium[®]-based system board that utilizes the PCI/ISA architecture. It integrates the SiS 5571 PCIsset, a super I/O controller, and a PCI mode 4 enhanced IDE controller with bus master support to enhance system performance. It has four single in-line memory module (SIMM) sockets that allow system memory expansion up to a maximum of 256MB. It also supports 256KB and 512KB pipelined-burst second-level cache.

One main feature of AP57 is the green power-management function that extends energy conservation from system components to display monitor. It complies with the power-saving standards of the U.S. Environmental Protection Agency (EPA) Energy Star program.

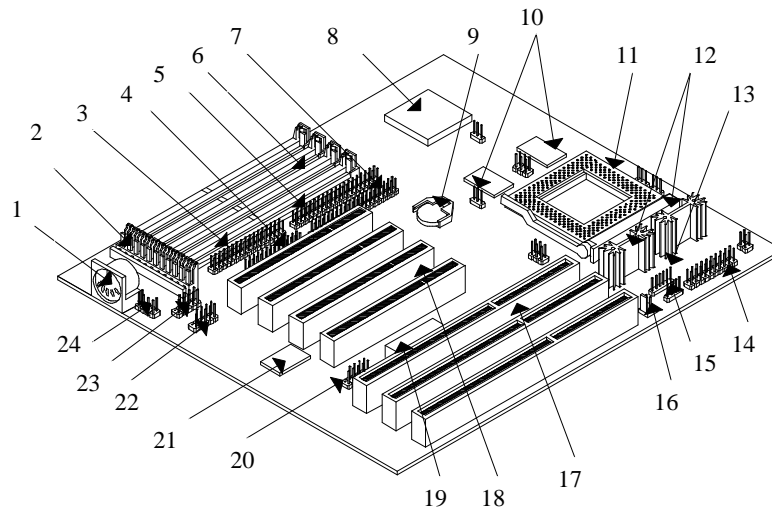
The AP57 board measures 220 mm x 250 mm.

Overview

1.1 Specifications

Form Factor	Baby AT
Board Size	220mm x 250mm
CPU	Intel Pentium Processor P54C, PP/MT (P55C), AMD K5 and Cyrix 6x86
System Memory	FPM (Fast Page Mode) or EDO (Extended Data Output) 72-pin SIMM x4, maximum 256MB.
Second-level Cache	256KB or 512KB pipelined-burst cache onboard
Chipset	SiS 5571 PCIset (480-pin BGA Package)
Expansion Slots	ISA x3 and PCI x4
Serial Port	Two serial ports UART 16C550 compatible
Parallel Port	One parallel port supports standard parallel port (SPP), enhanced parallel port (EPP) or extended capabilities port (ECP).
Floppy Interface	Floppy interface supports 3.5-inch drive with 720KB, 1.44MB or 2.88MB format or 5.25-inch drive with 360KB, 1.2MB format
IDE Interface	Dual-channel IDE interface supports a maximum of 4 IDE hard disks or CDROM. Mode 4 and bus master hard disk drives are also supported.
USB Interface (optional)	USB bracket that supports two USB ports . The BIOS also supports USB driver to simulate legacy keyboard.
PS/2 Mouse	Via PS/2 mouse bracket
Keyboard	Default: AT compatible keyboard Mini-DIN PS/2 keyboard connector is optional.
BIOS	Award Plug-and-Play Flash ROM BIOS
RTC	RTC build in chipset
Battery	Lithium (CR2032)

1.2 Board Layout



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| 1 | <i>Keyboard connector:</i> | <i>The default is AT-compatible keyboard. The P/2-compatible mini-DIN keyboard connector is optional.</i> |
| 2 | <i>Power connector:</i> | <i>Provides mainboard power.</i> |
| 3 | <i>FDC connector:</i> | <i>Connects to 3.5-inch/5.25-inch floppy drives.</i> |
| 4 | <i>Printer connector:</i> | <i>Connects to parallel printer</i> |
| 5 | <i>IDE1 connector:</i> | <i>Primary channel for IDE hard disk or CDROM, accepts a maximum of two devices.</i> |
| 6 | <i>SIMM sockets:</i> | <i>Accepts 72-pin fast page mode or EDO DRAM module for system main memory.</i> |
| 7 | <i>IDE2 connector:</i> | <i>Secondary channel for IDE hard disk or CDROM, accepts a maximum of two devices.</i> |
| 8 | <i>SiS chipset:</i> | <i>SiS 5571 cache/memory controller in BGA package.</i> |
| 9 | Battery: | CR2032-compatible |
| 10 | <i>Pipelined-burst cache:</i> | <i>256/512KB secondary level cache. Cache is used to enhance memory performance.</i> |
| 11 | <i>CPU socket:</i> | <i>Accepts Intel Pentium P54C, PP/MT (P55C), AMD K5, and Cyrix 6x86 CPUs.</i> |

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- 12 *Voltage Regulators w/ Heatsink:* *The regulator is used to supply CPU voltage.*
- 13 *IrDA connector:* *Wireless Infrared connector, used as COM2.*
- 14 *Front-panel connector:* *Connector for front panel power reset, suspend switches and power or green LED.*
- 15 *IDE LED connector:* *For front panel IDE LED.*
- 16 *CPU fan connector:* *+12V 2-pin connector for CPU fan.*
- 17 *ISA slots:* *Accepts 8-MHz ISA bus expansion cards.*
- 18 *PCI slots:* *Accepts 33-MHz PCI bus expansion cards.*
- 19 *Keyboard controller:* *Controls keyboard input/output functions.*
- 20 *USB connector (optional):* *Universal Serial Bus (USB). The USB is a new 4-pin serial interface that allows easy installation and cascading of USB devices..*
- 21 *Super I/O controller:* *SMC 669-compatible I/O control chip including two serial ports (COM1/COM2), one parallel port (printer), and floppy controller.*
- 22 *COM1 connector:* *Serial port 1.*
- 23 *COM2 connector:* *Serial port 2.*
- 24 *PS/2 mouse connector:* *Connects to PS/2 mouse bracket or PS/2-compatible mouse. Unlike serial mouse from COM1/COM2, the PS/2 mouse signal is similar as the keyboard and is also controlled by the keyboard controller.*