

## **Chapter 1**

### **INTRODUCTION**

The Baby TX8 mainboard is a high-performance personal computer mainboard. This mainboard supports Intel®Pentium®processor/Pentium® processor with MMX™ technology, Cyrix®6x86/6x86L/6x86MX, and AMD® K5/K6 processors. The mainboard also supports four 32-bit PCI (Peripheral Component Interconnect) Local Bus standard slots.

The mainboard uses the highly integrated Intel®82430TX chipset to support the PCI/ISA and Green standards, and to provide the Host/PCI bridge. The Intel®82430TX chipset integrates all system control functions such as ACPI (Advanced Configuration and Power Interface). The ACPI provides more Energy Saving Features for the OSPM(OS Direct Power Management) function. The Intel®82430TX chipset also improves the IDE transfer rate by supporting Ultra DMA/33 IDE that transfer data at the rate of 33MB/s.

The mainboard also supports the System Hardware Monitor Controller as an optional function. This function includes: CPU/power fan control, CPU temperature detect and protect, and system voltage detect .

## **1.1 System Board Features**

### **CPU**

- Socket 7 supports Intel® Pentium® processor/Pentium® processor with MMX™ technology.
- The Cyrix® 6x86/6x86L/6x86MX and AMD® K5/K6 processors are also supported.

### **Chipset**

- Intel® 82430TX chipset

### **Cache Memory**

- Supports 512K PB SRAM.
- 64MB DRAM cacheability.
- Direct mapped organization.
- Cache hit read/write cycle timing at 3-1-1-1.
- Back-to-Back read/write cycles at 3-1-1-1-1-1-1-1.

### **Main Memory**

- Supports three memory banks using two 168-pin unbuffered DIMM and two 72-pin SIMM sockets .
- Supports a maximum memory size of 256 MB.
- Supports 3.3v Fast Page (FP), Extended Data Output (EDO), and SDRAM DIMM.

### **Slots**

- Four 32-bit Master PCI Bus slots and three 16-bit ISA bus slots
- Supports 3.3v/5v PCI bus Interface.

### **On-Board IDE**

- An IDE controller on the Intel® 82371AB chipset provides IDE HDD/CD-ROM with PIO, Bus Master and Ultra DMA/33 operation modes.
- Connect up to four IDE devices.

**On-Board Peripherals**

- On-Board Peripherals include:
  - 1 floppy port supports 2 FDD with 360K, 720K, 1.2M, 1.44M and 2.88Mbytes.
  - 2 serial ports (COMA + COMB)
  - 1 parallel port supports SPP/EPP/ECP mode
  - 2 USB ports
  - 1 IrDA connector for SIR.

**BIOS**

- The mainboard BIOS provides “Plug & Play” BIOS which detects the peripheral devices and expansion cards of the board automatically.
- The mainboard provides a Desktop Management Interface(DMI) function which records your mainboard specifications.

**Dimension**

- Baby AT : 22cm(L) x 22cm(W) x 4 layers PCB

**Mounting**

- 5 mounting holes.

