

## **Chapter 1**

### **INTRODUCTION**

The MS-5156 mainboard is a high-performance personal computer mainboard. The mainboard supports the Peripheral Component Interconnect (PCI) Local Bus standard and provides five 32-bit PCI bus slots.

The mainboard uses the highly integrated Intel® 83430TX 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.

## **1.1 System Board Features**

### **CPU**

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

### **Chipset**

- Intel® 82430 TX chipset.

### **Cache Memory**

- Supports 512K pipelined burst cache memory.
- Supports Direct Map Organization and Write-Back cache policy.

### **Main Memory**

- Supports four memory banks using four 72-pin SIMM sockets and two 168-pin DIMM sockets (for unbuffered DIMM).
- Up to 256 Mbytes main memory.
- Supports EDO Hyper Page Mode DRAM, Standard Fast Page mode DRAM and SDRAM(Synchronous DRAM).

### **Slots**

- Five 32-bit PCI Bus slots (four 32-bit bus master PCI slots + one 32-bit slave PCI slot) + Three 16-bit ISA bus slots. One shared slot can be used as ISA or PCI.

### **On-Board IDE**

- Supports Bus Master and Ultra DMA/33 IDE.
- Supports up to 4 IDE drives.

### **On-Board Peripherals**

- On-Board Peripherals include:
  - 1 floppy port supports 2 FDD
  - 2 serial ports (COMA + COMB)
  - 1 parallel port supports ECP or EPP mode
  - USB
  - IR (SIR)

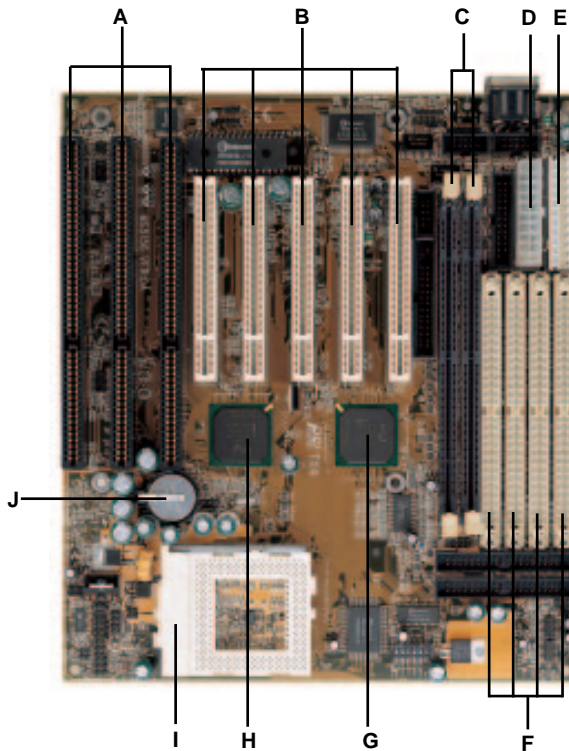
**Dimensions**

- Baby-AT form factor
- 25cm(L) x 22cm(W) x 4 layer PCB

**Mounting**

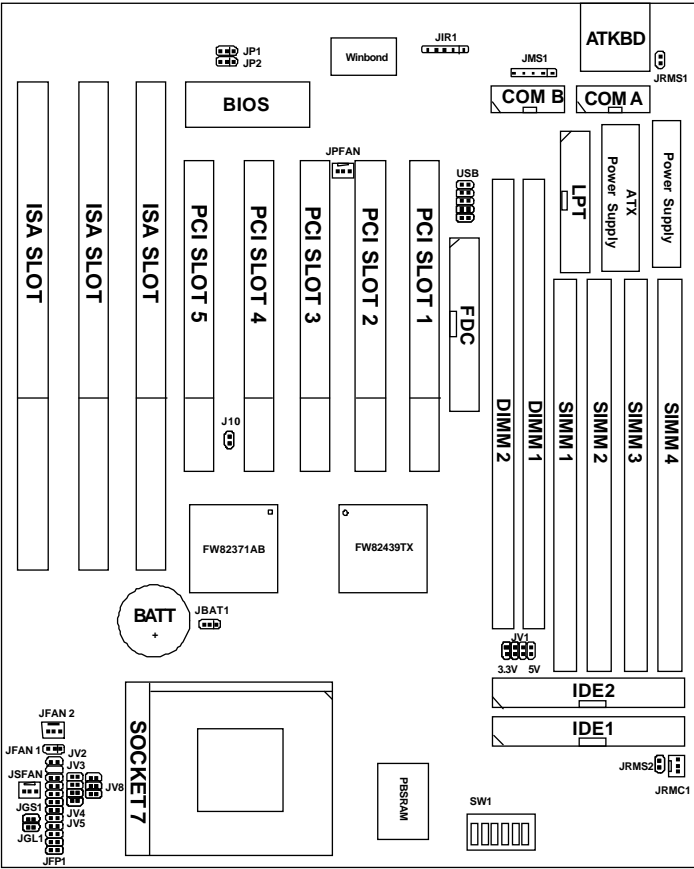
- 5 mounting holes

## 1.2 Parts of the Mainboard



- A Three 16-Bit ISA SLOTS
- B Five 32-Bit PCI SLOTS
- C Two 168-Pin DIMM SOCKETS
- D ATX 20-Pin POWER CONNECTOR
- E PS/2<sup>®</sup> POWER CONNECTOR
- F Four 72-pin SIMM SOCKETS
- G Intel<sup>®</sup> 82439TX
- H Intel<sup>®</sup> 82371AB
- I SOCKET 7
- J 2032 LITHIUM BATTERY

1.3 Mainboard Layout



MS-5156