

Chapter 1

INTRODUCTION

The MICRO-ATX CX2 mainboard is a high-performance personal computer mainboard. This mainboard supports Cyrix®GXm processor with MMX™ technology. The mainboard also supports three 32-bit PCI (Peripheral Component Interconnect) Local Bus standard slots.

The Cyrix®Cx5520™ Core Logic is a companion device to the family of MediaGX™ Integrated Processors. The Cx5520 and MediaGX processors together provide a system-level solution suitable for desktops.

The Cx5520™ is a PCI-to-ISA bridge (South Bridge) that provides complete AT/ISA functionality. The device also contains state-of-the-art power management. Hardware support for the Cyrix®Virtual System Architecture™ (VSA™) is provided enabling Microsoft®PC97 compliant audio. Two bus mastering IDE controllers are included for support of up to four ATA-compliant devices. An optional two-port Universal Serial Bus (USB) provides high speed, Plug & Play expansion for a variety of new consumer peripheral devices such as digital cameras.

All of the clocks required in the system are integrated into this device, eliminating the need for an external clock chip.

1.1 Mainboard Features

CPU

- Socket supports Cyrix®GXm processor with MMX™ technology only.

Chipset

- Cyrix®CX5520 chipset (onboard VGA/Audio).

Onboard VGA

- Cyrix®Xpress GRAPHICs™.

Onboard Audio

- Cyrix®Xpress Audio™ 16-bit sound.

Main Memory

- Supports two memory banks using two 168-pin DIMM sockets (for unbuffered DIMM).
- Up to 512 Mbytes main memory.
- Supports SDRAM(Synchronous DRAM).

Slots

- Three 32-bit PCI Bus slots (two 32-bit bus master PCI slots + one slave slot)
- Two 16-bit ISA Bus slots.

On-Board IDE

- Supports Bus Master.
- 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 Ports (optional)
 - VGA Port

Dimension

- MICRO- ATX: 24.4cm(L) x 17.6cm(W) x 4 layers PCB

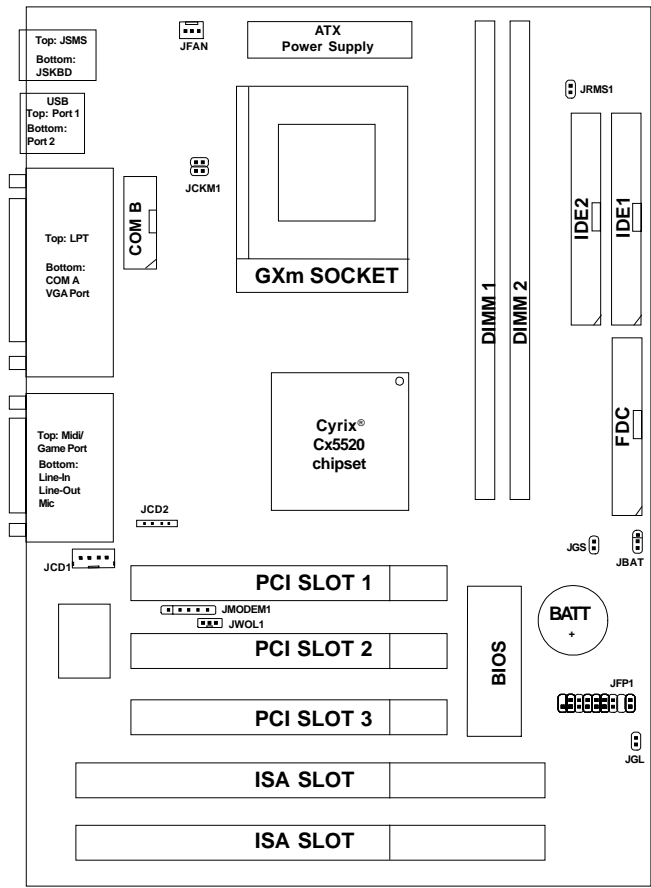
Mounting

- 7 mounting holes.

Other Features

- Poly Fuse used by keyboard and USB devices
- Power ON/OFF switch connector on board
- Ring Wake-Up
- Alarm Wake-Up

1.2 Mainboard Layout



MS-5176