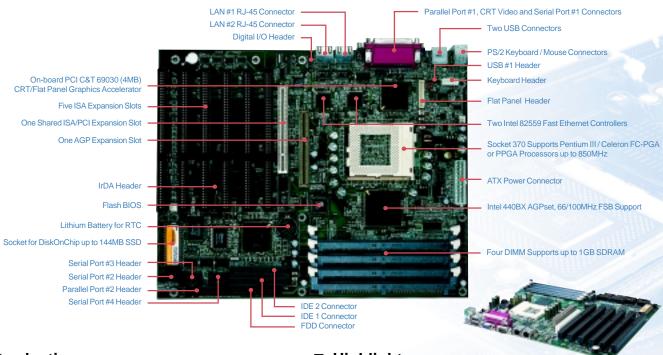
Industrial ATX Motherboard



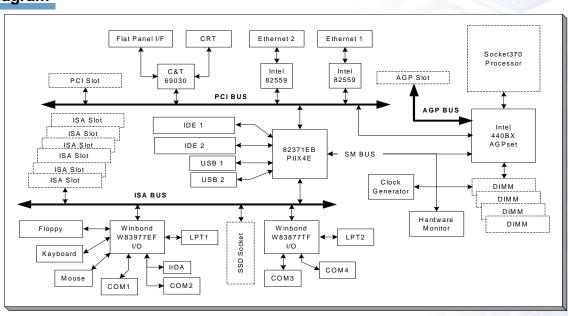
■ Introduction

The MB-X61 is specially designed for telecom, telephony, and other applications where multiple ISA slots are needed. The ATX motherboard provides a total of 6 ISA slots for add-in cards. Based on the proven Intel 440BX chipset, it supports Intel Pentium III or Celeron FC-PGA processors and up to 1GB memory. On-board C&T 69030 video provides CRT and Flat Panel display, or you can upgrade video via the AGP slot with optional AGP video card. Two Intel 82559 Fast Ethernet are built-in for networking. Also included are quad serial ports, dual parallel ports and a socket for flash memory.

■ Highlights

- Version controlled industrial ATX Motherboard
- Intel 440BX AGPset
- Supports Intel Pentium III/Celeron processors up to 850MHz
- Supports up to 1GB SDRAM
- On-board C&T 69030 CRT / Flat Panel graphics accelerator
- Two on-board Intel 82559 10/100Base-T Ethernet controllers
- 1 AGP, 5 ISA and 1 shared PCI/ISA slots
- 4 Serial, 2 Parallel, 2 USB and 4 Digital I/O
- · DiskOnChip flash memory support
- Multilevel watchdog timer and System health monitoring

■ Block Diagram



Industrial ATX Motherboard

■ Features

Processor

Supports Socket370 Intel Pentium III / Celeron processors in FC-PGA or PPGA package.

Max processor speed supported: 533MHz with 66MHz FSB processors, 850MHz with 100MHz FSB processors.

Chipset

Intel 440BX AGPset 66/100MHz FSB & Winbond 83977EF & 83877TF I/O chip.

System BIOS

256KB Award licensed flashable BIOS.

System Memory

Four 168-pin DIMM sockets support up to 1GB of PC66 or PC100 SDRAM modules (ECC capable).

· Solid State Disk / Flash Memory

One 32-pin DIP socket supports M-Systems' DiskOnChip up to 144MB.

Video

C&T 69030 PCI LCD CRT / Flat Panel graphics accelerator with integrated with 4MB video memory.

Supports resolutions and color depth: VGA 640x480 up to 16mil colors, SVGA 800x600 up to 16mil colors, XVGA 1024x768 up to 16mil colors, SXVGA 1280x1024 up to 16mil colors, and UXVGA 1600x1200 up to 64K colors.

Capable of "Simultaneous Display" of same screen and "Dual Display" of two different screens on CRT and Flat panel.

Fast Ethernet

Two Intel 82559 PCI Fast Ethernet (10/100Base-T) controllers with two RJ-45 connectors on-board.
Supports Wake-on-LAN function.

IDE Interface

Two PCI Enhanced IDE interface supports up to four (PCI Bus Master, Ultra DMA-33, Multiword DMA & PIO mode 0-4) IDE devices. Two IDE cables included.

Floppy Interface

One floppy interface supports up to two floppy devices. FDD cable included.

Serial I/O

Four 16550 serial ports, three RS-232 and one RS-232/422/485 selectable. Serial port 1 on DB-9 connector, serial port 2-3 on header.

Parallel I/O

Two parallel ports supports for EPP, ECP and SPP modes. Parallel port 1 on DB-25 connector at rear I/O and parallel port 2 on header.

Digital I/O and IR

TTL mode 4 bit digital input / 4 bit digital output and IrDa v1.0 interface on headers.

· Keyboard, Mouse and USB

One 6-pin mini-DIN PS/2 keyboard connector, one 6-pin mini-DIN PS/2 mouse connector, and two USB connectors at rear I/O arer.

One 5-pin keyboard header for backplane/ chassis keyboard extension.

One 5-pin USB header for chassis front panel USB connector extension.

Expansion Bus

One AGP slot for AGP video controller, Five ISA expansion slots, and One shared PCI/ISA expansion slot.

Watchdog Timer

Software triggered 16 level time-out intervals from 0~30 seconds in 2-second intervals.

Health Monitoring

On-board Genesys 518SM health monitoring IC with CPU temperature alarm.

• Real Time Clock

Internal RTC with Lithium battery back-up.

Specifications

Electrical

Power Requirement: +5V, +12V
Power Input: Standard ATX
Power Consumption:
w/ PentiumIII 850MHz CPU
and 1GB RAM
4.4A @ +5V, 0.1A @ +12V (23.2W)
w/ Celeron 400MHz CPU
and 64MB RAM
3.5A @ +5V, 0.2A @ +12V (19.9W)

Mechanical

ATX Motherboard Dimension: 230mm x 305mm (9" x 12") Weight: 697.4g (1lb 8.6oz)

Environmental

Operating Temperature: 0°C to 60° C
Storage Temperature: -20°C to 70° C
Operating Humidity: 10% to 90% RH,
non-condensing

Reliability

MTBF: >40,000 hours

Safety Approvals

CE & FCC Certification Pending

Warranty

Two years (Contact Sales for details)

■ Software

The MB-X61 is compatible with operating systems developed for x86 PC. The board supports Windows 95 / 98, Windows NT / NT Embedded, Windows 2000, and Linux. Drivers for various OSes are included on a CD-ROM with every package.

Ordering Information

MB-X61A

Socket 370 Industrial ATX Motherboard with on-board video, dual Ethernet and 6 ISA slots.