
Introduction

1

The Pro266 Master (MS-6366) ATX mainboard is a high-performance computer mainboard based on Apollo Pro266 chipset and designed for the Intel® Celeron™ or Pentium !!! (FC-PGA) processor for inexpensive business/personal desktop markets.

The Apollo Pro266 chipset consists of the VT8633 V-Link DDR Host system controller and the VT8233 highly integrated V-Link Client PCI/LPC controller. The VT8633 provides superior performance between the CPU, DRAM, AGP bus and V-Link interface with pipelined, burst, and concurrent operation and supports eight banks of SDR/DDR SDRAMs up to 4 GB and full AGP v2.0 capability including 2x and 4x mode transfers, SBA (SideBand Addressing), Flush/Fence commands, and pipelined grants.

The VIA® VT8233 South Bridge enhances the functionality of the standard ISA peripherals and supports delayed transactions and remote power management so that slower ISA peripherals do not block the traffic of the PCI bus. In addition, the VT8233 includes eight levels (doublewords) of line buffers from the PCI bus to the ISA bus to further enhance overall system performance.

This chapter includes the following topics:

Mainboard Specifications	1-2
Mainboard Layout	1-4
Quick Components Guide	1-5
Key Features	1-6
MSI Special Features	1-7

Chapter 1

Mainboard Specification

CPU

- Support Socket 370 for Intel® Celeron(PPGA/FC-PGA)/Coppermine (FC-PGA) processor or VIA Cyrix III/Samuel processor
- Support CPU frequency at:
 - Celeron 433/500/533/566/600/633/667/700/733MHz and above
 - Coppermine 500/550/600/650/700/750/800/850 MHz and above @ 100MHz FSB, or 533/600/667/733/800/866/933/1G/1.13GHz and above @ 133MHz FSB
 - Cyrix III 433/466/500/533/566MHz and above @ 133MHz FSB
 - Samuel 500/533/550/600/650/700/733MHz and above @ 133MHz FSB

Chipset

- VIA® VT8633 chipset (552 BGA)
 - support 66/100/133 FSB
 - AGP 4x and Vlink plus Advanced ECC Memory Controller
 - Support PC100/133 SDRAM and PC200/266 DDR technology
- VIA® VT8233 chipset (376 BGA)
 - High Bandwidth Vlink Client controller
 - Integrated Faster Ethernet LPC
 - Integrated Hardware Sound Blaster/Direct Sound AC97 audio
 - Ultra DMA 33/66/100 master mode PCI EIDE controller
 - ACPI

Clock Generator

- Programmable (48-pin clock programmable + 56-pin buffer)
- Support 66/100/133MHz clocks

Main Memory

- Support four memory banks using two 168-pin SDRAMs (maximum size up to 2GB) and six memory banks using three 184-pin DDR DIMMs (maximum size up to 3GB)

Slots

- One AGP (Accelerated Graphics Port) slot
 - AGP v2.0 specification compliant
- One CNR (Communication Network Riser) slot

- Five 32-bit Master PCI Bus slots
- Supports 3.3V/5V PCI bus Interface

On-Board IDE

- An IDE controller on the VIA® VT8233 Chipset provides IDE HDD/CD-ROM with PIO, Bus Master and Ultra DMA 33/66/100 operation modes
- Can connect up to four IDE devices

Audio

- Chipset integrated

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 supporting SPP/EPP/ECP mode
 - 6 USB ports (2 rear connectors and 2 USB front pin headers- 4 ports)
 - 1 IrDA connector for SIR/CIR/FIR/ASKIR/HPSIR
 - 1 Game/3 Audio ports
 - 2 IDE Raid connectors
 - On board buzzer

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

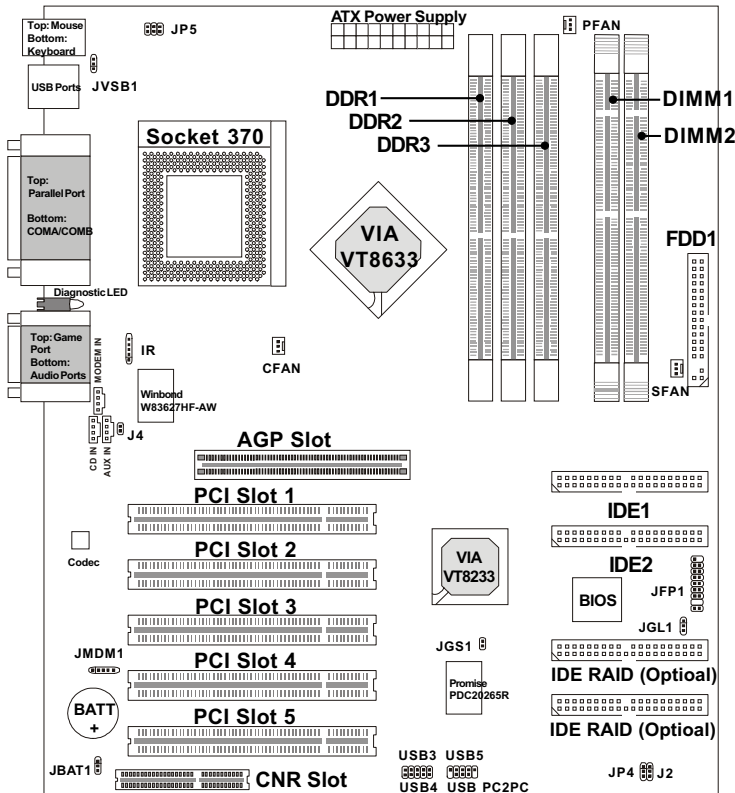
Dimension

- ATX Form Factor

Mounting

- 6 mounting holes

Mainboard Layout



Pro266 Master (MS-6366) ATX Mainboard

Quick Components Guide

Component	Function	Reference
DIMM 1~2	Installing memory modules	See p. 2-4~2-6
Socket 370	Installing CPU	See p. 2-2
CFAN	Connecting to CPUFAN	See p. 2-23
SFAN	Connecting to SYSFAN	See p. 2-23
PSFAN	Connecting to Power Supply Fan	See p. 2-23
ATX Power Supply	Installing power supply	See p. 2-7
IDE1& IDE2	Connecting to IDE hard disk drive	See p.2-13
IDE RAID connectors	Connecting to IDE RAID hard drives	See p.2-14
FDD1	Connecting to floppy disk drive	See p.2-12
USB3/4/5	Connecting to USB interfaces	See p. 2-17
USB PC2PC	Connecting to USB PC2PC interface	See p. 2-17~2-19
PCI Slot 1~5	Installing expansion cards	See p. 2-30
AGP Slot	Installing AGP cards	See p. 2-30
CNR Slot	Installing expansion cards	See p. 2-30
JFP1	Connecting to the case	See p. 2-15
JGS1	Connecting to sleep/suspend switch	See p. 2-20
JGL1	Connecting to sleep/suspend LED	See p. 2-21
JMDM1	Connecting to a modem card	See p. 2-20
J4	Top Tech III: monitor AGP temp.	See p. 2-22
IR	Connecting to IrDA infrared module	See p. 2-22
JBAT1	Clearing CMOS data	See p. 2-26
JVBS1	Setting keyboard wake-up function	See p. 2-27
J2	Selecting beep device	See p. 2-29
JP4	Enabling onboard audio codec	See p. 2-29
JP5	Enabling overclocking feature	See p. 2-28

Chapter 1

Key Features

- Microsoft® PC99 compliant
- D-LED™ - 4 LEDs embedded in the mainboard
- T.O.P Tech™ III - accurately detect components' temperatures
- PC Alert™ III system hardware monitor
- CPU: Socket 370 for Intel® Celeron™/Pentium !!! Processor
- ATX Form Factor
- Clock: 66/100/133MHz
- Soft Audio integrated in chipset
- Memory: 3 DDR DIMMs + 2 SDR DIMMs
- LAN Wake up Function
- Modem (External/Internal) Ring Wake up Function
- I/O: 2 serial ports, 1 parallel port, 5 USB ports, 1 USB PC to PC Port, 1 floppy port, 1 IrDA connector, 3 Audio/1 Game port, 2 IDE RAID connectors (Optional)
- Slot: 1 AGP slot, 1 CNR slot, 5 PCI slots

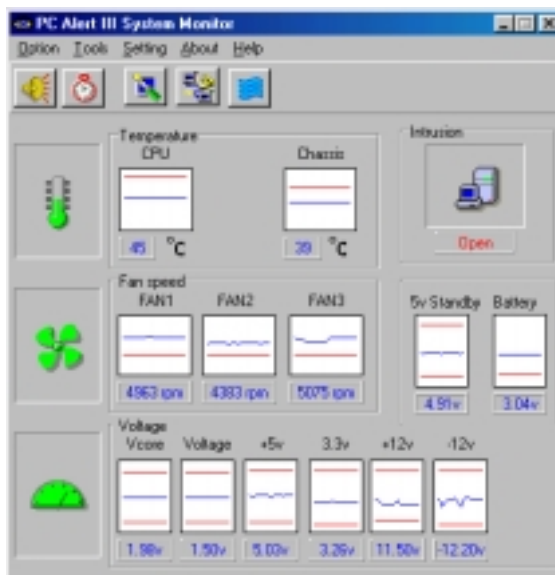
MSI Special Features

PC Alert™ III

The PC Alert™ III is a utility you can find in the CD-ROM. The utility is just like your PC doctor that can detect the following PC hardware status during real time operation:

- * monitor CPU & system temperature
- * monitor fan speed
- * monitor system voltage
- * monitor chassis intrusion

If one of the items above is abnormal, the program main screen will be immediately shown on the screen, with the abnormal item highlighted in red. This will continue to be shown, until user disables warning.



Chapter 1

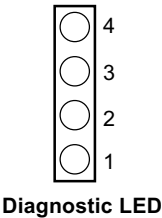


Features:

- Network Management
 - Monitoring & remote control
- Basic System Utilities
 - Scandisk & Defragment to maintain your HDD
- 3D Graphics Design
 - Enables a more friendly user interface
- Software Utilities
 - SoftCooler Optimized Cooling

D-LED™











The D-LED™ uses graphic signal display to help users understand their system. Four LEDs embedded in the mainboard provide up to 16 combinations of signals to debug the system. The 4 LEDs can debug all problems that fail the system, such as VGA, RAM or other failures. This special feature is very useful for the overclocking users. These users can use the feature to detect if there are any problems or failures.



● Red ○ Green

D-LED	Description
<div>1 2 3 4</div> <div><div>●●●●</div></div>	System Power ON - The D-LED will hang here if the processor is damaged or not installed properly.
<div><div>○●●●</div></div>	Early Chipset Initialization
<div><div>●○●●</div></div>	Memory Detection Test - Testing onboard memory size. The D-LED will hang if the memory module is damaged or not installed properly.
<div><div>○○●●</div></div>	Decompressing BIOS image to RAM for fast booting.
<div><div>●●○●</div></div>	Initializing Keyboard Controller.
<div><div>○●○●</div></div>	Testing VGA BIOS - This will start writing VGA sign-on message to the screen.

Chapter 1

	<p>Processor Initialization</p> <p>- This will show information regarding the processor (like brand name, system bus, etc...)</p>
	<p>Testing RTC (Real Time Clock)</p>
	<p>Initializing Video Interface</p> <p>- This will start detecting CPU clock, checking type of video onboard. Then, detect and initialize the video adapter.</p>
	<p>BIOS Sign On</p> <p>- This will start showing information about logo, processor brand name, etc....</p>
	<p>Testing Base and Extended Memory</p> <p>- Testing base memory from 240K to 640K and extended memory above 1MB using various patterns.</p>
	<p>Assign Resources to all ISA.</p>
	<p>Initializing Hard Drive Controller</p> <p>- This will initialize IDE drive and controller.</p>
	<p>Initializing Floppy Drive Controller</p> <p>- This will initialize Floppy Drive and controller.</p>
	<p>Boot Attempt</p> <p>- This will set low stack and boot via INT 19h.</p>
	<p>Operating System Booting</p>