

Chapter 1

INTRODUCTION

The 815 PRO (MS-6326) ATX S2 mainboard is a high-performance computer mainboard based on Intel® 815 chipset. The 815 PRO is optimized to support the Intel® Pentium® III (FC-PGA) processor for high-end business/personal desktop markets.

The Intel® 815 chipset integrates a Display Cache SDRAM controller that supports a 32-bit 133MHz SDRAM array for enhanced integrated 3D graphics performance. It is a highly-flexible chipset which is designed to extend the basic graphics/multimedia PC platform up to the mainstream performance desktop platform.

The Intel® 815 chipset implements the host address, control, and data bus interfaces within a single device. It takes advantage of the pipelined addressing capability of the processor to improve the overall system performance. In addition, the chipset also integrates a system memory controller that supports a 64-bit 100/133 MHz SDRAM array.

The Intel® 82801AA (ICH) chipset is a highly integrated multifunctional I/O Controller Hub that provides the interface to the PCI Bus and integrates many of the functions needed in today's PC platforms. It communicates with the host controller over a dedicated hub interface and provides added flexibility in designing cost-effective system solutions.

1.1 Mainboard Features

CPU

- Support Socket370 for Intel® Celeron™/Pentium® III(FC-PGA) processor.
- Support 500MHz, 550MHz, 600MHz, 633MHz, 667MHz and up to 1GHz.

Chipset

- Intel® 815 chipset. (544 BGA)
 - AGP 4x/2x universal slot
 - Support 66/100/133MHz FSB
- Intel® ICH chipset. (241 BGA)
 - AC'97 Controller Integrated
 - 2 full IDE channels, up to ATA66
 - Low pin count interface for SIO

Main Memory

- Support three 168-pin DIMM sockets.
- Support a 32 to 512MB using 16/64/128/256Mbit technology.

Slots

- One AMR(Audio Modem Riser).
- One AGP(Accelerated Graphics Port) 2x/4x slot.
- Five PCI 2.2 32-bit Master PCI Bus slots.
- Support 3.3v/5v PCI bus Interface.

On-Board IDE

- An IDE controller on the ICH chipset provides IDE HDD/CD-ROM with PIO, Bus Master and Ultra DMA 66 operation modes.
- Can 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.
 - 1 serial port (COMA)
 - 1 parallel port supports SPP/EPP/ECP mode
 - 4 USB ports (Rear * 2 / Front * 2)
 - 1 VGA port

Video

- GMCH chip integrated
- 2D/3D Graphics
- Intel® D.V.M Technology
- Flexible AGP In-Line Memory Module(AIMM) (optional)
- One AGP Slot for external AGP card

Audio

- ICH chip integrated

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.

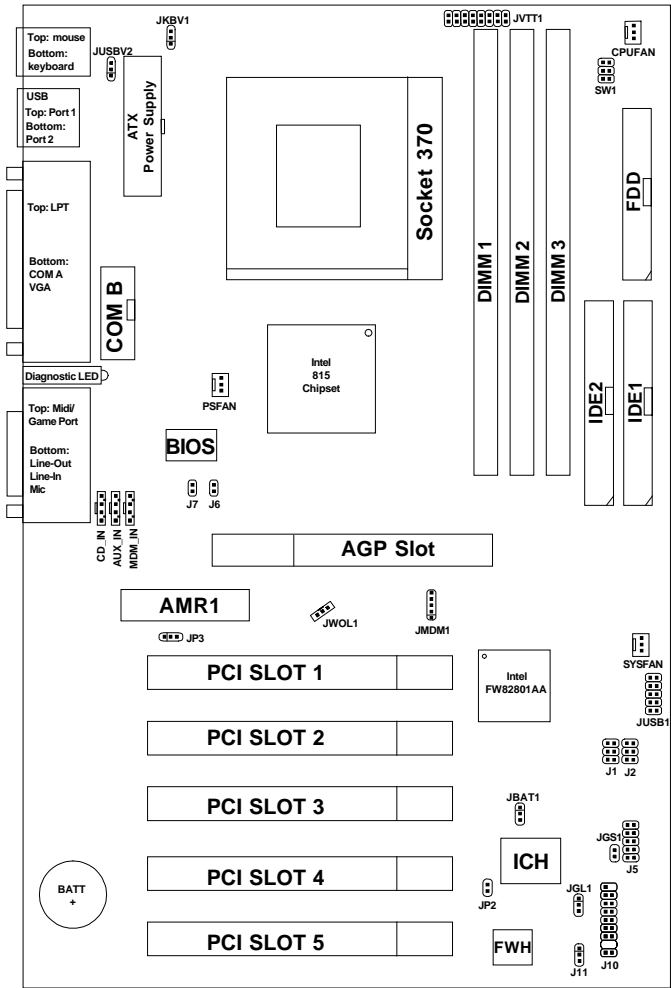
Dimension

- ATX Form Factor

Mounting

- 6 mounting holes.

1.2 Mainboard Layout



815 PRO (MS-6326) ATX S2 Mainboard