

## Chapter 2

# 2

# Features

## Features of the 6A815EP Mainboard

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The 6A815EP is designed for the PC user who want many new key features processed by the fastest CPU in a economic package. This mainboard :

- ⌚ **New general CPU support :**
  - Socket 370 for Intel PPGA/FC-PGA PII/PIII processor.
  - Socket 370 Celeron (300MHz~733MHz) or higher processor.
  - Socket 370 VIA Cyrix III 500~600MHz processor.
  - Socket 370 Coppermine (500MHz~1GHz) or higher processor.

- ⌚ **Chipset :**  
-GMCH Chipset :Intel 815EP support a 66/100/133 FSB.  
-ICH Chipset :Intel ICH2.

- ⌚ **Biggest memory capacity :**  
6A815EP is equipped with three DIMM socket to support (16MB, 32MB, 64MB, 128MB,256MB) 168 pin 3.3v SDRAM SPD(Special Presence Detect).Maximum memory up to 512MB.

<p>-Supports up to 3 double sided DIMMs at 100MHz system memory bus. -Supports up to 2 double sided or 3 single sided DIMMs at 133MHz system memory bus.</p>
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- ⌚ **AGP for fast VGA solution :**  
-AGP specification compliant.  
-AGP 66 MHz 3.3v/1.5v for 1X/2X/4X device support.

- ⌚ **PCI Expansion Slot :**  
Provide five 32 bit PCI slots.

- ⌚ **On-Board IDE :**  
-An IDE controller on the ICH2 chipset provides IDE HDD/CD-ROM with PIO,Bus Master and Ultra DMA 33/66/100 operation modes.  
-Can connect up to four IDE device.

- ⌚ **On-Board Peripherals:**  
-1 floppy port supports 2 FDD with 360K,720K,1.2M, 1.44M and 2.88M byte.  
-2 serial ports (COM1+COM2 (10pin )).  
-4 USB ports.  
-1 parallel port supports SPP/EPP/ECP mode.  
-1 RJ-45 connector. (option)

- ⌚ **Audio:**  
- ICH2 chip integrated.  
- AC'97 CODEC on board ,support 3D sound effect.

### **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.
- BIOS support CD-ROM, SCSI, LAN BOOT, Temperature sensor, Wake on modem, LAN, Alarm Bus CLK setup with BIOS.

### **Intel Accelerated Hub Architecture :**

Features a dedicated high speed hub link between the ICH2 and GMCH with a bandwidth of 266MB/sec-twice the maximum bandwidth of the PCI bus.

### **CNR Support :**

Two Communication and Networking Riser(CNR) slots provide interface to support very affordable multichannel audio, V.90 analog modem, Home PNA, 10/100 Ethernet networking, USB hub, as well as future technologies such as XDSL .

### **Fan Status Monitoring and Alarm Temperature Monitoring/Voltage Monitoring and Alert.**

- ⌚ **Support Ring on by modem/Alarm on :**  
Support System power up from Modem ring up or timer of System. Required enabled in Ring on by modem and Alarm on in BIOS.
- ⌚ **PC Health Monitoring :**  
Provides an easy way to examine and manage system status information, such as CPU and system voltages, temperatures, and fan status through the onboard hardware.
- ⌚ **Suspend and Go :**  
Suspend-to-RAM (str) provides maximum power savings as an alternative to leaving the computer ON and Quickstart so that you do not have to wait for a long time for system boot.
- ⌚ **Dual Function Power Button :**  
Through BIOS, the power button can be defined as the “Stand by” button or as the Soft-Off button.

# The 6A815EP Mainboard layout

