

Chapter 2

2

Features

Features of the 6A815E1/6A815EP1 Mainboard

The 6A815E1/6A815EP1 is designed for the PC user who wants many new key features processed by the fastest CPU in a economical package. This mainboard :

- ⌚ **New general CPU support :**
 - Socket 370 for Intel PPGA/FC-PGA PII/PIII processor.
 - Socket 370 Celeron (300MHz~800MHz) or higher processor.
 - Socket 370 VIA Cyrix III 500~600MHz processor.
 - Socket 370 Coppermine (500MHz~1GHz) or higher processor.

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

- ⌚ **Biggest memory capacity :**
6A815E1/6A815EP1 is equipped with three DIMM sockets 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>
--

- ⌚ **AGP for fast VGA solution :**
-AGP specification compliant.
-AGP 66 MHz 3.3v/1.5v for 1X/2X/4X device support.

- ⌚ **PCI Expansion Slot :**
Provides 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 devices.

- ⌚ **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 , supports 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.



Integrated Graphics :

(Only supports 6A815E1 motherboard)

Controller supports 3D hyper pipelined architecture, parallel data processing and compression, precise pixel interpolation, full 2D hardware acceleration, and motion video acceleration.

- ⌚ **Support Ring on by modem/Alarm on :**
Supports 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 6A815E1/6A815EP1 Mainboard layout

