Chapter 2

2

Features

Features of the 6VIA83 Mainboard

The 6VIA83 is designed for the PC user's 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.
- CPU clock select support for 66/100MHz and up to 133MHz
  CPU bus speed configuration.

⌛ **Chipset :**
   VIA APOLLO PRO+ chips with I/O subsystems.

⌛ **Biggest memory capacity :**
   6VIA83 is equipped with four DIMM socket to support (16MB, 32MB, 64MB, 128MB.256MB) 168 pin 3.3v SDRAM SPD(Special Presence Detect).Maximum memory up to 1024MB.

⌛ **AGP for fast VGA solution :**
   AGP (Accelerator Graphic Port) will enhance & improve display performance and Application. The bus speed is 66 MHz .

⌛ **ISA & PCI Expansion Slot :**
   Provide one 16 bit ISA, and five 32 bit PCI slots.

⌛ **PCI Bus Master IDE Controller :**
   Comes with an on-board PCI Bus Master IDE, controller with two connectors that supports four IDE devices in two channels, Provides faster data transfer rate, and supports Enhanced IDE devices such as Tape Backup and CD-ROM devices(ATAPI). This controller supports PIO mode 3 and 4 (16.6MB/sec.), and Ultra DMA/66(66MB/Sec.), also supports ZIP100 and LS-120. BIOS support IDE CD-ROM or SCSI bootup.

⌛ **Super Multi-I/O :**
   Provides two high-speed UART2 compatible serial ports (match NS16C550A compatible) and one parallel port with SPP,EPP and ECP capabilities. UART2 can also be directed from COM2 to the Infrared Module for wireless connections. Two floppy drives of either 5.25" or 3.5 "(1.25MB,1.44MB or 2.88MB) are also supported without an external card. Supports Japanese standard "Floppy 3 mode" (3.5" 1.25MB).

🕱 **CPU built-in Level 2 Cache :**
   128/256KB Pipeline Burst Level 2 cache in the PII/III CPU
   processors.

🕱 **WOL (Wake On LAN) :**
   Supports system power up from LAN ring up .

🕱 **IrDA Port :**
   Support this serial fast communication up to 115.2Kbps.

🕱 **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.

🕱 To support CPU FAN On/Off and LED indicator under Suspend
   mode.

🕱 **To support CPU temperature detect and Alarm warning by
   sound. (option)**

🕱 **Dimension : 30.4 cm x 20.5 cm**

🕱 Supports 16-bits stereo audio controller. Sound Blaster 16/
   PRO compatible with stereo voice up to 48 KHz sampling rates.
   Dual channel game port. (supports Microsoft game-pad up to
   8 ports). **(option)**

The 6VIA83 Mainboard layout