

CHAPTER 1

INTRODUCTION

- This chapter briefly introduces the characteristics of this mainboard. It includes the information regarding the chipset, CPU types, built-in functions and layout. Users will have more ideas about mainboards after reading this chapter.

THIS CHAPTER CONTAINS THE FOLLOWING TOPICS :

-
- 1-1 MAINBOARD SPECIFICATION**
 - 1-2 MAINBOARD LAYOUT**
 - 1-3 CHIPSET DIAGRAM**

1- 1 MAINBOARD SPECIFICATION

1-1-1 CPU

- Supporting Intel® FC-PGA Pentium III™ up to 1GHz.
- Supporting Intel® FC-PGA 370 Celeron up to 1GHz.
- Supporting Intel® FC-PGA2 Tualatin processors.
- Supporting VIA Cyrix III up to 1GHz.
- Supporting 66 to 200 MHz system bus speed.
- Supporting CPU voltage Auto-Detect circuit.

1-1-2 CHIPSET

- North Bridge - VIA VT82C694T.
- South Bridge - VIA VT82C686B.

1-1-3 HIGH PERFORMANCE DRAM CONTROLLER

- Supporting FP, SDRAM, and VCM SDRAM memory types up to 3 DIMMs.
- 64-bit data width and 3.3V DRAM interface.
- Supporting up to 1.5 GB memory space.
- Different DRAM types may be used in mixed combinations.
- PCI-2.2 compliant, 32 bit 3.3V PCI interface with 5V tolerant inputs .
- DRAM interface synchronous with host CPU (66/100/133 MHz) or AGP (66MHz) for most flexible configuration.
- DRAM interface may be faster than CPU by 33MHz to allow use of PC100 memory modules with 66MHz Celeron or use of PC133 with 100MHz Pentium III.
- DRAM interface may be slower than CPU by 33 MHz to allow use of older memory modules with newer CPUs (e.g., PC66 memory modules with 100 MHz Pentium III).

1-1-4 ACCELERATED GRAPHICS PORT (AGP)

- Synchronous and pseudo-synchronous with the host CPU bus with optimal skew control PCI AGP CPU Mode 33/66/100 MHz DDR 3x synchronous.
- Supporting 66MHz 1x/2x/4x modes for AD and SBA signaling.
- AGP v2.0 compliant.

1-1-5 MULTI-I/O FUNCTION

- Two Ultra DMA-33 / 66 / 100 Master Mode PCI EIDE ports.
- Two UARTs for Complete Serial Ports.
- One dedicated IR connector:
 - Third serial port dedicated to IR function either through the two complete serial ports or the third dedicated port Infrared-IrDA (HPSIR) and ASK (Amplitude Shift Keyed) IR.
- Multi-mode parallel connector supporting:
 - Standard mode, ECP and EPP.
- Floppy Disk connector supporting:
 - Two FDDs with drive swap function.
- Universal Serial Bus connector supporting:
 - USB v1.1 and Intel Universal HCI v1.1 compatible.
 - 2 built-in USB connectors, in addition to one internal USB header which requires a USB cable to support 2 more optional USB ports.
- PS/2 Keyboard connector.
- PS/2 Mouse connector.

1-1-6 EXPANSION SLOTS

- Five PCI bus Mater slots.
- One ISA slot.
- One AMR slot.
- One AGP 4x mode slot.
- Three DIMM slots.

1-1-7 AWARD BIOS V6.0, SUPPORTING

- Plug & Play V1.0.
- Flash Memory for easy upgrade.
- Year 2000 compliant.
- BIOS writing protection.

1-1-8 SOUND CONTROLLER

- Sound Blaster Pro Hardware and Direct Sound Ready AC'97 Digital Audio Controller with Codec onboard.

1-1-9 POWER MANAGEMENT

- ACPI 1.0 compliant (Advanced Configuration and Power Interface).
- APM V1.2 compliant (Legacy power management).
- System event monitoring with two event classes.
- Supporting PS/2 Keyboard & Mouse Wake-up.
- Supporting Wake On LAN (WOL) & Wake On Modem.
- Supporting real time clock (RTC) with date alarm, month alarm, and century field.

1-1-10 FORM FACTOR

- ATX form factor, 4 layer PCB.
- Motherboard size: 19.0cm X 30.5cm.

1-1-11 HARDWARE MONITORING

- Programmable control, status, to provide monitoring and alarm for flexible desktop management of hardware temperature. (software included in support CD).
- 5 positive voltage statuses monitoring.
- 2 fan speeds statuses monitoring.
- 2 temperature statuses monitoring.

1-3 CHIPSET SYSTEM BLOCK DIAGRAM

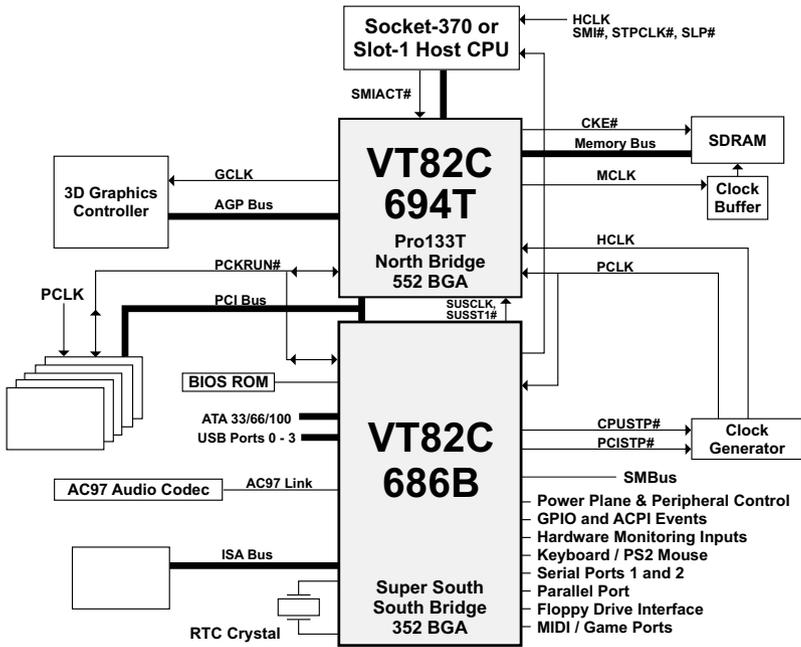


Diagram of Pro133T System Block Using the VT82C686B South Bridge

MEMO
