

## **ITEM CHECKUP**

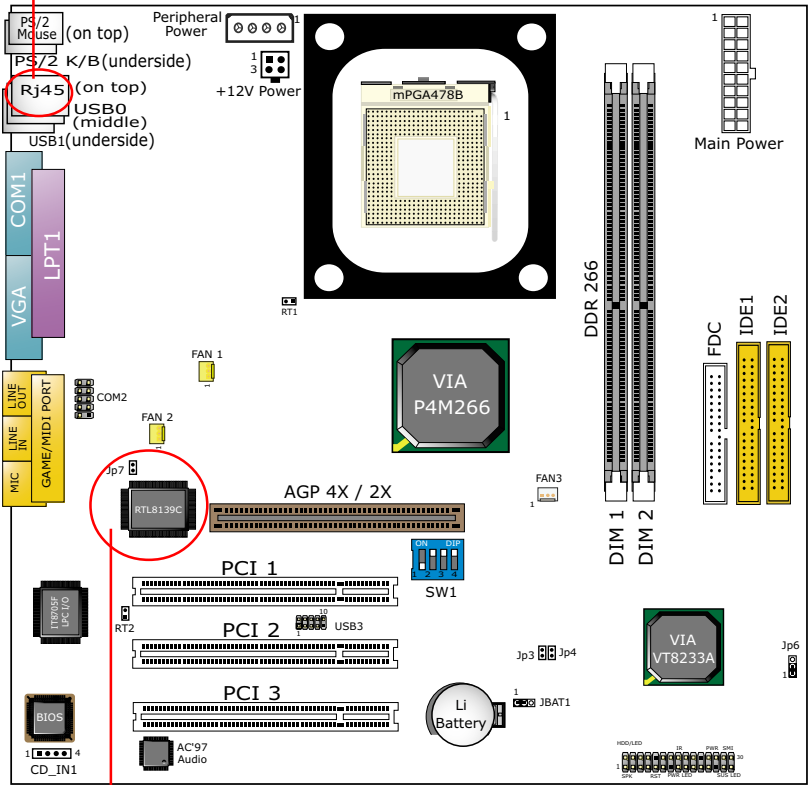
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- ☒ Mainboard
- ☒ Support CD
- ☒ Bundled Bonus Pack CD
- ☒ Bundled Bonus Pack Manual
- ☐ Temperature Sensor Cable (Optional)
- ☒ ATA66/100/133 IDE Cable
- ☒ FDD Cable
- ☒ User's Manual
- ☐ RS232 Cable (optional)
- ☐ USB Cable (optional)



# 85MIV / 85MIV-L -- Components Locations

Rj45 LAN Connector for 85MIV-L only



LAN Controller and Jp7 for 85MIV-L only



# Chapter 1 Specification

## Introduction

This mainboard features an integration of the powerful processor Intel Pentium 4 and the single-chip North Bridge of ProSavage P4M266 plus South Bridge VT8233A, by which the whole system performance is upgraded to 400 MHz system bus.

The Intel P4 processor is a rapid execution engine providing 400MHz quadpumped system bus to allow 3.2GB data transfer rates possible, while, in addition to the built-in S3 Savage4 Graphics Accelerator, ProSavage P4M266 North Bridge plus VT8233A South Bridge supports Intel P4 processor to implement the AGP 4X external bus, the LPC Super I/O, the DDR SDRAM and UATA 133/100/66 data transfer rate. This chapter is to introduce to users every advanced function of this high performance integration.

**Topics included in this chapter are:**

**1-1 Mainboard Specifications**

**1-2 Mainboard Specification Table**

**1-3 Chipset Diagram**



## **1-1 Mainboard Specifications**

### **1-1.1 CPU Socket**

CPU Socket 478B on board, supporting Intel® Pentium 4 and Northwood processors in the 478-pin package for :

- 400 MHz System Bus;
- Hyper-pipelined technology;
- Advanced dynamic execution;
- Advanced transfer cache;

### **1-1.2 System Chipsets**

North Bridge VIA ProSavage P4M266 plus South Bridge VT8233A to work with Intel Pentium 4 Processor for managing and arbitrating operations between all system interfaces.

### **1-1.3 Memory**

2 DDR DIMM 184-pin sockets on board for PC2100 and PC1600 DDR SDRAMs, at 64bit data transfer rate:

- North Bridge P4M266 directly supporting pseudo-synchronous SDRAM up to 2GB unbuffered DDR SDRAMs.
- Installation of mixed volumes of DDR SDRAM modules supported .

### **1-1.4 AWARD BIOS V6.0**

- Supporting Plug & Play V1.0;
- Flash Memory for easy upgrade;
- Supporting BIOS writing protection and Year 2000 compliant;
- BIOS Setup supported (Please see Chapter 4 BIOS Setup);

### **1-1.5 Accelerated Graphics Port (AGP) Interface**

AGP Controller is embedded in chip, supporting:

- 1.5V (4x) / 3.3V (2x) power mode;
- 2x/ 4x AD and SBA signalling, AGP pipelined split-transection long-burst transfers up to 1GB/sec.;
- One AGP Slot on board, AGP v2.0 compliant;



### **1-1.6 Advanced system Power Management, supporting:**

- ACPI 1.0B compliant (Advanced Configuration and Power Interface);
- APM V1.2 compliant (Legacy power management);
- POS (Power On Suspend);
- Wake On Modem (External) and Wake On LAN supported by Ring Power On Control through the Rj45 Connector on board (for 85MIV-L only);
- Real Time Clock (RTC) with date alarm, month alarm, and century field.

### **1-1.7 Multi-I/O Functions:**

- PCI EIDE Controller, supporting:
  - 2x Ultra ATA 133/100 / 66 / 33 IDE Connectors supporting up to 4 IDE devices;
- Dedicated IR Functions:
  - 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 Data transfer:
  - Standard mode, ECP and EPP support;
- Floppy Disk connector:
  - One FDD connector with drive swap support;
- Universal Serial Bus Transfer Mode:
  - USB V1.1 compliant;
  - 2 built-in USB connectors and one USB Headers (USB3) which requires one optional USB cable to provide 2 more optional USB ports;
- PS/2 Keyboard
- PS/2 Mouse
- UARTs (Universal Asynchronous Receiver / Transmitter):
  - Two complete Serial Ports (COM1 & COM2) on board;
- VGA
  - DB -15 Connector on board supporting built-in VGA

### **1-1.8 Expansion Slots**

- 3 PCI bus Master slots;
- One AGP 4x/2x slot;
- Two DDR DIMM slots;



### **1-1.9 Hardware Monitor on board**

Programmable hardware status, to provide monitoring and alarm for flexible desktop management of hardware temperatures. Utility Software is enclosed in Support CD to help display monitoring statuses of:

- 8 voltages, 3 types of hardware temperatures, 2 Fan speeds;

### **1-1.10 AC'97 Audio Codec on board**

AC'97 Audio Codec supported by AC'97 Link on chip VT8233A;

### **1-1.11 LAN (Local Area Network) on board (for 85MIV-L only)**

PCI local bus single-chip Fast Ethernet Controller RTL8139C on board:

- Supporting 10/100Mb data transfer
- Supporting Wake On LAN function through the on-board Rj45 LAN Connector

### **1-1.12 Form Factor**

- Micro-ATX form factor, Power supply ATX spec. version 2.03 compliant, supported by one Main Power Connector and one +12V Power Connector;
- Mainboard size: 245mm x 245mm;

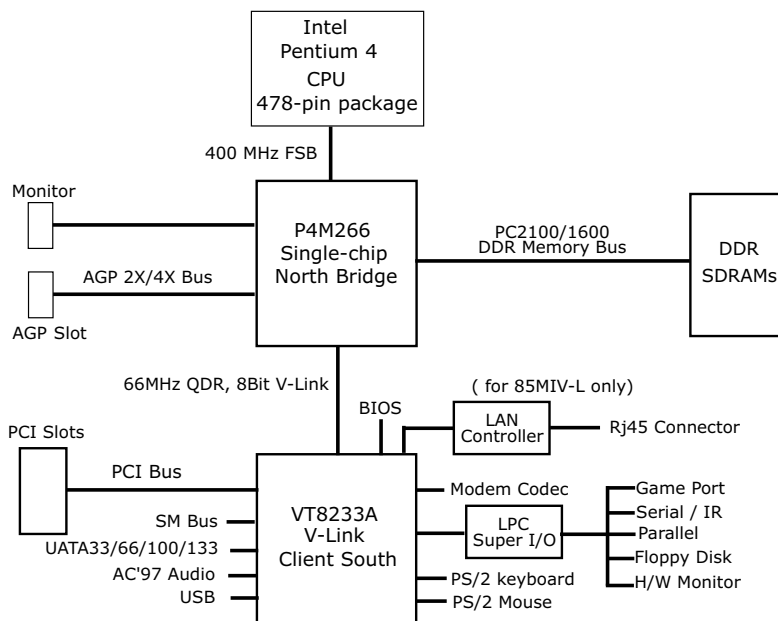


## 1-2 Mainboard Specification Table

| SL-85MIV / 85MIV-L Specification Table |   |
|--|---|
| Memory Controller Hub                  | North Bridge VIA ProSavage P4M266   |
| I/O Controller Hub                     | South Bridge VIA VT8233A  |
| CPU Socket                             | Socket PGA478B for Intel Pentium 4 478-pin package CPU  |
| Memory                                 | Supporting 2GB unbuffered<br>DDR SDRAMs with 2 DDR DIMM Slots                                 |
| I/O Chip                               | ITE IT8705F   |
| Audio                                  | AC'97 Audio Codec   |
| Onboard IDE                            | 2 x UATA 33/66/100/133 IDE ports  |
| AGP Interface                          | AGP 4X / 2X Mode; 1 AGP Slot on board   |
| I/O Connectors                         | 4 x USB ports, 1 x FDD port, 2 x COM ports,<br>1 x LPT port, 1 IrDA, 1 PS/2 Mouse, 1 PS/2 K/B |
| PCI slot                               | 3 PCI Master Slots  |
| LAN Controller                         | Realtek RTL8139C LAN Controller with 1Rj45 conn. on board<br>(for 85MIV-L only)               |
| VGA                                    | 1 DB-15 connector on board supporting built-in VGA  |
| Hardware Monitoring                    | Built-in  |
| BIOS writing Protection                | Built-in  |



## 1-3 Chipset System Block Diagram



## Intel Pentium 4 + VIA P4M266 + VT8233A Diagram