

**TM-VA370EB**  
**PCI/ AGP/AMR Mainboard**

Version: 1.0

Warning: Never run the processor without the heatsink properly and firmly installed. Permanent Damage Will result!

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Printed in Taiwan

### Overview

The **TM-VA370EB** is a Dual CPU Soeckt 370 based mainboard that utilizes VIA 694A+686B chipset, a high level of integrated function. This mainboard is designed for Celeron & 133 MHz CuMine FC-PGA CPU, and support new architectures such as high speed AGP graphic port, ATA66/100, Bus Master IDE, Sound On Board, SDRAM memory and expandable to a maximum 1.5GB.

In addition to above features, this mainboard implements most advanced technology such as Synchronous switching regulator, CPU thermal protection, CPU fan monitoring, System voltage monitoring, Over currentt protection, Wake On Modem, Wake On LAN, Keyboard Power On, PS/2 mouse Power On.

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# CONTENTS

<b>COPYRIGHT</b> .....	<b>2</b>
<b>DISCLAIMER</b> .....	<b>2</b>
<b>OVERVIEW</b> .....	<b>3</b>
<b>CONTENTS</b> .....	<b>4</b>
<b>INTRODUCTION</b> .....	<b>5</b>
SPECIFICATIONS.....	6
<b>SETUP GUIDE</b> .....	<b>8</b>
LAYOUT DIAGRA.....	8
JUMPER	
SETTINGS.....	9
ESCOCAM - AN INTEGRATED MODULE.....	12
CONNECTION GUIDE OF ESCOCAM	
.....	14
BIOS UPDATED NOTE.....	17
<b>BIOS SETUP</b> .....	<b>18</b>
GETTING HELP.....	18
<i>Standard CMOS Setup</i> .....	19
<i>Advanced Setup</i> .....	20
<i>Power Management</i> .....	22
<i>PCI / Plug and Play Setup</i> .....	24

## User's Manual

---

<i>Optimal Settings</i> .....	25
<i>Features Set</i> .....	26
<i>CPU PnP Setup</i> .....	28
<i>Hardware Monitor</i> .....	29
<i>Change Password</i> .....	30
<i>Exit</i> .....	30

## **DRIVER & SOFTWARE.....31**

### SYSTEM BLOCK DIAGRAM

.....35

POST CODE.....36

PROBLEM SHEET.....43

MEMO.....44

## Introduction

### A. Specifications

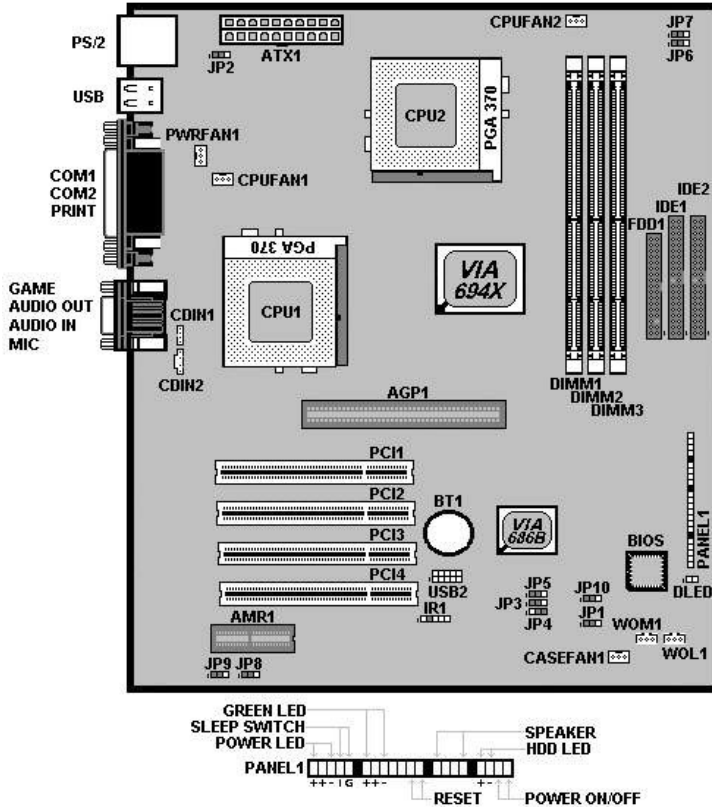
<b>System Chipset</b>	VIA 694X+686B chipset.
<b>Dual CPU</b>	Support 300-800 (Ex. Clk 66 MHz); CuMine FC-PGA 450-800 (Ex. Clk 100 MHz); CuMine FC-PGA 533-1GHz (Ex. Clk 133 MHz) CPU.
<b>Memory</b>	Expandable to 1.5GB (3 banks) with three 168-pin DIMM socket {support 3.3 V EDO (66MHz only) / SDRAM (66/100 & 133 MHz for VIA chipset)}.
<b>Sound On Board</b>	AC 97 Codec Complaint PC97 2.1 specification, Supports 18-bit ADC and DAC as well as 18-bit Stereo full duplex codec.
<b>I/O</b>	Two high speed 16550 compatible serial ports, one Multi-Mode. Parallel Port support SPP/EPP/ECP standard mode. Two onboard PCI IDE Ports (32-bit data transfer). LS-120/ ZIP FDD, IrDA/ ASK IR/ Consumer IR. Dual USB ports Support two 360/720KB/1.2/1.44/2.88MB floppy disk devices. One PS/2 Mouse port.
<b>BIOS</b>	AMI System BIOS installed in socket (Flash and PnP).
<b>Expansion slots</b>	1x AGP(x4) slot, 4xPCI Master Slots and 1x AMR.
<b>Voltage</b>	Auto
<b>Dimension</b>	4-layer PCB, size (30.5cm x 24.5cm).
<b>Bundled Software</b>	<b>*Super VB</b> : Provides anti-virus protection.

## User's Manual

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- \***Super Voice** : For data, FAX and voice communication.
  - \***Gamut 2000**: Provides professional audio features.
  - \***Media Ring Talk** : Provides PC to PC, or PC to phone internet communication.
  - \***Corel WordPerfect Suite 8** : A office application suite under Windows.
  - \***3 DEEP** : Provides for adjust color, contrast and brightness of monitor.
- Package Content**
- \* Mainboard
  - \* Manual & CD Diskette
  - \* 1x FDD, 1xDMA66/100 Cables
- Others**
- Hardware Monitor, **ATA66/100**,  
Modem Ring On, LAN Wake Up.

## Setup Guide Layout Diagram





## *Jumper Setting*

- **JP1** : Clear CMOS

<b>JP1</b>	
<b>1-2 On</b>	<b>Normal Operation (Default)</b>
<b>2-3 On</b>	<b>Clearing CMOS Data</b>

- **JP2** : Keyboard/USB wake-up

<b>JP2</b>	
<b>1-2 On</b>	<b>Enable</b>
<b>2-3 On</b>	<b>Disable</b>

- **JP5** : BIOS Write Protection:

<b>JP5</b>	
<b>1-2 On</b>	<b>Disable</b>
<b>2-3 On</b>	<b>Enable (Read Only)</b>

- **JP6 & JP7 CPU Jumper Setting:**

This mainboard is available with Auto Clocking Detect for 100/133. However, if you want to run over-clocking, the forced setting is required :

### **JP6 : 100 MHz Clock Setting**

<b>JP6</b>	
<b>1-2 On</b>	<b>Normal</b>
<b>2-3 On</b>	<b>Force to set up 100 MHz</b>

JP7 : 133 MHz Clock Setting

<b>JP7</b>	
<b>1-2 On</b>	<b>Normal</b>
<b>2-3 On</b>	<b>Force to set up 133 MHz</b>

## User's Manual

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JP7	
1-2 On	Normal
2-3 On	Force to set up 133 MHz

### Warning:

1. When just use one single CPU, Intel CPU must be installed in the CPU1 socket and single Cyrix CPU must be in the CPU2 socket.
2. When use dual CPUs, do not use CPUs with different Clocking (Frequency) or different Multiplier.

- **JP8 : Onboard Audio Codec**

JP8	
1-2 On	Enable
2-3 On	Disable

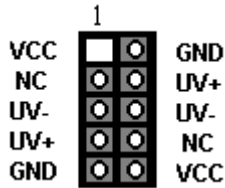
- **JP9 : Onboard Codec Priority:**

JP9	
1-2 On	Primary Codec
2-3 On	Secondary Codec

- **JP10 : AC Resume:**

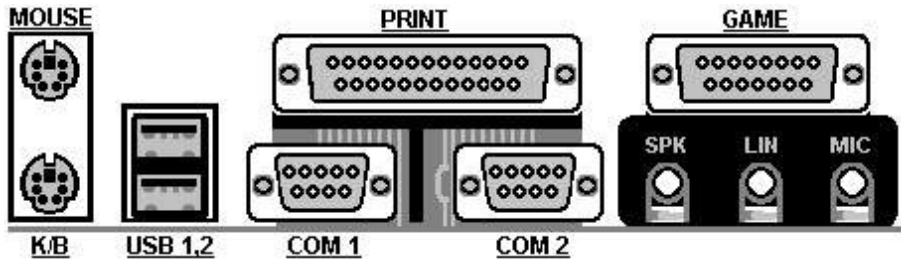
JP10	
1-2 On	Disable
2-3 On	Enable

- **USB2 : USB Connector**

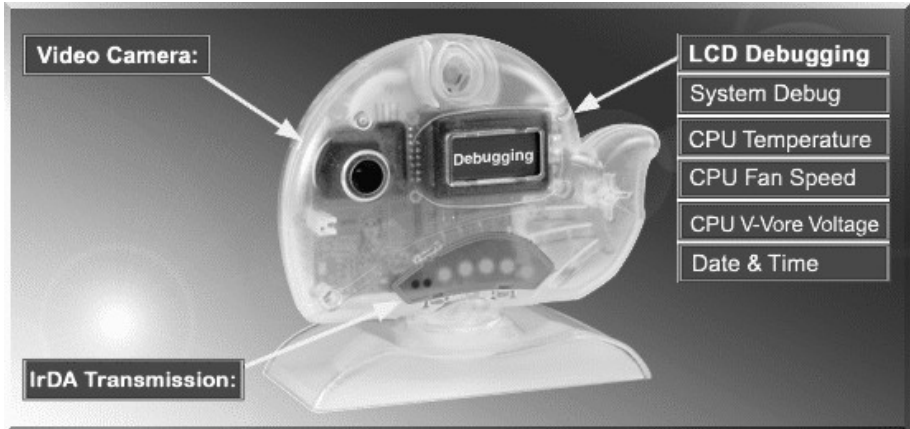


- **SIR1 : Infrared Port (IrDA)**

- 1 – VCC
- 2 – NC
- 3 – IRRx
- 4 – GND
- 5 – IRTx



### EscoCAM – An Integrated Module



It's so valuable that you don't have to pay thrice to buy three fashionable devices of PC Camera, Debugging and IrDA ware now because we have integrated them into our **EscoCAM** in the shape of a lovely whale to escort your system. The whale is the king of the sea and the symbol of all-mighty power. With PC camera, Debug, CPU heat monitor and IrDA device built into the **EscoCAM**, we offers you the unbeatable solution to upgrade the value of your PC system.

#### 1. PC Camera:

As video and audio email is gaining popularity, PC cameras are making inroads into PC systems and it will increasingly become a standard PC peripheral. In view of this strong market demand, we has timely launched its state-of-the-art PC cameras. Besides, our PC Camera is allowed to adjust the Focus of Camera via Keyboard or mouse instead of wheel. It's a patent design in PC Camera. Hope you enjoy this new technology.

### **2. External Debug :**

When initializing system, LCD will check the peripherals of CPU, Chipset, DRAM, BIOS, Keyboard, CMOS, VGA card, Devices, FDD, HDD and Cache...Once peripherals were not been properly installed or defective, the LCD display will show out the detective place. After system successfully booted up, Time & Date, CPU Temperature, CPU V-Core Voltage, CPU Fan Speed will take turn to show out on the LCD display.

### **3. Monitor CPU Temp. And FAN Working Status:**

Audio, video and multi-tasking functions call for faster and faster CPUs to improve system efficiency. However, faster CPUs will generate more heat which must be dissipated in a timely manner. Therefore, a more efficient fans to dissipate heat is as important as watch-out of fan working situation. In this Internet era, people are using their computers for longer and longer time which can easily cause overheat and damage to the CPU. Prolonged use of the computer will increase CPU temperature. It is therefore necessary to have a device to constantly monitor the CPU temperature, CPU fan speed and V-Core voltage and timely remind user.

### **4. IrDA For Data Transmission :**

As more and more computers, notebook, mobile phone and PDA are installed with the IrDA device for wireless transmission, we also developed its own IrDA device for this purpose.

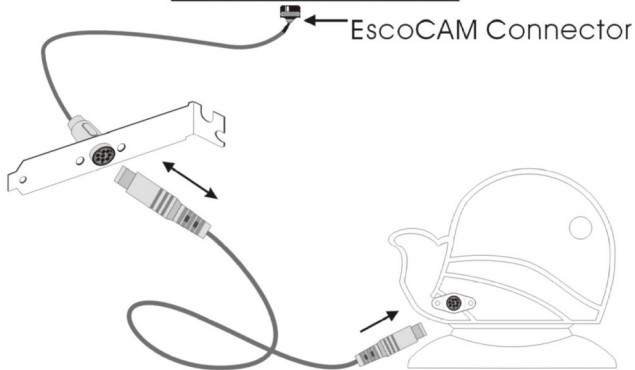
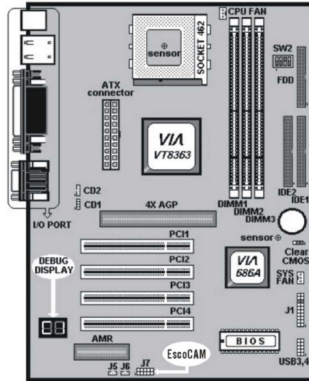
## The Connection of EscoCAM

### I. For TM-VAK7 Mainboard :

If you use TM-VAK7P, the most updated mainboard, it's already built-in all the circuit of **EscoCAM** so that user don't need a extra daughter card to connect it. The connection drawing as follows:

For TM-VAK7P only (I)

★ Functions :All

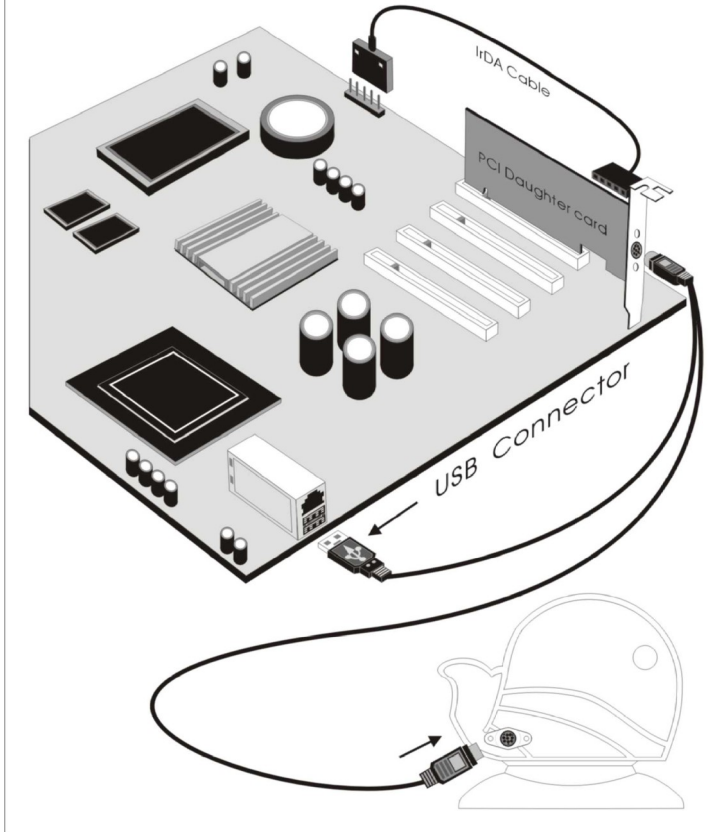


## II. For All Others Mainboards:

If the mainboard you used is not TM-VAK7, you need A PCI daughter card to be inserted and make connection as follows:

For All Mainboards ( I I )

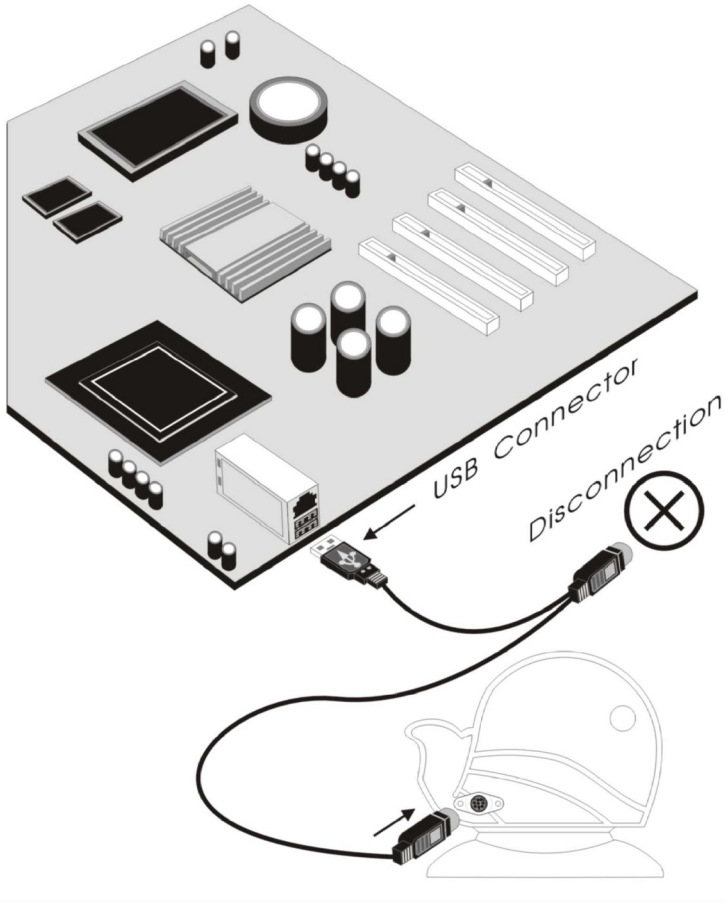
\*Functions :All



III. Or, if you just want use the function of PC Camera, the connection drawing as follows:



For All Mainboards (III)  
\*Functions : PC Camera Only



**BIOS Update Note**

## User's Manual

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Do not update the BIOS if no abnormalities occur. However, if BIOS update is needed, consult your dealer first. Prior to updating your BIOS, you are recommended to save the original BIOS values.

1. Download the AMI BIOS Flash Utility file (**AMIFL818.exe**)
2. Download the BIOS file used by your mainboard(**e.g., xxx.BIN**)
3. **Reboot** your system (but do not run **Himem.sys** and **Emm386.exe**) to execute the new BIOS program.
4. Execute these commands: **AMIFL818 xxx.BIN**