Chapter 1 Specification

1-1 Mainboard Layout and Components Setup

RJ45 For PM800I-RL Only



1-2 Chipset System Block Diagram



Intel Pentium 4 + VIA PM800 + VT8237 Diagram

1-3 Mainboard Specification Table

SL-PM800I-R/ PM800I-RL Specifications and Features			
CPU	Socket 478B for P4 CPU, including HT and Prescott 3.0GHz CPUs; P4 Willimatte 1.75V CPU not supported		
North Bridge	VIA PM800, supporting 800/533/400MHz FSB		
South Bridge	VT8237, with RAID Controller		
VGA	Integrated VIA Unichrome Pro Graphic		
Memory	Supporting DDR 400/333/266 SDRAM, up to 2GB in 2 DIMM slots		
I/O Chip	ITE IT8705F		
AGP interface	1 AGP 4X/8X Slot on board		
Audio	AC'97 Audio 2.2 compliant, 6-channel audio		
IDE Interface	2 UATA 66/100/133 IDE ports		
PCI Slots	3 PCI Master slots on board		
I/O Connectors	8 USB2.0 ports, 1 FDD port, 1 COM port, 1 LPT, 1 IrDA, 1 PS/2 Keyboard, 1 PS/2 Mouse		
SATA RAID Interface	SATA RAID interface, supported by VT8237, with 2 integrated SATA RAID connector		
Other common features	PS/2 Keyboard/Mouse Wake Up		
Models Optional Features	PM800I-R	PM800I-RL	
LAN Controller on board	No	Yes	

1-4 Pentium 4 CPU and CPU Fan Installation 1-4.1 CPU Installation with Socket 478B



1-4.2 Hyper-Threading CPU Setup (supported by Win XP)

This mainboard supports Hyperthreading dual-in-one CPU, the function of which can be enabled by Windows XP. (See illustration on the right.)

(If Hyper-Threading CPU is installed successfully with Windows XP, the O/S will enable the dual-in-one CPU function.)



1-5 On board Fan Connector Setup



1-6 ATX V 2.03 Power Supply Installation



1-7 Jumper Settings

The following diagrams show the locations and settings of jumper blocks on the mainboard.



1-8 Other Connectors Setup

1-8.1 Front Audio Connector

This Mainboard is designed with a Front Panel Audio connector "JAUD1" which provides connection to your chassis.

- 1. When JAUD1 is set to 5-6 closed and 9-10 closed, this default setting disables this connector and leaves the Back Panel Audio enabled.
- 2. To use this Front Panel Audio Connector, please open all pins of JAUD1 and connect it to your chassis.



1-8.2 Complex Header (Front Panel Connectors)

This complex Header consists of 6 connectors providing various supports:

Front Panel Connectors Illustration



Chapter 2 Software Setup

2-1 To Open up the Support CD

1. Please put the Support CD enclosed in your mainboard package into the CD-ROM drive. In a few seconds, the Main Menu will automatically appear, displaying the contents to be installed for this series:

VIA 4 in 1 Driver
VIA USB 2.0 Driver
DirectX
Graphics Driver
AC'97 Audio Driver
Onboard LAN Driver (Optional)
Hardware Monitor Utility

- 2. Start driver and software installation from the first item and finish all to optimize your system.
- 3. If you are setting up RAID system, you mustalso install the VT8237 RAID driver (manually) into your system.

2-2 Some Setup guides (including RAID Driver Setup)

2-2.1 LAN Driver Installation (for PM800I-RL)

- Following the procedures of opening the Support CD, click to " Onboard LAN Driver" to proceed.
- 2. Instantly, "The installation is completed" screen appears, indicating that LAN Driver setup is finished.

2-2.2 LAN Driver Verification

1. After LAN Driver setup, a new networking icon will appear at the corner of the "Start" screen of your system, indicating that a network channel has been set up.





2-2.3 Installing AC'97 6-channel Audio Driver

- 1. Following the procedures of opening the Support CD, click to "AC'97 Audio Driver" to proceed.
- 2. Instantly, the VIA Audio Driver Setup Program screen appears to guide you through the whole setup.
- 3. In a few seconds, the setup process is finished. Please check the radial button "Yes, I want to restart my computer now." And click "Finish" to restart your system.



2-2.4 Verifying 6-channel Audio

- 1. Start your Windows system and double click the Avance Sound Effect manager icon to enter 6-channel configuration:
- 2. The AC'97 Audio Configuration" screen will pop out. Clikc the "Speaker Configuration" bar with your mouse.
- Instantly, the "Speaker Configuration" screen will pop out. Pick the items "6-channel mode for 5.1 speakers output" and " Synchronize the phonejack switch with the speakers settings" and then click "OK" to finish configuration.
- 4. At finishing the Speakers Configuration, you can also click the "Speaker Test" bar on the screen to test the 6-channel performance. The figure below is the "Speaker Test" screen with testing instructions enclosed on it. Follow the instructions to perform the Speakers Test.



"Speaker Configuration"

"The Speakers Test"



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2-2.5 To Install USB 2.0 Driver

VIA USB V2.0 is already integrated on board. Its 480Mb/s transfer rate supports operating systems Windows 98SE/ME/2000/XP. USB2.0 Driver is typically for Windows 98SE/ME. For Windows 2000/XP, users can install their latest Service Pack instead of the USB2.0 driver to gain the USB2.0 support. For the Windows system which is not installed with its latest Service Pack, users must install the USB2.0 driver to activate the USB2.0 support:

2-2.6 To Install RAID System and Driver

(1) First set up SATA Hard Disks to SATA connectors.



(2) To set up RAID system and RAID driver, first enter CMOS BIOS Setup. Then choose "Integrated Peripheral" and "VIA OnChip IDE Device". As soon as you click on the "VIA OnChip IDE Device", a list of events appears for you to configure their values. Choose "Enabled" for the "OnChip SATA RAID" so as to enable the SATA RAID interface.

VIA OnChip IDE Device:

To press< Enter > on VIA OnChip IDE Device will reveal the following item(s).

OnChip SATA RAID To enable/disable the on-chip SATA interface.

(3) SATA-RAID Driver is incorporated in Support CD/Floppy Disk for user's installation. <u>The Driver Floppy Disk is needed for SATA RAID</u> installation on Windows 2K/XP. If you cannot find this Driver Floppy Disk in the mainboard package, you can make one by copying the driver from the Driver CD into a Floppy Disk.

Chapter 3 AWARD BIOS Setup

3-1 To Update BIOS

• "AWDFLASH.EXE" is a Flash EPROM Programming utility that up dates the BIOS by uploading a new BIOS file to the programmable flash ROM on the mainboard. This program only works in **DOS** environment, the utility can not be executed in Windows 95/98, *ME*, *NT*, WINDOWS 2000 or Windows XP environment.

• Please follow the steps below for updating the system BIOS:

Step 1. Please visit the board maker's website, download the zip file which contains the latest BIOS file and Award Flash Utility "AWDFLASH. EXE". After unzipping, the BIOS file format will be *.bin, of which " * " stands for the specific BIOS file name.

Step 2. Create a bootable diskette. Then copy the BIOS file and Award Flash Utility "AWDFLASH.EXE" into the diskette.

Step 3. Insert the diskette into drive A, reboot your system and boot from the diskette.

Step 4. Type **awdflash *.bin /sn/py/cc** and then press <Enter> to run BIOS upgrade program. (*.bin depends on your mainboard model and version code. Instead of typing "*", you should type specific file name for your specific mainboard).

Step 5. Please press <F1> or <F10> to exit or reset your system.

Step 6. You will need a message "CMOS checksum error-Default loaded" during booting the system. Press to run CMOS setup utility, then reload "LOAD SETUP DEFAULTS" or "Load Optimized Defaults" and save this change.

Attention: The BIOS Setup is subject to constant update without further notice to users. It is necessary for users themselves to update onboard BIOS with the latest BIOS version provided in our web site: http://www.soltek.com.tw

3-2 BIOS SETUP by CMOS Setup Utility

- 1. Power on your system.
- 2. At the initial screen, enter CMOS Setup Utility by pressing < Del > key before POST(Power on Self Test) is complete and the main program screen will appear as follows.

 Standard CMOS Features 	 Frequency / Voltage Contorl 		
 Advanced BIOS Features 	 Load Optimize Defaults 		
 Advanced Chipset Features 	 Set Supervisor Password 		
 Integrated Peripherals 	 Set User Password 		
 Power Management Setup 	 Save & Exit Setup 		
 PnP/PCI Configuration 	 Exit Without Saving 		
 SmartDoc Anti-Burn Shield 			
$\begin{array}{c} \text{ESC: Quit} \\ \text{F10: Save \& Exit Setup} \end{array} \uparrow \downarrow \longleftarrow \vdots \text{ Slect Item} \end{array}$			
Time, Date, Hard Disk Type			

Phoenix - AwardBIOS CMOS Setup Utility

- 3. Use the arrow keys on your keyboard to select an option, and press <Enter>. Modify the system parameters to reflect the options installed in your system.
- 4. You may return to the Main Menu anytime by pressing <Esc>.
- 5. In the Main Menu, "Save Changes and Exit" saves your changes and reboots the system, and "Discard Changes and Exit" ignores your changes and exits the program.
- Standard BIOS Features(Times, Date, System Information etc.)
- Advanced BIOS Features (CPU,IDE, Floppy, SuperIO, Hardware Health, ACPI, USB, and Frequency/Voltage Control)
- Advanced Chipset Features (NorthBridge, SouthBridge Configuration)
- PCI/PNP Resource Management (IRQ Settings, Latency Timers etc.)
- Boot Configuration Setup (Boot Settings, Boot Device Priority etc.)
- BIOS Security Features (Supervisor Password, User Password)
- Save Changes and Exit (Exit system setup with saving the changes.)
- Discard Changes and Exit (Exit system setup without saving the changes.)
- Load Optimal Default
- Discard Changes

SL-PM800I-R / PM800I-RL Quick Installation Guide



Réglage des cavaliers Jumper-Einstellungen Configuración de Jumper Configuração de Jumper Настройки джамперов ジャンパーセッティング 跳線設定 점퍼 세팅

Effacement du CMOS	Очистка CMOS	CMOS Daten löschen		
JBAT1	(энергонезависимой памяти) IP AT1	JBAT1 1-2 Dates orbaltes (Standard)		
1-2 Conservation des données	ЈБАН 1-2-Лля сохранения данных	2-3 CMOS Daten löschen		
(par défaut)	(По умолчанию)	2-3 CINOS Dater I loschen		
2-3 Effacement du CMOS	2-3=Для очистки СМОS	IBAT1		
Limpor dodoo do CMOS	1 JBAT1 Clear CMOS	1-2 Retener Dados (nor defecto)		
	1 1	2-3 Borrar el CMOS		
JDATT 1.2. Deter Dedee (Dedrãe)	C 3 0 C 3	استعادة الوضيع الافتر اضي لنظام الدخل والخرج الأساسي		
1-2 Relei Dauos (Faulau)	1-2 (default) 2-3	JBAT1		
2-3 Limpar dados do CINOS	To hold data To clear CMOS	1 = 2 = وضع الحفاظ على المعلومات (افتر اضي)		
CMOS データを消却	CNOS 데이타 삭제	3-2 = استعادة الوضع الافتر اضى للمصنع		
JBAT1	JBAT1	清除 CMOS 功能		
1-2 データを記憶する	1-2 원래값 유지 (기본값)	JBAT1		
(デフォルト)	2-3 현재 CMOS 데이타 삭제	1-2 記憶資料 (預設値)		
2-3 CMOS データを消却		2-3 清除 CMOS 功能		
Sélection de la fréquence du CPU	Выбор частоты процессора	CPU Clock Einstellungen		
JCLK1 & JCLK2	JCLK1 & JCLK2	JCLK1 & JCLK2		
()Autodétection du CPU (par défaut)	() Авто-определение процессора (Поумолчанию)	①CPU Autodetect (Standard)		
2 Pour une fréquence CPU de 100MHz	Для установки частоты процессора 100 МГц	(2) Fur 100MHz CPU Clock		
3 Pour une fréquence CPU de 133MHz	ЭДля установки частоты процессора 133 МГц	(3) Fur 133MHz CPU Clock		
④Pour une fréquence CPU de 200MHz	Для установки частоты процессора 200 МГц	(4) FUF 200MHZ CPU CIOCK		
		Selección de Clock del CPU		
Seleção de Clock do CPU	CPU Frequency Select	JCLK1 & JCLK2		
JCLK1 & JCLK2	(1) (2) (3) (4)	() CPU Autodetect (por detecto)		
 Detecção automática do CPU 	JCLK1 JCLK2 JCLK1 JCLK2 JCLK1 JCLK2 JCLK1 JCLK2	Para 100MHz CPU Clock		
(Padão)		APara 200MHz CPU Clock		
2 Para 100MHz de Clock do CPU				
③ Para 133MHz de Clock do CPU		و صنعیات الوصف SOLKT & SOLK? لاختیار سرعة تردد ناقل المعالج		
(4) Para 200MHz de Clock do CPU	Auto-detect	 اختيار تلقاني للسرعة (افتر أضي) 		
	(default)	 (2) للسرعة 100 MHz الناقل (3) السرعة 132 MHz 		
CPUクロック設定	CPU 클릭 선택법	 السر عه 135 MHz الثانی (4) للسر عه 200 MHz للناقل 		
JCLK1 & JCLK2	JCLK1 & JCLK2	CDII梅麦乳宁		
① は CPU 自動検出設定用	① CPU 클락 자동 선택 (기본값)	Cru Ki & ICI Ki		
- (デフォルト)	② 100MHz CPU 클럭 선택	① CPII 自動偵測(預設値)		
② は 100MHz 使用時の設定	③ 133MHz CPU 클럭 선택	② 選擇 100MHz CPU 類率		
③ は 133MHz 使用時の設定	④ 200MHz CPU 클럭 선택	③ 選擇 133MHz CPU 頻率		
④ は 200MHz 使用時の設定		④ 選擇 200MHz CPU 頻率		
Reveil par Clavier / Souris	Выход из режима ожидания при	i astatur / Maus Autwachen		
JKB1	активности клавиатуры/мыши	JKB1		
1-2=Mis hors service (par défaut)				
2-3=ACIIVEE	1.2- Выключено (По умолизично)	1-2=Deaktiviert (Standard)		
	JКБ1 1-2= Выключено (По умолчанию) 2-3= Включено	1-2=Deaktiviert (Standard) 2-3=Aktiviert		
	1-2= Выключено (По умолчанию) 2-3= Включено	1-2=Deaktiviert (Standard) 2-3=Aktiviert Teclado/Ratón de Wakeup		
	 3КВ1 1-2= Выключено (По умолчанию) 2-3= Включено 3 IKB1 кВ/Моизе Wake up 	1-2=Deaktiviert (Standard) 2-3=Aktiviert <i>Teclado/Ratón de Wakeup</i> JKB1		
Ligar no Teclado/Rato de acordar	 1-2= Выключено (По умолчанию) 2-3= Включено 3 JKB1 KB/Mouse Wake up 	1-2=Deaktiviert (Standard) 2-3=Aktiviert <i>Teclado/Ratón de Wakeup</i> JKB1 1-2=Desactivado (por defecto)		
Ligar no Teclado/Rato de acordar JKB1	1-2= Выключено (По умолчанию) 2-3= Включено 3 JKB1 KB/Mouse Wake up	1-2=Deaktiviert (Standard) 2-3=Aktiviert <i>Teclado/Ratón de Wakeup</i> JKB1 1-2=Desactivado (por defecto) 2-3=Activado		
Ligar no Teclado/Rato de acordar JKB1 1-2-Desabilitado (Padrão)	1-2= Выключено (По умолчанию) 2-3= Включено 3 ЈКВ1 КВ/Моизе Wake up 1 СЭО	1-2=Deaktiviert (Standard) 2-3=Aktiviert <i>Teclado/Ratón de Wakeup</i> JKB1 1-2=Desactivado (por defecto) 2-3=Activado لاتشقيل قيهيز عن طريق لوحة المقاتيج ذات سخل		
Ligar no Teclado/Rato de acordar JKB1 1-2=Desabilitado (Padrão) 2-3=Habilitado	1-2= Выключено (По умолчанию) 2-3= Включено 3 JKB1 КВ/Моизе Wake up 1 1 1 1 1 1-2: (default) 2-3	1-2=Deaktiviert (Standard) 2-3=Aktiviert Teclado/Ratón de Wakeup JKB1 1-2=Desactivado (por defecto) 2-3=Activado تنتیزی تجهتز عن طریق نومة المقاتوع ذلك معلی JKB1		
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Ligar no Teclado/Rato de acordar JKB1 1-2=Desabilitado (Padrão) 2-3=Habilitado キーボード/ マウスカのウェ	1-2= Выключено (По умолчанию) 2-3= Включено 3 JKB1 КВ/Моизе Wake up 1 1 1 0 1 0 1-2= Выключено 1 1 0 1 0 1-2 0 1-3	1-2=Deaktiviert (Standard) 2-3=Aktiviert <i>Teclado/Ratón de Wakeup</i> JKB1 1-2=Desactivado (por defecto) 2-3=Activado تنتشؤن تيجهاز عن طريق نومة المقاتيج ذات منغل JKB1 نال التراضي) 2-3 مغعل (افتراضي) 3-2 مغعل		
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Ligar no Teclado/Rato de acordar JKB1 1-2=Desabilitado (Padrão) 2-3=Habilitado <i>キーボード / マウス力のウェ</i> <i>クーウプ</i> JKB1 1-2=設定無効にする(デフォルト) 2-3= 設定有効	1-2= Выключено (По умолчанию) 2-3= Включено 3 JKB1 КВ/Моизе Wake up 1 0000 1-2 (default) 2-3 Disabled Enabled 키보드/미우스 질권모드에서 해제 JKB1 1-2= 사용금지 (기본값) 2-3= 사용가능	1-2=Deaktiviert (Standard) 2-3=Aktiviert Teclado/Ratón de Wakeup JKB1 1-2=Desactivado (por defecto) 2-3=Activado لالقار (لالتراشي) د مفعل (افتراشي) 3-2 健能/滑展 喚醒功能 JKB1 1-2 = 關閉功能: (預設値) 2-3 = 開啓功能		