Chapter 1 Specification

1-1 Mainboard Layout and Components Setup



1-2 Mainboard Specification Table

Series 865GVI -L Specifications and Features					
CPU	Socket 478B for P4 CPUs (including Hyper- threading and Prescott CPUs up to 3.4GHz)				
North Bridge	Intel 865G or 865GV, supporting 800/533/ 400MHz FSB				
South Bridge	Intel ICH5				
Memory	Supporting Dual-channel DDR 400/333/266 SDRAM, up to 2GB in 2 DIMM slots				
I/O Chip	W83627HF with Hardware Monitor				
AGP Slot	AGP8X/4X and Add-on card for i865G; Add-on card only (DVO, TV-out etc) for i865GV ;				
Audio	AC'97 Audio 2.2 compliant, 6 channel audio				
IDE Interface	2 UATA 66/100 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				
Networking	Optional LAN Controller RTL8100C and Connector RJ45				
VGA Display	1 x VGA connector on board for analog display				
Other common features	Keyboard/Mouse Wake Up				
Models Optional Features	865GI	865GI-L	865GVI	865GVI-L	
North Bridge	865G	865G	865GV	865GV	
LAN Controller on board	No	Yes	No	Yes	

1-3 Pentium 4 CPU Installation

This mainboard is built with CPU Socket 478B (478-pin) supporting the Intel Pentium 4 CPU:

- Follow the steps described in this section to install the 478-pin Pentium 4 CPU into the on board Socket 478.
- After installation of Pentium 4 CPU, you must also install the specific Pentium 4 CPU fan designed in tandem with this CPU. This CPU Fan installation is described in next section.
- This mainboard supports Hyperthreading dual-in-one CPU, the function of which can be enabled by Windows XP. (See illustration on the right.)
- 1. First pull sideways the lever of Socket 478, and then turn it up 90° so as to raise the upper layer of the socket from the lower platform.
- 2. Configure Pin 1 of CPU to Pin 1 of the Socket, just as the way shown in the diagram on the right. Adjust the position of CPU until you can feel all CPU pins get into the socket with ease.
 - 3. Make sure that all CPU pins have completely entered the socket and then lower down the lever to lock up CPU to socket.



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



1-4 Pentium 4 CPU Fan Installation

1. Press down the 2 levers to lock fan to fanbase



2.Connect Fan Connector to CPU FAN connector

1-5 ATX V 2.03 Power Supply Installation



1-6 Memory Installation

1-6.1 To Install DDR SDRAM Module

- Make sure to unplug your power supply before adding or removing memory module.
- · Pay attention to the orientation of the DIMM slots.
- DDR DIMM slot has 184 pins and one notch. Insert a DDR SDRAM vertically into the 184-pin slot with the notch-to-rib matching.



DIMM1+DIMM2 = Dual Channel Memory

1-6.2 Dual Channel Memory Modules Setup

- To enable Dual Channel memory function, <u>users should insert totally</u> identical (size and frequency) DDR module pair into the bank-pair.
- Dual Channel memory configuration provides higher performance than Single Channel configurations
- Matched DIMMs need to have identical density, DRAM technology, DRAM bus width, and equal number of memory banks.
- This series supports up to 2GB unbuffered Dual-channel DDR 400/ 333/266 SDRAM, with 2 DDR DIMM slots on board. <u>Do not insert</u> <u>other type of modules into these slots.</u>
- The dual memory controller can double the DDR memory bandwidth up to 6.4GB/s with DDR400, 5.4GB/s with DDR333 and 4.2GB/s with DDR266.

1-7 Jumper Settings

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

Note on CPU Overclocking:

(1) JFSB1 & JFSB2 settings are for selecting appropriate CPU frequency to boot system only. CPU overclocking can be achieved in "Frequency/ Voltage Configuration" of the BIOS Setup.

(2) Since overclocking takes all onboard components into account, there is no guarantee of success for CPU overclocking or Soltek Turbo Mode.



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 Front Panel Audio ports.

- 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.
- To use this Front Panel Audio Connector, please open all pins of JAUD1 and connect it to your chassis.



1-8.2 Thermal Resistor

1. Resistor RT3: A thermal resistor is mounted by default to connector RT3 so as to detect the system temperature . What RT3 does is to transmit the thermal signal to Hardware Monitor.





1-8.3 Complex Header (Front Panel Connectors)

(1) Power Switch Connector:

Connection: Connected to a momentary button or switch.

(2) IR Connector (Infrared Connector):

Connection: Connected to Connector IR on board.

(3) HDD LED Connector:

Connection: Connected to HDD LED.

(4) Power LED Connector:

Connection: Connected to System Power LED.

(5) Reset Switch Connector:

Connection: Connected to case-mounted "Reset Switch".

(6) Speaker Connector:

Connection: Connected to the case-mounted Speaker.

Chapter 2 Software Setup

2-1 To Open up the Support CD

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



2-2 To Install Hardware Monitor Utility

2-2.1 Installation

Hardware Monitor is built on this mainboard. Its installation is programmed to a fully automated mode on Win 9X/Me/NT4/2000/XP.

Following the procedures of opening the Support CD, click to "Hardware Monitor Utility" to proceed. And in a few seconds, installation completes.



2-2.2 Verification

Click on the Soltek HM icon on your system screen to open up Soltek HM interface.



*Note: Only those items or functions that are supported by the mainboard will reveal themselves in the above screen.

2-3 To Install USB 2.0 Driver for Windows 2000/XP

USB V2.0 with its 480Mb/s transfer rate supports operating system Windows 2000 and Windows XP via the Windows 2000 and Windows XP Service Pack. For archieving Intel USB 2.0 support, users should install the latest Service Pack for Windows 2000 or Windows XP. (intel USB 2.0 does not support Windows 9X/ME.)

- 1. After installation of Intel Chipset software installation Utility in Windows 2000 or Windows XP, start to install the latest Service Pack version into the operating system. The installation of the latest Service Pack will support USB2.0 in Windows 2000 or Windows XP now.(The latest Service Pack can be found in Microsoft Web Site.)
- 2. To verify USB2.0 installation, please enter "Device Manager" of "My Computer". On the "Device Manager" screen, you should be able to see the item "Standard Enhanced PCI to USB Host Controller", verifying USB2.0 Driver is installed successfully.



Chapter 3 AMI BIOS Setup

3-1 To Update BIOS

• "AMIFLASH.EXE" is a Flash EPROM Programming utility that updates 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, 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 latest BIOS file and AMI update utility. The file name of AMI update utility will be "AMIXXX.EXE" of which " XXX " stands for the version number of the file. The BIOS file format will be *.ROM, of which " * " stands for the specific BIOS file name.

Step 2. Create a bootable diskette. Then copy the BIOS file and AMI flash utility "AMIXXX.EXE" into the diskette.

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

Step 4. Under "A " prompt, type " **AMIXXX.EXE** *.**ROM** " and then press <Enter> to run BIOS update program. Please note that there should be a space between AMIXXX.EXE and *.ROM. (*.ROM depends on your mainboard model and version code. Instead of typing "*", you should type the specific file name for your specific mainboard).

Step 5. When the message "Flash ROM Update Completed - Pass." appears, please restart your system.

Step 6. You will see a message "CMOS Memory Size Wrong" during booting the system. Press or <F1> to run CMOS setup utility, then reload "LOAD SETUP DEFAULTS" or "Load Optimal Defaults" and save this change.

3-2 BIOS SETUP by CMOS Setup Utility

- 1. Power on your system.
- 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.

CMOS Setup Utility - Copyright (C) 1985-2002, American Megatrends, Inc.

Standard BIOS Features	BIOS Sevurity Features			
 Advanced BIOS Features 	Save Changes and Exit			
Advanced Chipset Features	Discard Changes and Exit			
▶ PCI/PNP Resource Management	Load Optimal Defaults			
 Boot Configuration Features 	Discard Changes			
 Power Management Features 				
▶ Hardware Monitor Configuration				
↑↓ ← → : Move Enter : Select +/- : Values F10: Save Esc: Exit F1: General Help F7 : Previous Values F8 : Fail-Safe Defaults F9: Optimize Defaults				
Configure Time and Date. Display System Information				

- 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 Features (Boot Settings, Boot Device Priority etc.)
- Power management Features (Power management, Suspend mode)
- Hardware Monitor Configuration (Temperature, Voltage ...)
- BIOS Security Features (Supervisor Password, User Password)

Series SL-865GVI-L Quick Installation Guide (SL-865GVI / SL-865GVI-L / SL-865GI / SL-865GI-L)





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

Réveil par Clavier /Souris	Ligar no Teclado / Rato de acordar	キーボード/ <i>マウス力のウェクーウプ</i>
JKB1	JKB1	JKB1
1-2=Mis hors service (par défaut)	1-2=Desabilitado (Padrão)	1-2=設定無効にする(デフォルト)
2-3=Activée	2-3=Habilitado	2-3=設定有効
Tastatur / Maus Aufwachen JKB1 1-2=Deaktiviert (Standard) 2-3=Aktiviert	1 JKB1 Keyboard / Mouse Wake up 1 JKB1 Keyboard / Mouse Wake up 1 -2 Disabled (default) 2 -3 Enabled	<i>키보드 / 마우스 절진모드에서 해제</i> JKB1 1-2=사용금지 (기본값) 2-3=사용가능
Teclado / Ratón de Wakeup	<i>鍵盤 / 滑翼 喚醒功能</i>	لتشغيل المجهاز عن طريق لوحة المفاتيح ذات مدخل
JKB1	JKB1	JKB1
1-2=Desactivado (por defecto)	1-2= 關閉功能 (預設値)	2-1 غير مفعل (إفتراضي)
2-3=Activado	2-3= 開啓功能	3-2 مفعل
Sélection de la fréquence du CPU	Seleção de Clock do CPU	CPU クロック設定
JFSB1 & JFSB2	JFSB1 & JFSB2	JFSB1 & JFSB2
(1) Autodétection du CPU (par défaut)	① Detecção automática do CPU (Padão)	①は CPU 自動検出設定用 (デフォルト)
(2) Pour une fréquence CPU de 100MHz	② Para 100MHz de Clock do CPU	②は 100MHz 使用時の設定
(3) Pour une fréquence CPU de 133MHz	③ Para 133MHz de Clock do CPU	④は 133MHz 使用時の設定
(4) Pour une fréquence CPU de 200MHz	④ Para 200MHz de Clock do CPU	④は 200MHz 使用時の設定
CPU Clock Einstellungen	2 JFSB1 & JFSB2 CPU Clock Select	CPU 클릭 선택법
JFSB1 & JFSB2	0 2 3 4	JFSB1 & JFSB2
① CPU Autodetect (Standard)	JFSB1 JFSB1 JFSB1 JFSB1 JFSB1	① CPU 클락 자동 선택 (기본값)
② Fur 100MHz CPU Clock	1 JFSB2 JFSB2 JFSB2 JFSB2	② 100MHz CPU 클릭 선택
③ Fur 133MHz CPU Clock	CPU Auto-detect 100MHz 133MHz 200MHz	③ 133MHz CPU 클릭 선택
④ Fur 200MHz CPU Clock	(default) (coother FSB2 533MHz FSB 200MHz)	④ 200MHz CPU 클릭 선택
Selección de Clock del CPU JFSB1 & JFSB2 ① CPU Autodetect (por defecto) ② Para 100MHz CPU Clock ③ Para 133MHz CPU Clock ④ Para 200MHz CPU Clock	CPU 頻率設定 JFSB1 & JFSB2 ① CPU 自動偵測(預設値) ② 選擇 100MHz CPU 頻率 ③ 選擇 133MHz CPU 頻率 ④ 選擇 200MHz CPU 頻率	وضعيات الوصلة JFSB2 & JFSB2 لاختيار سرعة تردد ناقل المعالج ① اختيار تلقائي للسرعة (افتراضي) ② للسرعة 100 MH2 للدقل ④ للسرعة MH2 200 MH2 للدقل
Effacement du CMOS	<i>Limpar dados do CMOS</i>	<i>CMOS データを消却</i>
JBAT1	JBAT1	JBAT1
1-2 Conservation des données (par défaut)	1-2 Reter Dados (Padrão)	1-2 データを記憶する (デフォルト)
2-3 Effacement du CMOS	2-3 Limpar dados do CMOS	2-3 CMOS データを消却
CMOS Daten löschen JBAT1 1-2 Daten erhalten (Standard) 2-3 CMOS Daten löschen	3 JBAT1 Clear CMOS 1 CEDO DICE 1-2 To hold data 2-3 To clear CMOS	<i>CNOS 데이타 삭제</i> JBAT1 1-2 원래값 유지 (기본값) 2-3 현재 CMOS 데이타 삭제
Borrar el CMOS	<i>清除 CMOS 功能</i>	استعادة الوضيع الإفتر اضي لنظام الدخل و الخرج الأساسي
JBAT1	JBAT1	JBATI
1-2 Retener Dados (por defecto)	1-2 記憶資料 (預設値)	2-1 = وضع الحفاظ على المعلومات (افتر اضي)
2-3 Borrar el CMOS	2-3 清除 CMOS 功能	3-2 = استعادة الوضع الإفتر اضي للمصنع