

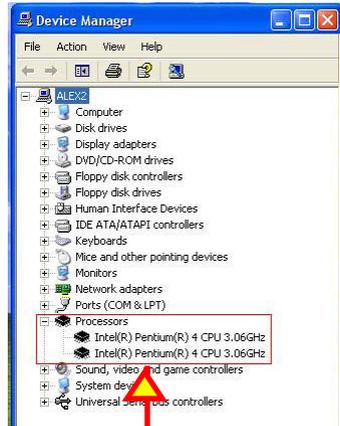
1-2 Mainboard Specification Table

86MIP/86MIP-L Specifications and Features		
CPU	Socket 478B for P4 CPU(HT CPU included)	
North Bridge	Intel 865G, supporting 800/533/400MHz FSB	
South Bridge	Intel ICH5	
BIOS	AMI BIOS	
Memory	Supporting Dual-channel DDR 400/333/266 SDRAM, up to 2GB in 2 DIMM slots	
I/O Chip	W83627HF, with Hardware Monitor	
AGP interface	AGP8X/4X Mode only; 1 AGP Slot on board	
Audio	AC'97 Audio 2.2 compliant, 6 channel audio	
IDE Interface	2 UATA 66/100 IDE ports	
SATA Interface	2 Serial ATA connectors	
PCI Slots	2 PCI Master slots on board	
I/O Connectors	8 USB2.0 ports, 1 FDD port, 2 COM ports, 1 LPT, 1 IrDA, 1 PS/2 Keyboard, 1 PS/2 Mouse	
Networking	LAN Controller RTL8100B and Connector RJ45 (for 86MIP-L only)	
VGA Display	1 x VGA connector on board for analog display	
Other common features	Keyboard/Mouse Wake Up	
Optional Features	Models	
		86MIP
LAN Controller on board	No	Yes

1-3 Pentium 4 CPU Installation

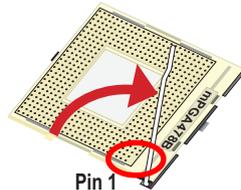
This mainboard is built with CPU Socket 478B (478-pin) supporting the Intel Pentium 4 CPU:

- 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 Hyper-threading dual-in-one CPU, the function of which can be enabled by Windows XP. (See illustration on the right.)

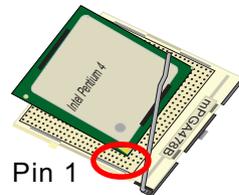


(If Hyper-threading CPU is installed successfully with O/S Win XP, the O/S will enable the dual-in-one CPU function.)

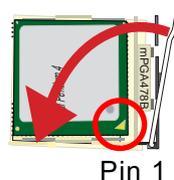
1. First pull sideways the lever of Socket 478, and then turn it up 90° so as to raise the upper layer of the socket from the lower platform.



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.

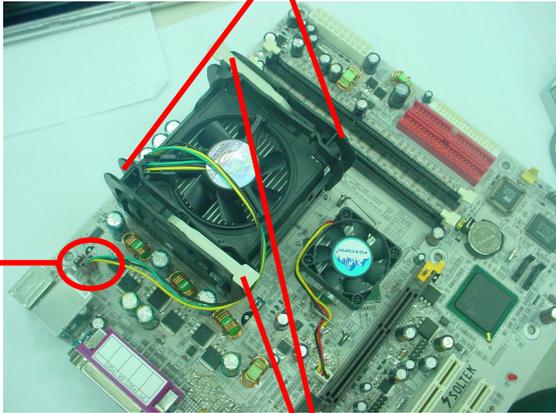


3. Make sure that all CPU pins have completely entered the socket and then lower down the lever to lock up CPU to socket.



1-4 Pentium 4 CPU Fan Installation

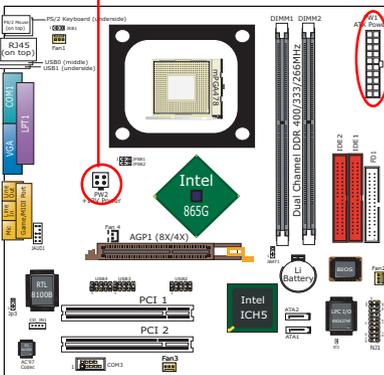
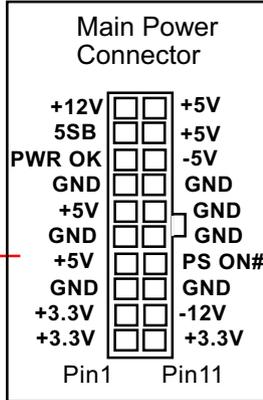
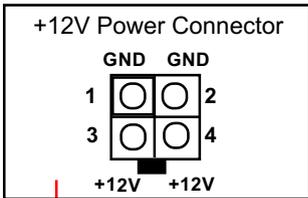
1. Press down 4 latches.



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

3. Connect Fan Connector to CPU FAN connector

1-5 ATX V 2.03 Power Supply Installation



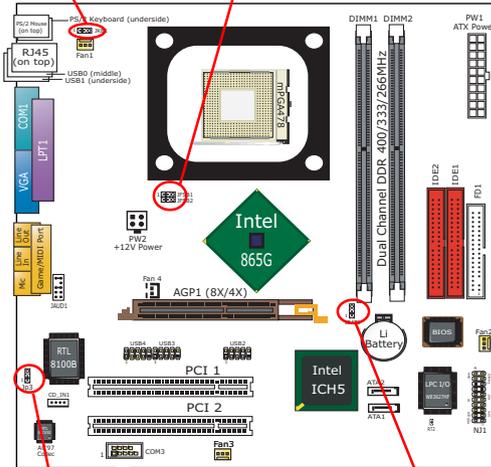
Warning: Both the Main Power Connector and the +12V Power Connector should be connected to Power Supply; otherwise, the system may either not start or be damaged.

1-6 Jumper Settings

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

JKB1: Keyboard / Mouse Wake Up	
 1	1-2 closed (default) Disabled
 1	2-3 closed Enabled

JFSB1&JFSB2: CPU Frequency Select					
	CPU Auto- Detect (default)	100MHz (400MHz FSB)	133MHz (533MHz FSB)	200MHz (800MHz FSB)	
JFSB1	1 	1 	1 	1 	
JFSB2	1 	1 	1 	1 	



Jp3 LAN Controller Select (86MIP-L only)	
 1	1-2 closed (default) LAN controller enabled
 1	2-3 closed LAN controller disabled

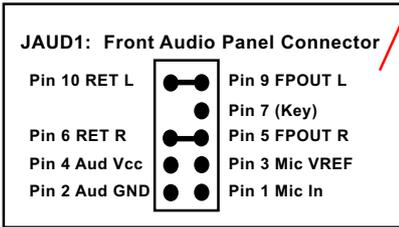
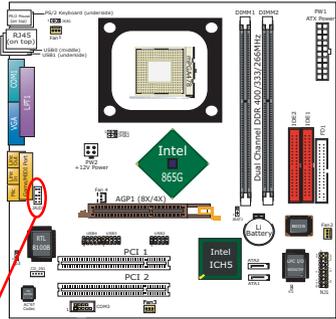
JBAT1 Clear CMOS	
 1	1-2 closed (default) To hold data
 1	2-3 closed To clear CMOS

1-7 Other Connectors Setup

1-7.1 Front Audio Connector

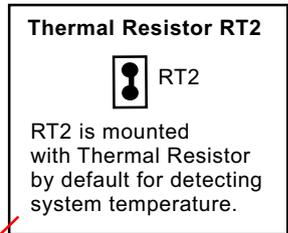
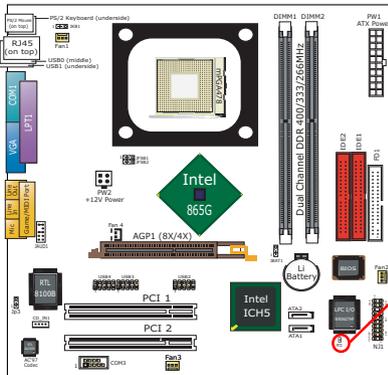
This Mainboard is designed with a Front Panel Audio connector “JAUD1” which provides connection to your chassis.

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.

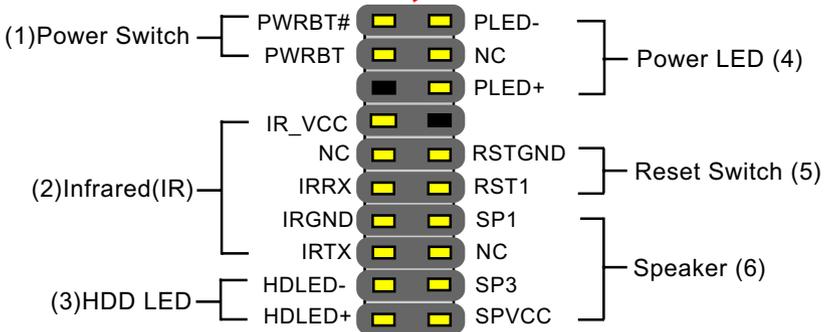
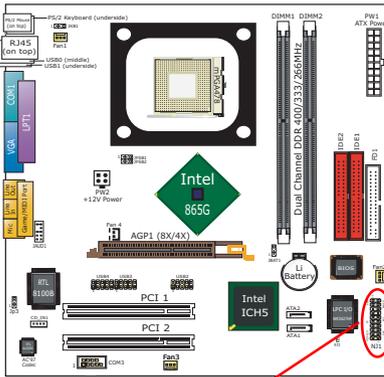


1-7.2 Thermal Resistor

1. Resistor RT2: A thermal resistor is mounted by default to connector RT2 so as to detect the system temperature . What RT2 does is to transmit the thermal signal to Hardware Monitor.



1-7.3 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”.

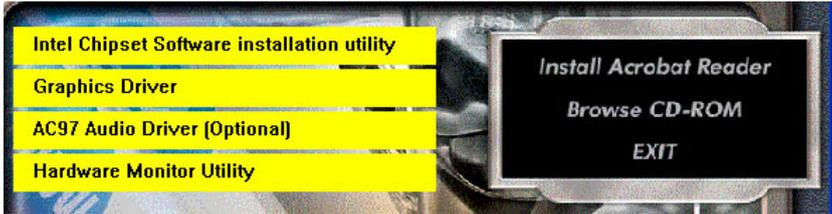
(6) Speaker Connector:

Connection: Connected to the case-mounted Speaker.

Chapter 2 Software Setup

2-1 To Open up the Support CD

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:



2-2 To Install LAN Drivers (for 86MIP-L only)

2-2.1 RTL8100B LAN driver on Windows 9X

The LAN driver contained in the Support CD is not included in the Autorun Menu. To install RTL8100B LAN driver on Windows 9X, please follow the steps shown below:

1. On the “Start” screen of your system, please click to the following path:

My Computer\properties\Device manager

2. In the “Device manager” screen, you can see the item “ PCI Ethernet Controller” with a yellow question mark on its left side, which indicates that the LAN controller is already detected by system but the driver for this on-board RTL8100B Ethernet Controller is not installed yet. Please point to this item with your mouse and double click on it (or click the “Properties” button).

3. Instantly, the “PCI Ethernet Controller Properties” screen shows up. Please click the “General” bar to continue.

4. In the “General” screen, click “reinstall Driver” button to continue. Please note that the status of “Device Usage” should stay at “Exists in all hardware profiles”.



5. In the “Update device Driver Wizard” screen, click “Next” to continue until you see a dialog box asking you to “Specify a location” for the driver. You should **now** insert the Support CD into your CD-ROM.
6. As illustrated in the picture below, check the item “Specify a location” and click the “Browse” button to find out the correct path for the driver. Supposing your CD-ROM drive is Drive E, please type: E:\Driver\Network\RTL8139\Win98 into the blank bar. (Please note that both RTL8100B and RTL8139C controllers are supported by Driver RTL8139.) Then click the “Next” button to continue.



7. The Update Device Driver Wizard will then go on installing the driver, until the “Insert Disk” dialog box shows up. Please withdraw your Support CD and insert the Windows 98SE CD-ROM into the CD-ROM drive for updating system and click “OK” to continue.
8. The Update Device Driver Wizard will then proceed to update the system with the LAN driver. When the “Finish” screen shows up, click “Finish” to continue.
9. Final Dialog box will appear to remind you that you must restart your computer to finish updating the new hardware. Please click “Yes” to restart system and finish the LAN driver installation.

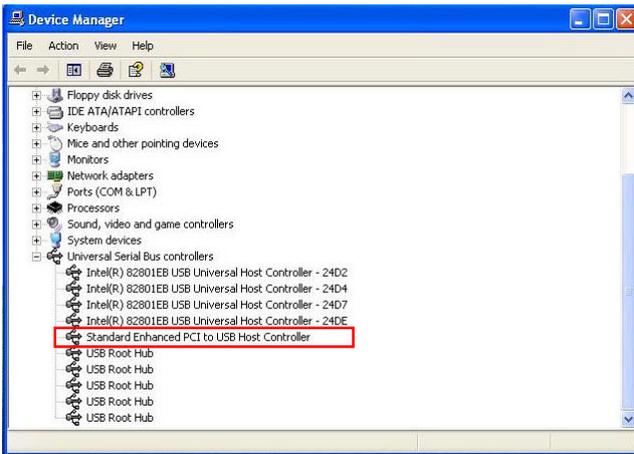
2-2.2 RTL8100B LAN driver on Windows ME / 2000 / XP

1. When you newly install Windows ME, Windows 2000 or Windows XP, the system will detect the LAN Controller on board and configure it automatically into system. Therefore, users need not bother to install the LAN controller into these operating systems.
2. To verify the existence of RTL8100B Controller and Driver, please enter the “Control Panel” of your system and click “Network” to open the “Configuration” screen. You can then see the “Realtek8139 (A/B/C) PCI Fast Ethernet Adapter” is already installed in your system.

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).

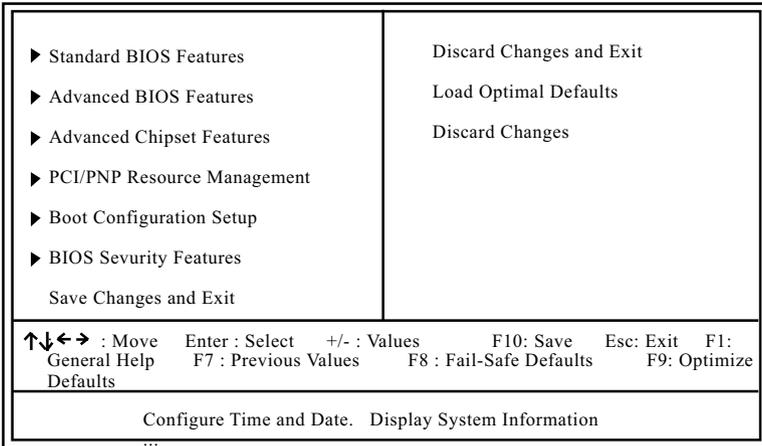
Step 5. When the message “Flash ROM Update Completed - Pass.” appears, please restart your system.

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.
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.

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



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.

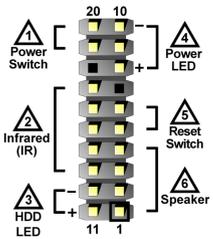
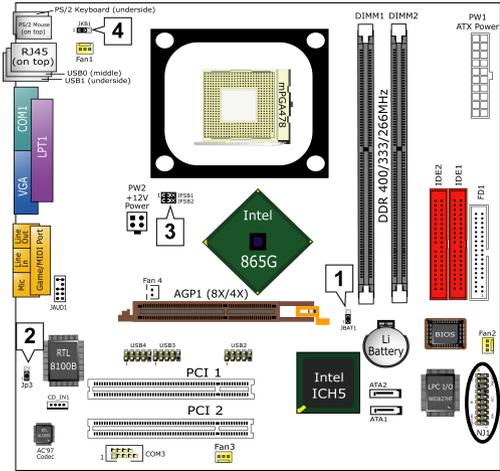
- Standard BIOS Features(Times, Date, System Information etc.)
- Advanced BIOS Features (CPU,IDE, Floppy, SuperIO, Hardware Health, ACPI, USB, and Frequency/Voltage Control)
- Advanced Chipset Features (NorthBridge, SouthBridge Configuration)
- PCI/PNP Resource Management (IRQ Settings, Latency Timers 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-86MIP / 86MIP-L Quick Installation Guide

Brochage composite Gesamtübersicht Conector de dispositivos Conectores em Pinos

設備連接埠 複合ヘッダ 다목적 콘넥터 التوصيلات الداخلية

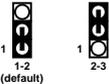
<p>Interruptor de Força Interruptor de Energia System ein/aus Schalter パワースイッチ Connecteur du Switch Power On 電源開關 전원 스위치 연결 مفتاح الطاقة الكهربائية</p>	<p>HDD LED HDD LED HDD LED HDD LED Connecteur du témoin d'activité du disque dur 硬碟指示燈 하드 드라이브 LED 연결 모شر ضوئي للقرص الصلب الأول</p>	<p>Interruptor de Reset Interruptor de Reset Neustart Schalter 리셋 스위치 Connecteur du bouton Reset 系統重設接頭 리셋 스위치 연결 مفتاح إعادة التشغيل</p>
<p>Infravermelho (IR) Conector de infrarrojos Infrarot 赤外線 (IR) Connecteur IR (Infrarouge) 紅外線連接頭 자외선 콘넥터 (IR) 연결 أشعة تحت الحمراء</p>	<p>LED de Força LED de Energia Betriebsanzeige 電源 LED Connecteur du témoin d'alimentation 電源指示燈 전원 LED 연결 مؤشر الطاقة الكهربائية الضوئي</p>	<p>Alto-falante Altavoz Lautsprecher 스피커 Connecteur du haut-parleur 喇叭接頭 스피커 연결 السماعات</p>



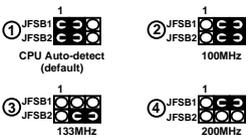
Réglage des cavaliers Jumper-Einstellungen Configuración de Jumper Configuração de Jumper

跳線設定 ジャンパーセッティング 점퍼 세팅 إعدادات الجامبر

<p>Effacement du CMOS JBAT1 1-2 Conservation des données (par défaut) 2-3 Effacement du CMOS</p>	<p>Limpar dados do CMOS JBAT1 1-2 Reter Dados (Padrão) 2-3 Limpar dados do CMOS</p>	<p>CMOS 데이터를 삭제 JBAT1 1-2 데이터를記憶する (デフォルト) 2-3 CMOS 데이터를 삭제</p>
<p>CMOS Daten löschen JBAT1 1-2 Daten erhalten (Standard) 2-3 CMOS Daten löschen</p>	<p>1 JBAT1 Clear CMOS 1-2 (default) 2-3</p>	<p>CMOS 데이터 삭제 JBAT1 1-2 원래값 유지 (기본값) 2-3 현재 CMOS 데이터 삭제</p>
<p>Borrar el CMOS JBAT1 1-2 Retener Datos (por defecto) 2-3 Borrar el CMOS</p>	<p>清除 CMOS 功能 JBAT1 1-2 記憶資料 (預設值) 2-3 清除 CMOS 功能</p>	<p>استعادة الوضع الافتراضي لنظام الدخل والخرج الأساسي JBAT1 2-1 = وضع الحفاظ على المعلومات (افتراضي) 3-2 = استعادة الوضع الافتراضي للمصنع</p>

<p><i>Sélection du contrôleur LAN</i> Jp3 (uniquement sur la SL-86MIP-L) 1-2=LAN activé (par défaut) 2-3=LAN désactivé</p>	<p><i>Seleção de Controladora de Rede</i> Jp3 (somente SL-86MIP-L) 1-2=Habilitar Rede (padrão) 2-3=Desabilitar Rede</p>	<p>LAN 装置の設定 Jp3 (SL-86MIP-Lのみ搭載) 1-2=LANを使用する場合(デフォルト) 2-3=LANを使用しない場合</p>
<p><i>LAN Controller Ausgewählt</i> Jp3 (Nur SL-86MIP-L) 1-2=Lan zur Verfügung (Standard) 2-3=Lan nicht verfügbar</p>	<p>2 Jp3 (SL-86MIP-L only) LAN Controller Select</p> 	<p>LAN 콘트롤러 선택 Jp3 (SL-86MIP-L 모델만 해당) 1-2=LAN 사용 (기본값) 2-3=LAN 사용 안함</p>
<p><i>Selección del LAN Controller</i> Jp3 (SL-86MIP-L solamente) 1-2=LAN Activado (por defecto) 2-3=LAN Desactivado</p>	<p>LAN 装置設定 Jp3 (僅供給 SL-86MIP-L) 1-2= 開啓 LAN 功能(預設值) 2-3= 關閉 LAN 功能</p>	<p>الاختيار الخاص ببطاقة الشبكة (فقط للموديل SL-86MIP-L) Jp3 2-1 = تفعيل بطاقة الشبكة (افتراضي) 3-2 = ابطال بطاقة الشبكة</p>



<p><i>Sélection de la fréquence du CPU</i> JFSB1 & JFSB2 ① Autodétection du CPU (par défaut) ② Pour une fréquence CPU de 100MHz ③ Pour une fréquence CPU de 133MHz ④ Pour une fréquence CPU de 200MHz</p>	<p><i>Seleção de Clock do CPU</i> JFSB1 & JFSB2 ① Detecção automática do CPU (Padão) ② Para 100MHz de Clock do CPU ③ Para 133MHz de Clock do CPU ④ Para 200MHz de Clock do CPU</p>	<p>CPU クロック設定 JFSB1 & JFSB2 ①はCPU自動検出設定用(デフォルト) ②は100MHz使用時の設定 ③は133MHz使用時の設定 ④は200MHz使用時の設定</p>
<p><i>CPU Clock Einstellungen</i> JFSB1 & JFSB2 ① CPU Autodetect (Standard) ② Fur 100MHz CPU Clock ③ Fur 133MHz CPU Clock ④ Fur 200MHz CPU Clock</p>	<p>3 JFSB1 & JFSB2 CPU Clock Select</p> 	<p>CPU 클럭 선택법 JFSB1 & JFSB2 ① CPU 클럭 자동 선택 (기본값) ② 100MHz CPU 클럭 선택 ③ 133MHz CPU 클럭 선택 ④ 200MHz CPU 클럭 선택</p>
<p><i>Selección de Clock del CPU</i> JFSB1 & JFSB2 ① CPU Autodetect (por defecto) ② Para 100MHz CPU Clock ③ Para 133MHz CPU Clock ④ Para 200MHz CPU Clock</p>	<p>CPU 頻率設定 JFSB1 & JFSB2 ① CPU 自動偵測 (預設值) ② 選擇 100MHz CPU 頻率 ③ 選擇 133MHz CPU 頻率 ④ 選擇 200MHz CPU 頻率</p>	<p>JFSB1 & JFSB2 الوصلات اختيار سرعة تردد ناقل المعالج ① اختيار تلقائي للسرعة (افتراضي) ② للسرعة 100 MHz للناقل ③ للسرعة 133 MHz للناقل ④ للسرعة 200 MHz للناقل</p>



<p><i>Réveil par Clavier /Souris</i> JKB1 1-2=Mis hors service (par défaut) 2-3=Activée</p>	<p><i>Ligar no Teclado/Rato de acordar</i> JKB1 1-2=Desabilitado (Padrão) 2-3=Habilitado</p>	<p>キーボード / マウスのウェイクアップ JKB1 1-2= 設定無効にする(デフォルト) 2-3= 設定有効</p>
<p><i>Tastatur/ Maus Aufwachen</i> JKB1 1-2=Deaktiviert (Standard) 2-3=Aktiviert</p>	<p>4 JKB1 KB/Mouse Wake up</p> 	<p>키보드/마우스 절전모드에서 해제 JKB1 1-2= 사용금지 (기본값) 2-3= 사용가능</p>
<p><i>Teclado/Ratón de Wakeup</i> JKB1 1-2=Desactivado (por defecto) 2-3=Activado</p>	<p>鍵盤 / 滑鼠 喚醒功能 JKB1 1-2= 關閉功能 (預設值) 2-3 = 開啓功能</p>	<p>لتفعيل الجهاز عن طريق لوحة المفاتيح ذات مدخل JKB1 2-1 غير مفعل (افتراضي) 3-2 مفعل</p>