

GA-8IPE1000

Intel® Pentium® 4

Rev. 4001
12MK-8IPE1K4-4001

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“Technology Guide”

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, Gigabyte

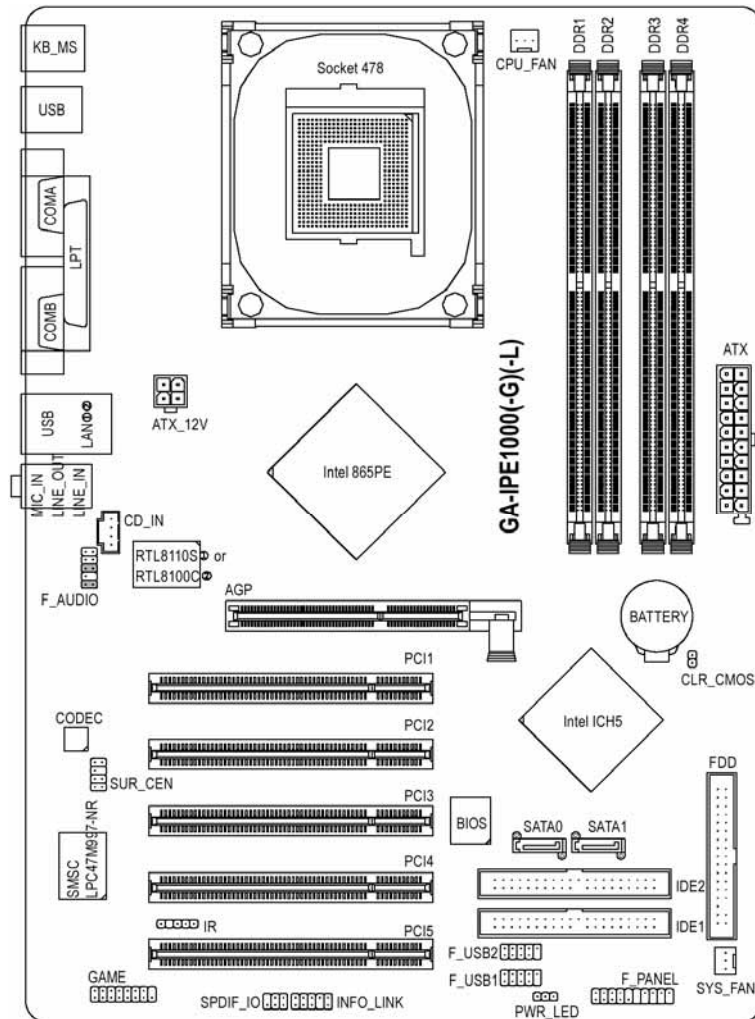
(www.gigabyte.com.tw

www.gigabyte.co.kr)

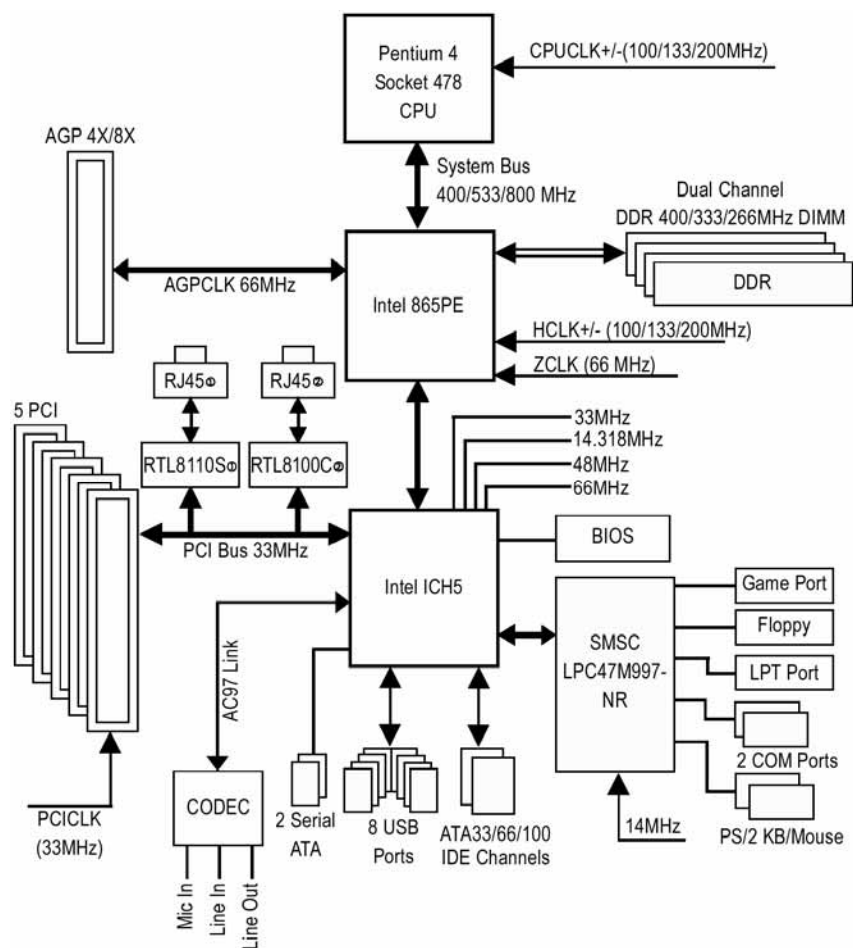
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GA-8IPE1000



- ① GA-8IPE1000-G (Rev 4.x)
- ② GA-8IPE1000-L



① GA-8IPE1000-G (Rev 4.x)

② GA-8IPE1000-L

[illegible]

1

1-1

(ESD)

1.

2.

3. (CPU, RAM)

(ESD)

4.

5.

가

1.

(No.)

(No.)

2.

3.

4.

5.

6.

7.

가

8.

가

가

1.

2.

3.

4.

5.

6.

Gigabyte

1-2

	◆	GA-8IPE1000-G	GA-8IPE1000-L	GA-8IPE1000
CPU	◆	HT	Intel® Pentium® 4 (Northwood, Prescott)	Socket 478
	◆	800/533/400MHz FSB		
	◆	CPU	L2	
	◆		: Intel® 865PE	
	◆		: Intel® ICH5	
	◆	4 DDR DIMM	(4GB)	
	◆		DDR400/333/266 DIMM	
	◆	2.5V DDR DIMM		
	◆	1 AGP	8X/4X (1.5V)	
	◆	5 PCI		
IDE	◆	IDE	2 (UDMA 33/ATA 66/ATA 100), 4	IDE
		가		
FDD	◆	FDD	1 , 2	FDD 가
SATA	◆	2	ATA : ICH5 (SATA0, SATA1)	
Peripherals	◆	1	Normal/EPP/ECP	
	◆	2	(COMA COMB)	
	◆	8 USB 2.0/1.1	(: : 4 , : 4)	
	◆	1		
	◆	1 IR		
	◆	1 PS/2		
	◆	1 PS/2		
LAN ^{①②} (가)	◆	RTL8110S	(10/100/1000 Mbit) ^①	
	◆	RTL8110C	(10/100 Mbit) ^②	
	◆	1 RJ45	^{①②}	
	◆	ALC850 CODEC (UAJ)		
	◆		(JACK Sense)	
	◆	2 / 4 / 6 / 8	(2 / 4 / 6)	
	◆	Line In; Line Out; MIC		
	◆		(: 8CH)	
	◆	SPDIF In/Out		
	◆	CD In /		

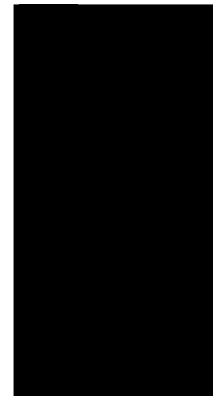
() PC architecture ,

, 4GB (POST) 3.xxGB

① GA-8IPE1000-G .

② GA-8IPE1000-L .

I/O	◆	SMSC LPC47M997-NR	
	◆		
	◆	CPU	
	◆	CPU /	
BIOS	◆	Licensed AWARD BIOS	
	◆	Q-Flash	
가	◆	@BIOS	
	◆	EasyTune 5	
	◆	BIOS	(CPU/AGP/DDR)
	◆	BIOS	(CPU/AGP/DDR/PCI)
	◆	ATX	, 30.5cm x 22cm



1-3 CPU



1. CPU 가 , CPU
 2. CPU , CPU 가 , CPU
 3. CPU CPU
 4. CPU CPU CPU CPU
 5. CPU
- , CPU,



- HT :
- (Hyper-Threading)
- CPU: HT Intel® Pentium 4
 - : HT Intel®
 - BIOS: HT 가 BIOS
 - OS: HT

1-3-1 CPU



1
90



2

CPU CPU CPU

CPU CPU CPU

CPU 가 CPU 가 , CPU

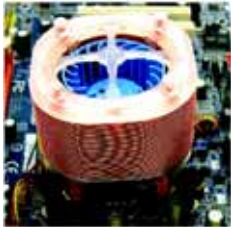
가 CPU 가



CPU CPU CPU 가 가

CPU

1-3-2



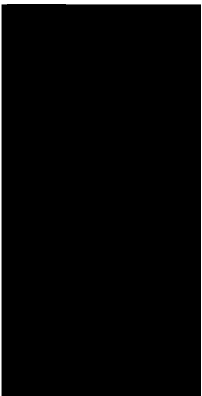
1
CPU
(
).



2
CPU CPU
CPU_FAN CPU
.



가 CPU 가 .



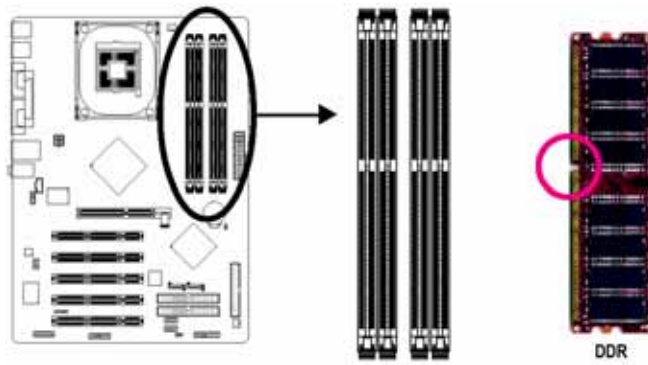
1-4



1. 가
- 2.
- 3.

DDR

, BIOS



1
DIMM

, DIMM
. DIMM

DIMM



2
DIMM
DIMM
DIMM

DDR

GA-8IPE1000 6.4GB/s (DDR400) 5.3GB/s (DDR333)가

GA-8IPE1000 4 DIMM
DIMM :
▶▶ A: DDR 1, DDR 2
▶▶ B: DDR 3, DDR 4
Intel
1. DDR
2. DDR () A B
DDR
3. DDR
BIOS DDR
DDR
DIMM

: (DS: , SS:)

	DDR 1	DDR 2	DDR 3	DDR 4
2	DS/SS	X	DS/SS	X
	X	DS/SS	X	DS/SS
4	DS/SS	DS/SS	DS/SS	DS/SS

1-5

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

BIOS

BIOS

AGP VGA



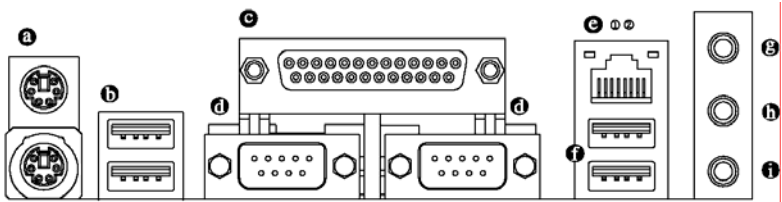
VGA
AGP

VGA

AGP

. VGA 가

1-6 I/O

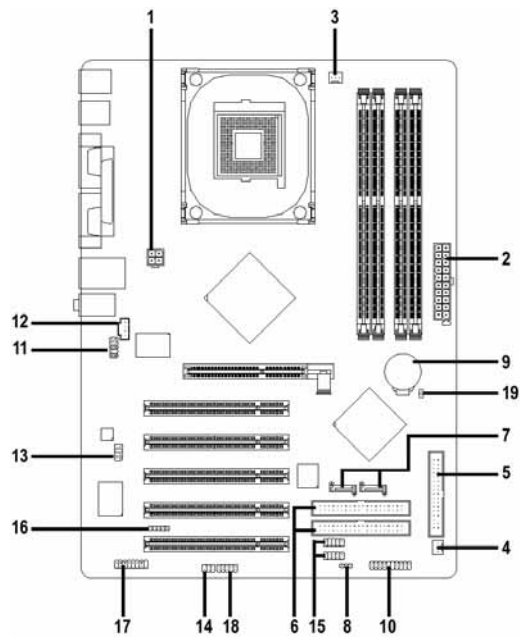


- a** PS/2 PS/2 (), ()
- b** USB () USB , USB , ZIP, ...
USB USB USB
- c** COMA / COMB ()
- d** LAN ① 10/100/1000Mbps Gigabit Ethernet
LAN ② 10/100Mbps Ethernet
- e** Line In CD-ROM, Line-In
- f** Line Out
- g** MIC In MIC In



① GA-8IPE1000-G
② GA-8IPE1000-L

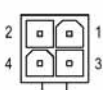
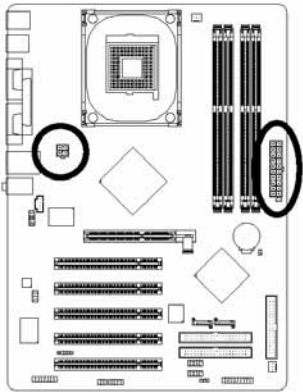
1-7



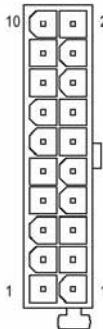
1) ATX_12V	11) F_AUDIO
2) ATX (Power Connector)	12) CD_IN
3) CPU_FAN	13) SUR_CEN
4) SYS_FAN	14) SPDIF_IO
5) FDD	15) F_USB1 / F_USB2
6) IDE1 / IDE2	16) IR
7) SATA0 / SATA1	17) GAME
8) PWR_LED	18) INFO_LINK
9) BATTERY	19) CLR_CMOS
10) F_PANEL	

1/2) ATX_12V/ATX ()

ATX_12V CPU . ATX_12V 가
!
(300W)



1	GND
2	GND
3	+12V
4	+12V

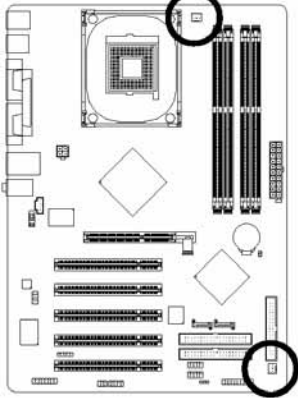


1	3.3V
2	3.3V
3	GND
4	VCC
5	GND
6	VCC
7	GND
8	Power Good
9	5V SB (+5V)
10	+12V
11	3.3V
12	-12V
13	GND
14	PS_ON (soft on/off)
15	GND
16	GND
17	GND
18	-5V
19	VCC
20	VCC

3/4) CPU_FAN / SYS_FAN ()

(GND) CPU CPU 가)

CPU ! CPU CPU



1 CPU_FAN

1 SYS_FAN

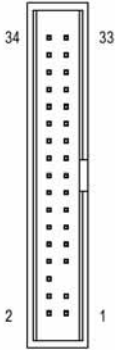
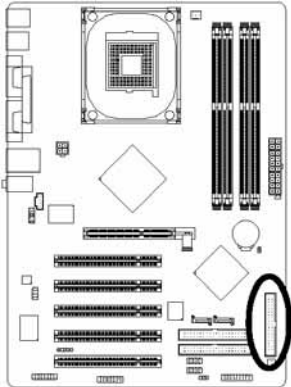
1	GND
2	+12V
3	

5) FDD (FDD)

FDD FDD FDD FDD

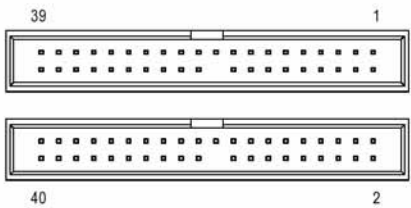
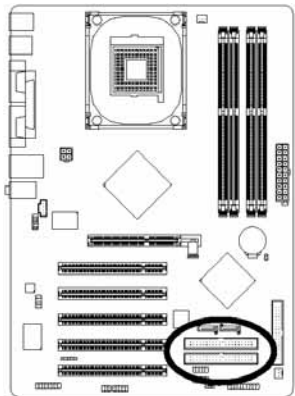
360KB, 720KB, 1.2MB, 1.44MB 2.88MB

1



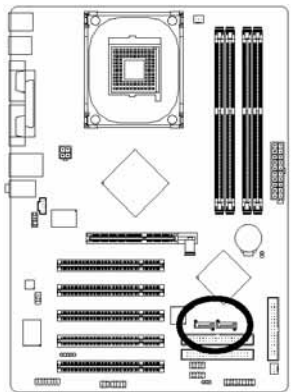
6) IDE1/IDE2 (IDE)

1 IDE 1 IDE . 1 IDE
1 IDE , 1 IDE 2 IDE
()
, IDE
(IDE).

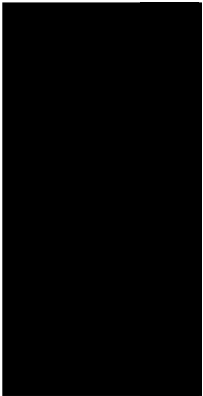


7) SATA0/SATA1 (ATA)

ATA 150MB/s . ATA
BIOS .

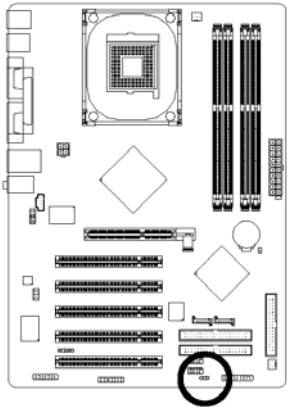


1	GND
2	TXP
3	TXN
4	GND
5	RXN
6	RXP
7	GND



8) PWR_LED
PWR_LED

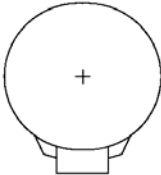
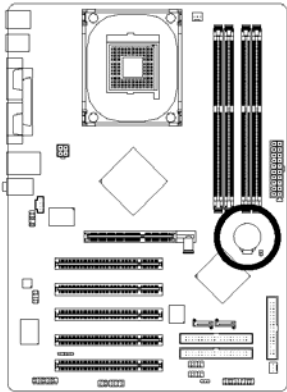
가



1

1	MPD+
2	MPD-
3	MPD-

9) BATTERY

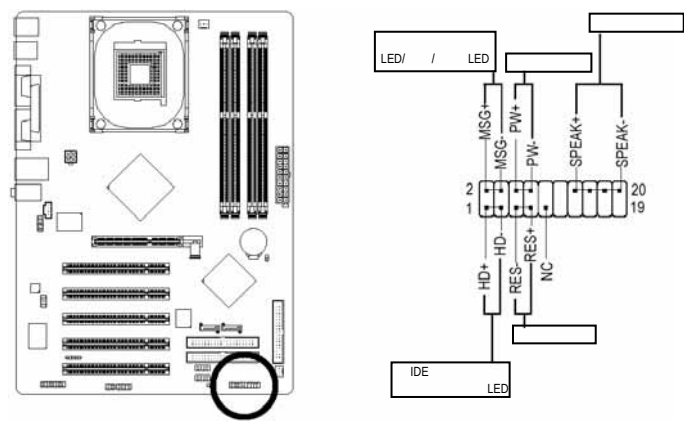


- ❖
- ❖
- ❖

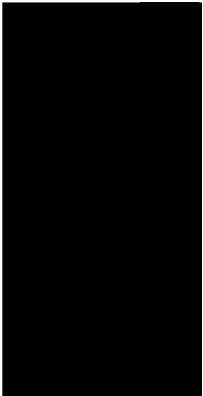
가 CMOS ...

- 1.
- 2. 30
- 3.
- 4.

10) F_PANEL ()
LED, PC
F_PANEL

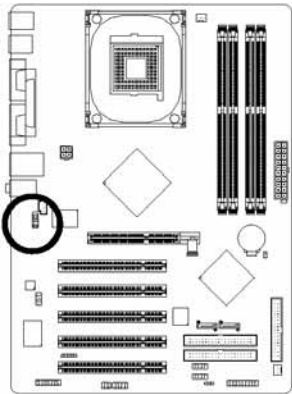


MSG (LED/ / LED /)	Pin 1: LED (+) Pin 2: LED (-)
PW (/)	Open (): Close: /
SPEAK (/)	Pin 1: (+) Pin 2 - Pin 3: NC Pin 4: (-)
HD (IDE LED /)	Pin 1: LED (+) Pin 2: LED (-)
RES (/)	Open (): Close:
NC ()	NC



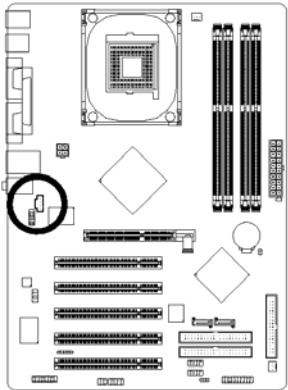
11) F_AUDIO ()

5-6, 9-10
가
MB
가



1	MIC
2	GND
3	MIC BIAS
4	
5	(R)
6	(R)
7	
8	No Pin
9	(L)
10	(L)

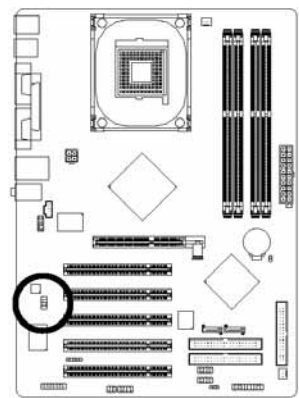
12) CD_IN (CD In)
CD-ROM DVD-ROM



1	CD-L
2	GND
3	GND
4	CD-R

13) SUR_CEN ()

SUR_CEN
(02-707-5000)



1	SUR OUTL
2	SUR OUTR
3	GND
4	No Pin
5	CENTER_OUT
6	BASS_OUT
7	AUX_L
8	AUX_R

14) SPDIF_IO (SPDIF In/Out)

SPDIF

AC3

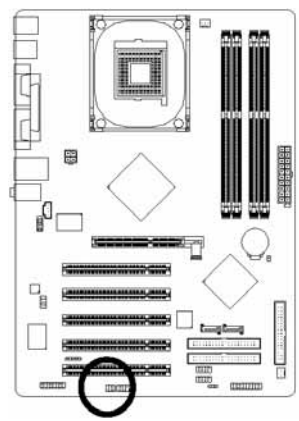
가 SPDIF_IO

SPDIF

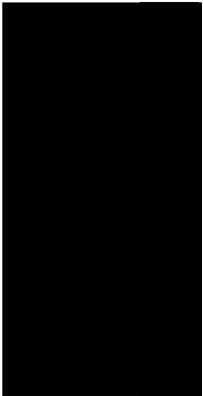
가

SPDIF_IO

(02-707-5000)



1	VCC
2	No Pin
3	SPDIF
4	SPDIFI
5	GND
6	GND



15) F_USB1 / F_USB2 (USB)

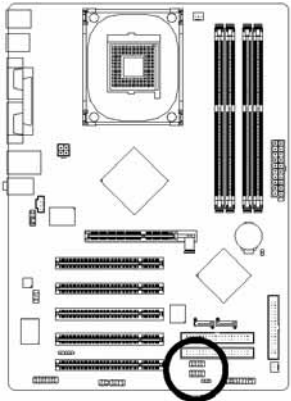
USB

USB

가

USB

(02-707-5000)



1	
2	
3	USB DX-
4	USB Dy-
5	USB DX+
6	USB Dy+
7	GND
8	GND
9	No Pin
10	NC

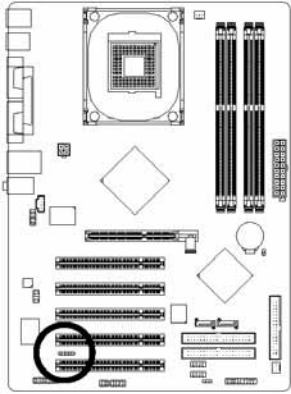
16) IR

IR

IR

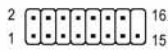
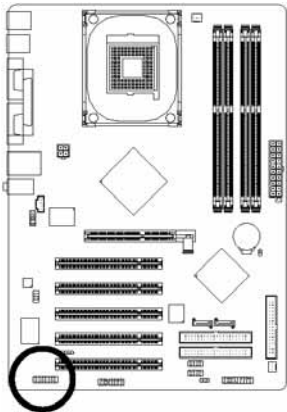
IR

(02-707-5000)



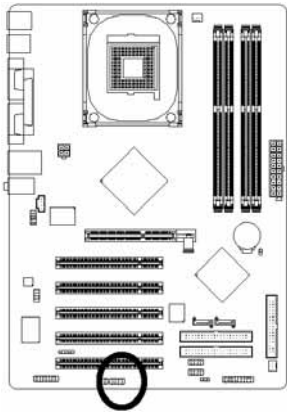
1	VCC
2	No Pin
3	IR RX
4	GND
5	IR TX

17) GAME ()
, MIDI



1	VCC
2	GRX1_R
3	GND
4	GPSA2
5	VCC
6	GPX2_R
7	GPY2_R
8	MSI_R
9	GPSA1
10	GND
11	GPY1_R
12	VCC
13	GPSB1
14	MSO_R
15	GPSB2
16	No Pin

18) INFO_LINK
가

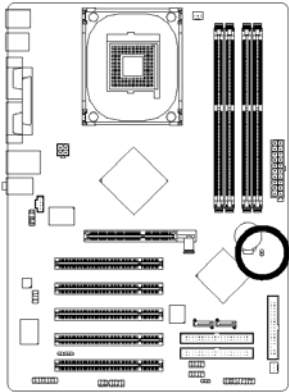


1	SMBCLK
2	VCC
3	SMBDATA
4	GPIO
5	GND
6	GND
7	No Pin
8	NC
9	+12V
10	+12V

19) CLR_CMOS (CMOS)

CMOS
, 1-2

(“ ”
). CMOS
)



Open ():



: CMOS

2 BIOS

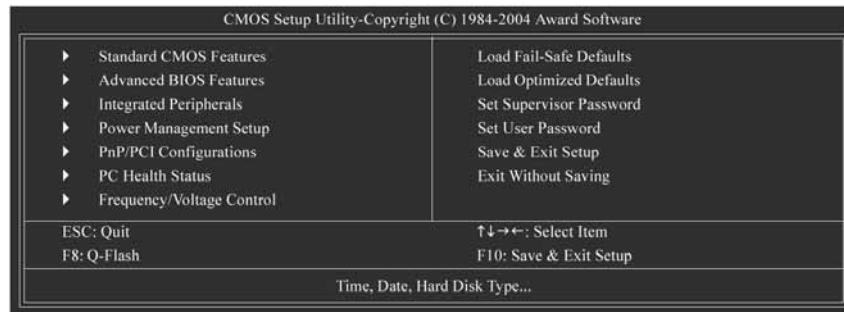
BIOS () CMOS SETUP 가
가
CMOS SETUP CMOS SRAM
CMOS SRAM
, BIOS POST (Power-On Self Test) CMOS SETUP
"Ctrl+F1" BIOS
BIOS , BIOS 가
BIOS , GIGABYTE
Q-Flash @BIOS
Q-Flash 가 BIOS
@BIOS BIOS DOS
가 BIOS

<↑><↓><←><→>		
<Enter>		
<Esc>	- CMOS	가 -
		가
<Page Up>		
<Page Down>		
<F1>		
<F2>		
<F5>	CMOS	CMOS ,
<F6>	BIOS	File-safe CMOS
<F7>		
<F8>	Q-Flash	
<F9>		
<F10>	CMOS	,

/
F1
가 . <Esc>

(: BIOS Ver.: E8)

Award BIOS CMOS 가 , ()
<Enter>
가 .



, "Ctrl+F1"

- **Standard CMOS Features**
- **Advanced BIOS Features**
Award BIOS
- **Integrated Peripherals**
- **Power Management Setup**
- **PnP/PCI Configuration**
PCI & PnP ISA
- **PC Health Status**
- **Frequency/Voltage Control**
CPU
- **Load Fail-Safe Defaults**
Fail-Safe

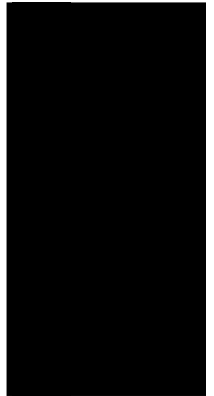
■ **Load Optimized Defaults**

■ **Set Supervisor Password**

■ **Set User Password**

■ **Save & Exit Setup**
CMOS

■ **Exit Without Saving**
CMOS



2-1 Standard CMOS Features

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software		
Standard CMOS Features		
Date (mm:dd:yy)	Tue, Oct 26 2004	Item Help
Time (hh:mm:ss)	22:31:24	Menu Level▶
▶ IDE Channel 0 Master	[None]	Change the day, month, year
▶ IDE Channel 0 Slave	[None]	<Week>
▶ IDE Channel 1 Master	[None]	Sun. to Sat.
▶ IDE Channel 1 Slave	[None]	<Month>
Drive A	[1.44M, 3.5"]	Jan. to Dec.
Drive B	[None]	<Day>
Floppy 3 Mode Suport	[Disabled]	1 to 31 (or maximum allowed in the month)
Halt On	[All, But Keyboard]	<Year>
Base Memory	640K	1999 to 2098
Extended Memory	239M	
Total Memory	240M	
↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help		
F5: Previous Values F6: Fail-Save Defaults F7: Optimized Defaults		

- ☞ Date
- <week>, <month>, <day>, <year>
- ▶▶ Week, ~, BIOS
- ▶▶ Month, 1 ~ 12
- ▶▶ Day, 1 ~ 31 ()
- ▶▶ Year, 1999 ~ 2098
- ☞ Time
- <hour> <minute> <second> 24
- : 1 13:00:00 .
- ☞ IDE Channel 0 Master, Slave / IDE Channel 1 Master, Slave
- ▶▶ IDE HDD Auto-Detection "Enter"
- ▶▶ IDE Channel 0/1 Master/Slave IDE
- Auto BIOS POST() IDE
- None IDE
- Manual 가
- ▶▶ Access Mode 가 : CHS/LBA/Large/Auto (:)
- ▶▶ Cylinder
- ▶▶ Head
- ▶▶ Precomp
- ▶▶ Landing Zone
- ▶▶ Sector 가 , NONE <Enter>

☞ Drive A / Drive B

B A

▶▶ None 가

▶▶ 360K, 5.25" 5.25 PC- ; 360Kb

▶▶ 1.2M, 5.25" 5.25 AT- ; 1.2Mb (3 가 가

3.5).

▶▶ 720K, 3.5" 3.5 ; 720Kb

▶▶ 1.44M, 3.5" 3.5 ; 1.44Mb

▶▶ 2.88M, 3.5" 3.5 ; 2.88Mb

☞ Floppy 3 Mode Support (for Japan Area)

▶▶ Disabled . ()

▶▶ Drive A A 3

▶▶ Drive B B 3

▶▶ Both A B 3

☞ Halt on

가 가

▶▶ No Errors 가

▶▶ All Errors BIOS (or)

▶▶ All, But Keyboard ;

가 . ()

▶▶ All, But Diskette ;

가

▶▶ All, But Disk/Key 가

☞ Memory

BIOS POST (Power On Self Test/ 가 가)

▶▶ Base Memory

BIOS POST

512K

512K , 640K

640K

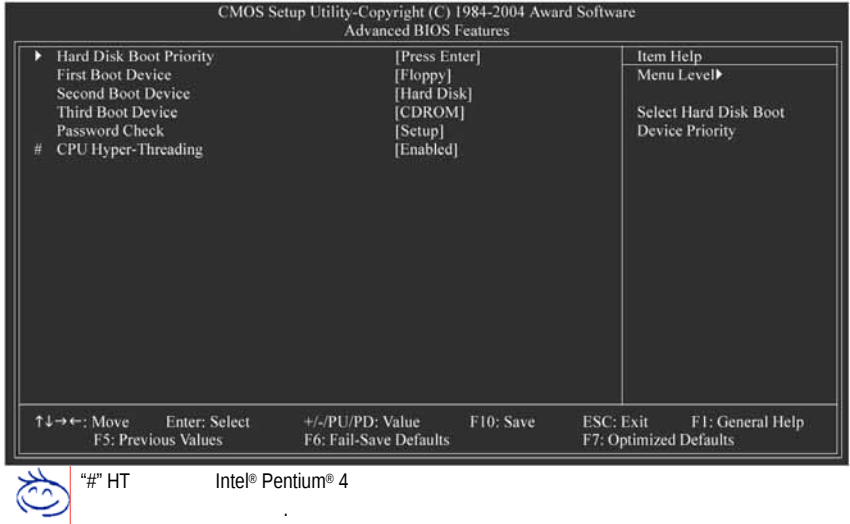
▶▶ Extended Memory

BIOS POST

CPU 1MB

▶▶ Total Memory

2-2 Advanced BIOS Features



- ☞ **Hard Disk Boot Priority**
 - () SCSI, RAID
 - <↑> <↓> () <+> , <->
 - <ESC>
- ☞ **First / Second / Third Boot Device**
 - ▶▶ Floppy
 - ▶▶ LS120 LS120
 - ▶▶ Hard Disk
 - ▶▶ CD-ROM CD-ROM
 - ▶▶ ZIP ZIP
 - ▶▶ USB-FDD USB-FDD
 - ▶▶ USB-ZIP USB-ZIP
 - ▶▶ USB-CD-ROM USB-CDROM
 - ▶▶ USB-HDD USB-HDD
 - ▶▶ LAN LAN
 - ▶▶ Disabled
- ☞ **Password Check**
 - ▶▶ Setup 가 () 가 BIOS
 - ▶▶ System 가 () BIOS
 - 가 가
- ☞ **CPU Hyper-Threading**
 - ▶▶ Enabled CPU
 - ▶▶ Disabled CPU
 - .()

2-3 Integrated Peripherals



- ☞ On-Chip Primary PCI IDE
- ▶▶ Enabled IDE . ()
 - ▶▶ Disabled IDE .
- ☞ On-Chip Secondary PCI IDE
- ▶▶ Enabled IDE . ()
 - ▶▶ Disabled IDE .

① GA-8IPE1000-G .
② GA-8IPE1000-L .

☞ **Onboard LAN Boot ROM^{①②}**

	LAN	ROM	
▶▶ Enabled			.
▶▶ Disabled		.	()

☞ **Onboard Serial Port 1**

▶▶ Auto	BIOS	1	.
▶▶ 3F8/IRQ4		1	3F8 . ()
▶▶ 2F8/IRQ3		1	2F8 .
▶▶ 3E8/IRQ4		1	3E8 .
▶▶ 2E8/IRQ3		1	2E8 .
▶▶ Disabled		1	.

☞ **Onboard Serial Port 2**

▶▶ Auto	BIOS	1	.
▶▶ 3F8/IRQ4		2	3F8 .
▶▶ 2F8/IRQ3		2	2F8 . ()
▶▶ 3E8/IRQ4		2	3E8 .
▶▶ 2E8/IRQ3		2	2E8 .
▶▶ Disabled		2	.

☞ **UART Mode Select**

	I/O	Infra Red (IR)	
▶▶ Normal	I/O chip UART		. ()
▶▶ IrDA	I/O chip UART	IrDA	.
▶▶ ASKIR	I/O chip UART	ASKIR	.

☞ **UR2 Duplex Mode**

	IR	
"UART Mode Select"가 Normal		.
▶▶ Half	IR	. ()
▶▶ Full	IR	.

☞ **TxD, RxD Polarity Active**

"UART Mode Select"가 Normal		.
▶▶ Hi, Hi	TxD, RxD polarity active	Hi, Hi .
▶▶ Hi, Lo	TxD, RxD polarity active	Hi, Lo .
▶▶ Lo, Hi	TxD, RxD polarity active	Lo, Hi . ()
▶▶ Lo, Lo	TxD, RxD polarity active	LO,Lo .

☞ **Use IR Pins**

"UART Mode Select"가 Normal		.
▶▶ Rx2D2, Tx2D2	RxD2, Tx2D2	IR .
▶▶ IR-Rx2Tx2	IR-Rx2Tx2	IR . ()

① GA-8IPE1000-G

② GA-8IPE1000-L

☞ **Onboard Parallel port**

- » Disabled LPT .
- » 378/IRQ7 LPT 378/IRQ7 . ()
- » 278/IRQ5 LPT 278/IRQ5 .
- » 3BC/IRQ7 LPT 3BC/IRQ7 .

☞ **Parallel Port Mode**

- » SPP (SPP) .
- » EPP1.9+SPP EPP(Enhanced Parallel Port)1.9 SPP .
- » ECP ECP (Extended Capabilities Port) .
- » EPP1.9+ECP EPP (Enhanced Parallel Port) 1.9 ECP .
- » PRINTER . ()
- » EPP1.7+SPP EPP (Enhanced Parallel Port) 1.7 SPP .
- » EPP1.7+ECP EPP (Enhanced Parallel Port) 1.7 ECP .

☞ **ECP Mode Use DMA**

- » 3 ECP Mode Use DMA 3 . ()
- » 1 ECP Mode Use DMA 1 .

☞ **Game Port Address**

- » 201 Game Port Address 201 . ()
- » 209 Game Port Address 209 .
- » Disabled .

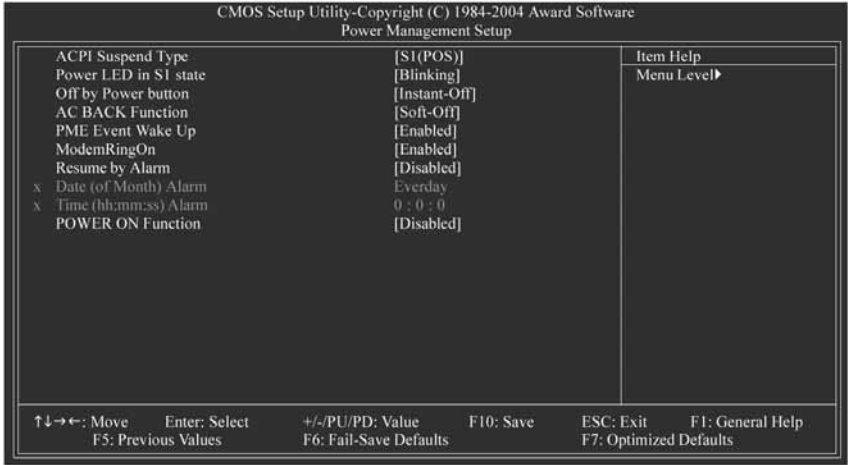
☞ **Midi Port Address**

- » 330 Midi 330 .
- » 300 Midi 300 .
- » 290 Midi 290 .
- » Disabled . ()

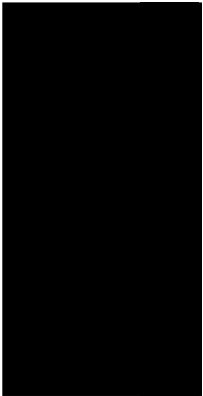
☞ **Midi Port IRQ**

- » 5 Midi Port IRQ 5 .
- » 10 Midi Port IRQ 10 . ()

2-4 Power Management Setup



- ACPI Suspend Type
 - S1 (POS) ACPI S1/POS (Power On Suspend)
 - S3 (STR) ACPI S3/STR (Suspend-To-RAM)
- Power LED in S1 state
 - Blinking (S1) LED
 - Dual/Off (S1):
 - a. LED, LED
 - b. LED, LED
- Off by Power button
 - Instant-off
 - Delay 4 Sec. 4
- AC BACK Function
 - Soft-Off AC, "Off" 가
 - Full-On AC, "On" 가
 - Memory AC
- PME Event Wake Up
 - 5VSB 1A ATX 가
 - Disabled
 - Enabled PME
- Modem Ring On
 - Disabled Modem Ring on
 - Enabled Modem Ring on



☞ **Resume by Alarm**

"Resume by Alarm" enabled /

- ▶▶ Disabled . ()
- ▶▶ Enabled .

RTC

- ▶▶ Date (of Month) Alarm: Everyday, 1~31
- ▶▶ Time (hh:mm:ss) Alarm: (0~23):(0~59):(0~59)

☞ **POWER ON Function**

- ▶▶ Disabled . ()
- ▶▶ Any KEY
- ▶▶ Mouse
- ▶▶ Mouse/Any KEY

Abstract



👉 PCI 1/5 IRQ Assignment

▶▶ Auto IRQ PCI 1/5 . ()

▶▶ 3,4,5,7,9,10,11,12,14,15 IRQ 3, 4, 5, 7, 9, 10, 11, 12, 14, 15 PCI 1/5

👉 PCI 2 IRQ Assignment

▶▶ Auto IRQ PCI 2 . ()
 ▶▶ 3,4,5,7,9,10,11,12,14,15 IRQ 3, 4, 5, 7, 9, 10, 11, 12, 14, 15 PCI 2

👉 PCI 3 IRQ Assignment

▶▶ Auto IRQ PCI 3 . ()
 ▶▶ 3,4,5,7,9,10,11,12,14,15 IRQ 3, 4, 5, 7, 9, 10, 11, 12, 14, 15 PCI 3

👉 PCI 4 IRQ Assignment

▶▶ Auto IRQ PCI 4 . ()
 ▶▶ 3,4,5,7,9,10,11,12,14,15 IRQ 3, 4, 5, 7, 9, 10, 11, 12, 14, 15 PCI 4

2-6 PC Health Status

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software		
PC Health Status		
Current CPU Temperature	50°C	Item Help
Vcore	1.35V	Menu Level▶
DDR25V	2.39V	
+3.3V	3.28V	
+12V	12.09V	
Current CPU FAN Speed	3308 RPM	
Current SYSTEM FAN Speed	0 RPM	
↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help		
F5: Previous Values F6: Fail-Save Defaults F7: Optimized Defaults		

- ☞ **Current CPU Temperature**
 - ▶▶ CPU
- ☞ **Current Voltage (V) Vcore / DDR25V / +3.3V / +12V**
 - ▶▶
- ☞ **Current CPU/SYSTEM FAN Speed (RPM)**
 - ▶▶ CPU/SYSTEM

2-7 Frequency/Voltage Control

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software		
Frequency/Voltage Control		
CPU Clock Ratio	[15X]	Item Help
CPU Host Clock Control	[Disabled]	Menu Level▶
x CPU Host Frequency (Mhz)	133	
x AGP/PCI/SRC Fixed	66/33/100	Set CPU Ratio if CPU Ratio is unlocked
Memory Frequency For	[Auto]	
Memory Frequency (Mhz)	266	
AGP/PCI/SRC Frequency (Mhz)	66/33/100	
DIMM OverVoltage Control	[Normal]	
AGP OverVoltage Control	[Normal]	
CPU OverVoltage Control	[Normal]	
↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help		
F5: Previous Values F6: Fail-Save Defaults F7: Optimized Defaults		



☞ CPU Clock Ratio

CPU BIOS
CPU "Locked"가

☞ CPU Host Clock Control

▶▶ Disabled CPU . ()
▶▶ Enabled CPU

☞ CPU Host Frequency (Mhz)

CPU Host Clock Control Enabled
▶▶ 100Mhz ~ 355Mhz CPU 100Mhz 355Mhz
400Mhz FSB , CPU Host Frequency 100MHz
533Mhz FSB , CPU Host Frequency 133MHz
800Mhz FSB , CPU Host Frequency 200MHz

☞ AGP/PCI/SRC Fixed

▶▶ AGP/PCI/SRC CPU

☞ Memory Frequency For

CMOS
FSB(Front Side Bus) = 400Mhz
▶▶ 2.66 = x 2.66.
▶▶ Auto DRAM SPD . ()
FSB (Front Side Bus) = 533Mhz
▶▶ 2.0 = x 2.
▶▶ 2.5 = x 2.5.
▶▶ Auto DRAM SPD . ()

FSB(Front Side Bus) = 800Mhz ,

>> 1.33 = x 1.33.
 >> 1.6 = x 1.6.
 >> 2.0 = x 2.
 >> Auto DRAM SPD . ()

> **Memory Frequency (Mhz)**
 >> CPU Host Frequency (Mhz) Memory Frequency For .

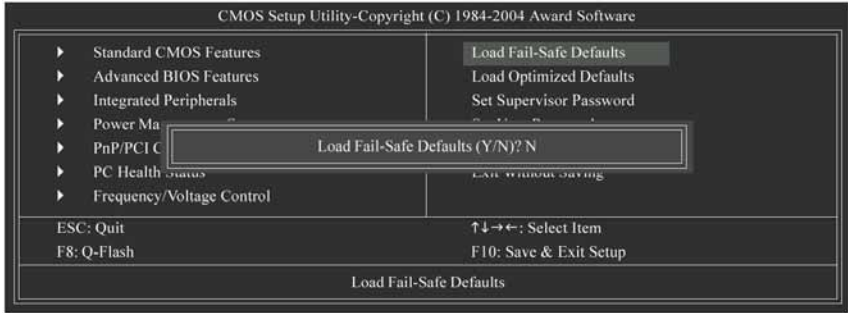
> **AGP/PCI/SRC Frequency (Mhz)**
 >> AGP/PCI/SRC Fixed .

> **DIMM OverVoltage Control**
 >> Normal DIMM OverVoltage Control . ()
 >> +0.1V DIMM OverVoltage Control +0.1V .
 >> +0.2V DIMM OverVoltage Control +0.2V .

> **AGP OverVoltage Control**
 >> Normal AGP OverVoltage Control . ()
 >> +0.1V AGP OverVoltage Control +0.1V .
 >> +0.2V AGP OverVoltage Control +0.2V .
 >> +0.3V AGP OverVoltage Control +0.3V .

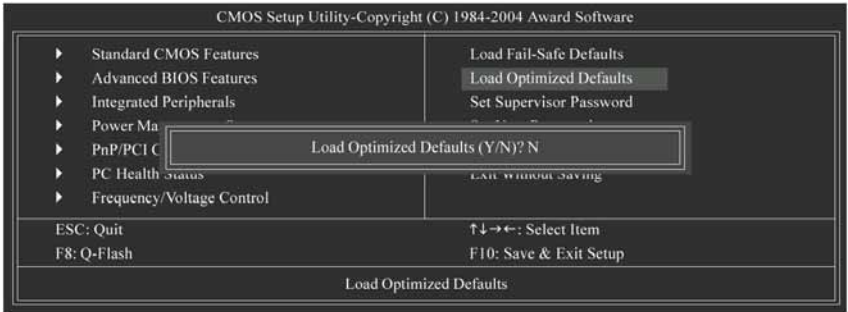
> **CPU OverVoltage Control**
 >> Normal CPU OverVoltage Control . ()
 >> +5.0% CPU OverVoltage Control +5.0% .
 >> +7.5% CPU OverVoltage Control +7.5% .
 >> +10.0% CPU OverVoltage Control +10.0% .

2-8 Load Fail-Safe Defaults



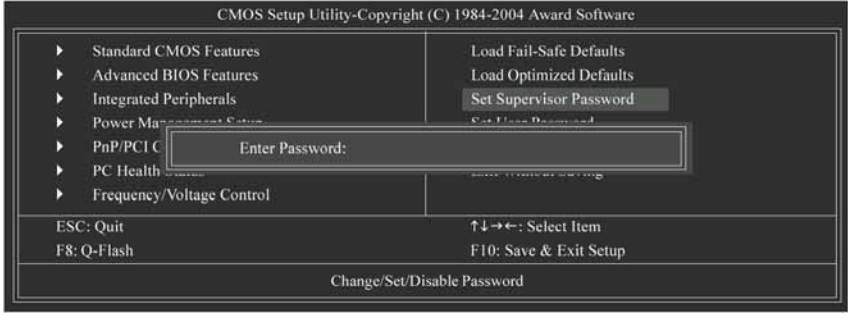
Fail-Safe defaults

2-9 Load Optimized Defaults



BIOS

2-10 Set Supervisor/User Password



BIOS

가

8

, <Enter>

<Enter>

, <Esc>

가

, <Enter>

"PASSWORD DISABLED"

가

BIOS

가

SUPERVISOR PASSWORD()

USER PASSWORD().

BIOS

BIOS

Advance BIOS Features Menu

"Password Check"

"System"

가

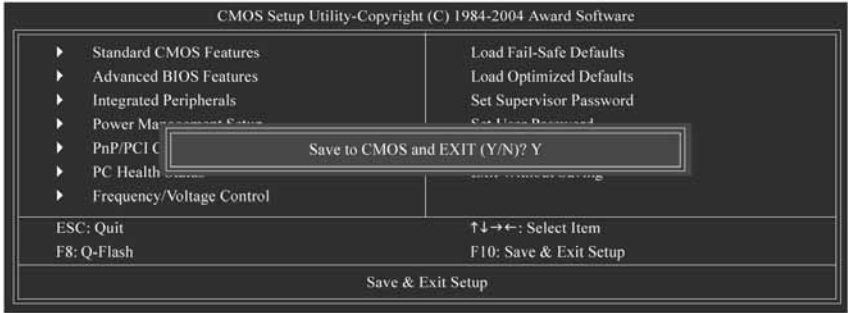
Advance BIOS Features Menu

"Password Check"

"Setup"

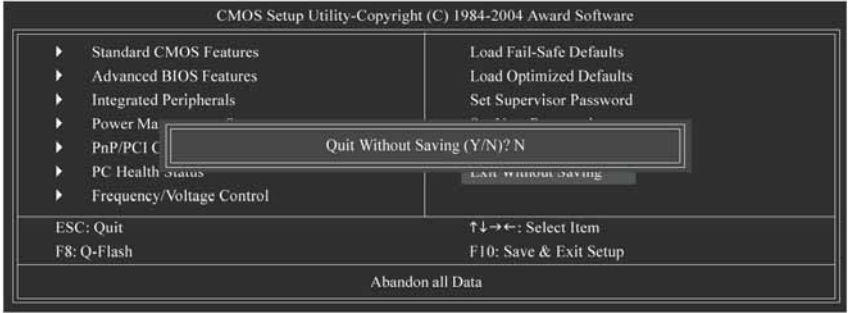
, BIOS

2-11 Save & Exit Setup

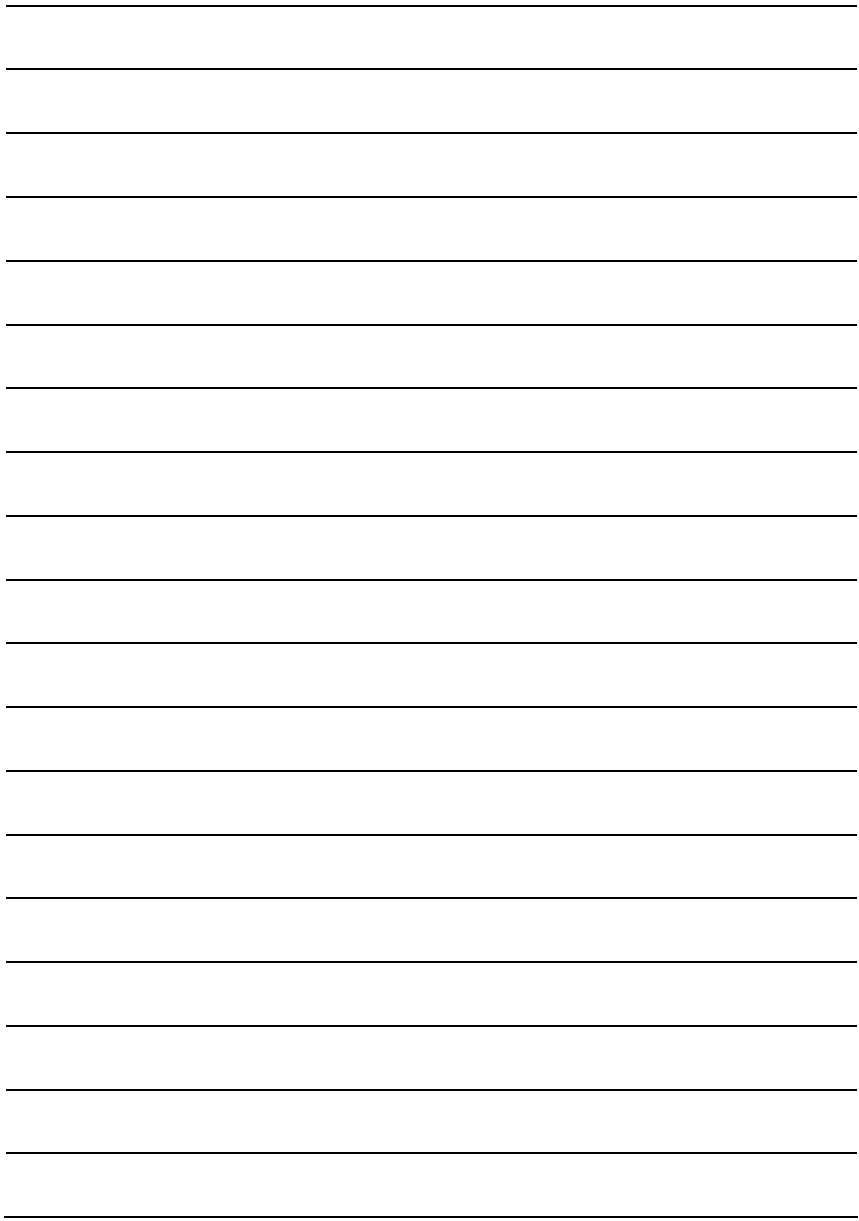


“Y” , 가 RTC CMOS
“N” ,

2-12 Exit Without Saving



“Y” 가 RTC CMOS
“N” ,





Windows XP
CD-ROM
가
가
CD-ROM
Setup.exe

3-1

(Install Chipset Drivers)

CD
"Xpress Install"
"Xpress Install" "Click and Go"
"GO"
"Xpress Install"



"Xpress Install"



Windows XP
USB 2.0
Windows
Windows
"?"가
USB 2.0
)

- ① GA-8IPE1000-G
- ② GA-8IPE1000-L

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

Gigabyte

66 7

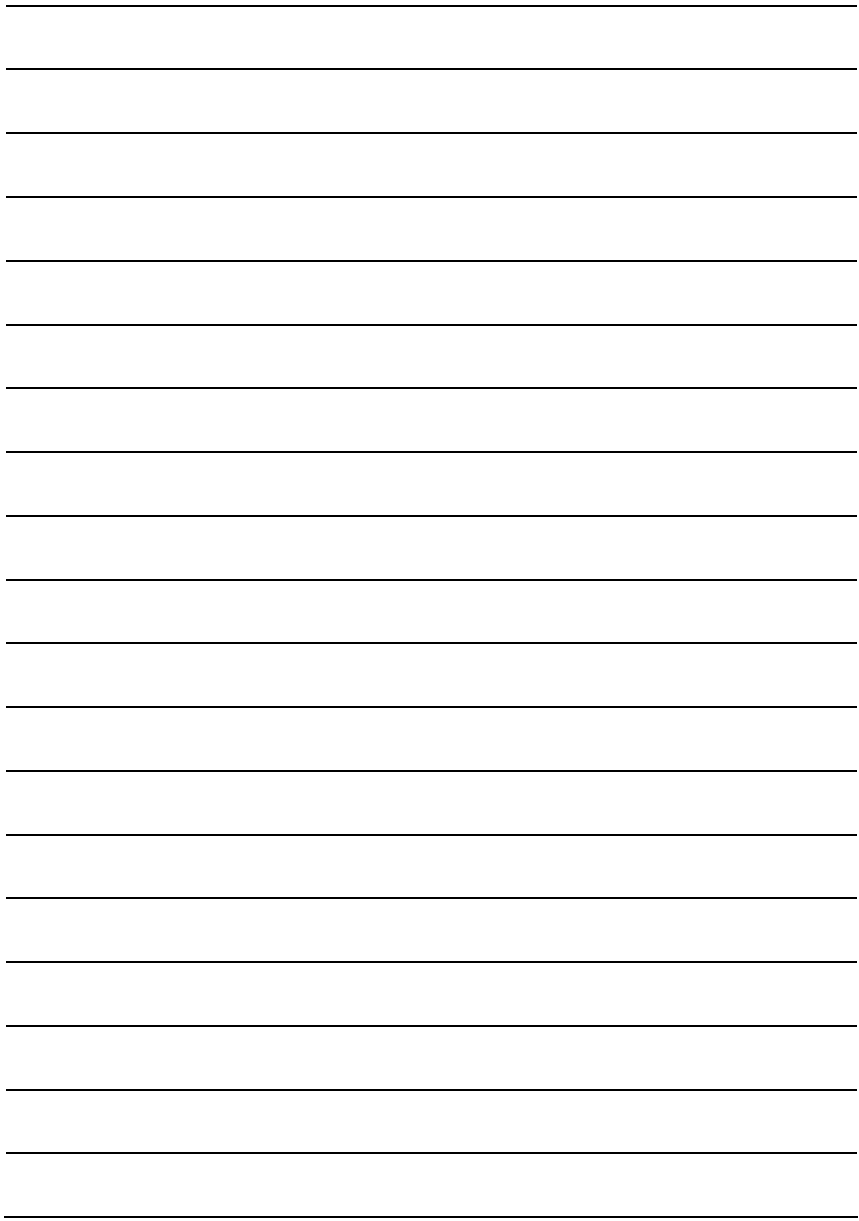
[illegible]

3-4 (Hardware Information)



3-5 (Contact Us)





4

4-1 가

4-1-1 Xpress Recovery



Xpress Recovery ?
Xpress Recovery OS

가



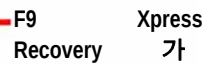
1. FAT16, FAT32, NTFS
2. IDE1 Master
3. 1 OS 가 가
4. HPA IDE 가
- 5.
6. Xpress Recovery NTFS

Xpress Recovery

1. CD-ROM (BMP)
BIOS 가 , "Advanced BIOS Feature" , CD-ROM
CD CD-ROM , BIOS
가 , "Boot from CD:" 가
"Boot from CD:"가 Xpress
Recovery 가
Xpress Recovery
F9



1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26



- 54 -

1. Execute Backup Utility:

 B

Esc



Xpress Recovery

가

F9

Xpress Recovery
CD-ROM

2. Execute Restore Utility:

 R

Esc

3. Remove Backup Image:



? (Y/N)

4. Set Password:

 4-16

(a-z

0-9)

Esc

Xpress Recovery

Xpress Recovery

가

가

, "Set

Password"

"Enter"

"New Password/Confirm Password"

가

5. Exit and Restart:

4-1-2 BIOS



1: Q-Flash™

Q-Flash™ Flash ROM BIOS
가 BIOS
BIOS Q-Flash™
DOS Windows
가 BIOS



BIOS
Gigabyte Technology Co., Ltd BIOS
BIOS

Q-Flash™ BIOS

1. Gigabyte BIOS
2. BIOS (.Fxx.)
8KNXP.U.Fba)
3. PC Del BIOS 가

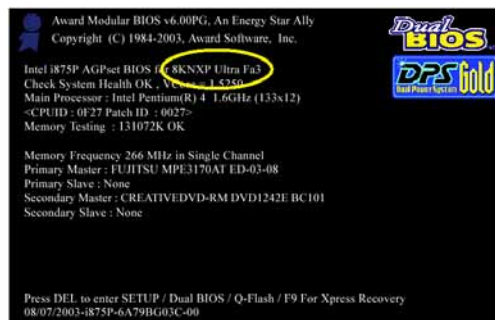
BIOS

BIOS 가 1
BIOS 가 2

1 :

BIOS Q-Flash™ BIOS
Gigabyte BIOS 가 Q-Flash BIOS
BIOS Q-Flash BIOS
Q-Flash
GA-8KNXP Ultra BIOS
Fa3 Fba

BIOS
Fa3



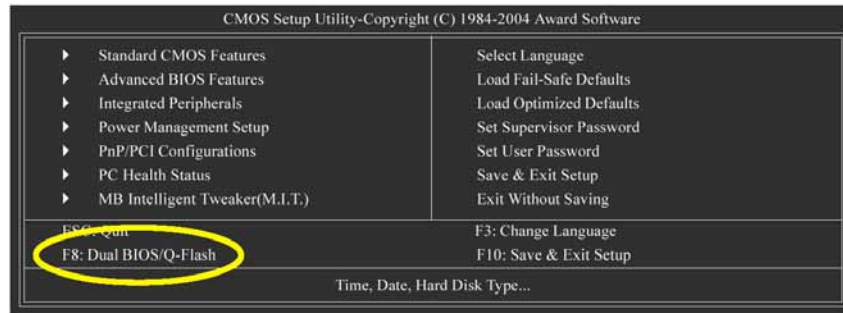
Q-Flash™

가 :

1 : Q-Flash
가

Del

BIOS



2 : F8
가

Y

BIOS/Q-Flash

Q-Flash™/ BIOS

BIOS

Q-Flash / BIOS



BIOS

8

2

BIOS ROM

Enter

Q-Flash

4

Enter

Q-Flash/

BIOS

4

1. Q-Flash “Load Main BIOS from Floppy”



BIOS



!!

3. BIOS
 BIOS 가 Y . BIOS



BIOS

4. BISO

Q-Flash

가

Dual BIOS Utility		
Boot From.....	Main Bios	
Main ROM Type/Size.....	SST 49LF004A	512K
Backup ROM Type/Size.....	SST 49LF004A	512K
Wide Range Protection Disable		
!! Copy BIOS completed - Pass !! Please press any key to continue		
Q-Flash Utility Load Main BIOS from Floppy Load Backup BIOS from Floppy Save Main BIOS to Floppy Save Backup BIOS to Floppy		
Enter : Run	↑↓:Move	ESC:Reset F10:Power Off



BIOS

1

4

5. Esc

Y

Q-Flash

. Q-Flash

Dual BIOS Utility		
Boot From.....	Main Bios	
Main ROM Type/Size.....	SST 49LF004A	512K
Backup ROM Type/Size.....	SST 49LF004A	512K
Wide Range Protection Disable		
Are you sure to RESET ? [Enter] to continue or [Esc] to abort...		
Q-Flash Utility Load Main BIOS from Floppy Load Backup BIOS from Floppy Save Main BIOS to Floppy Save Backup BIOS to Floppy		
Enter : Run	↑↓:Move	ESC:Reset F10:Power Off

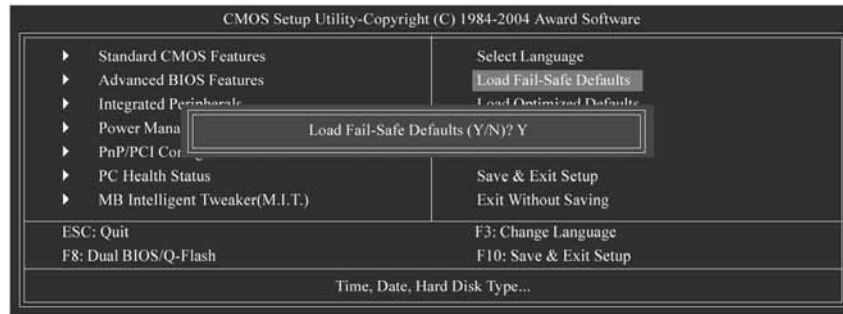
BIOS

BIOS

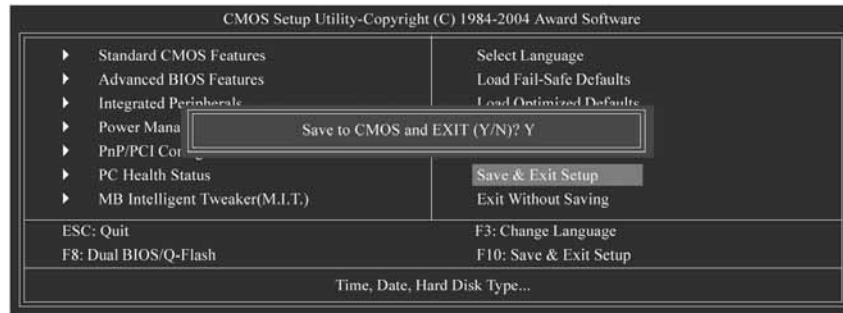
Fba 가

Award Modular BIOS v6.00PG, An Energy Star Ally		Dual BIOS DPS2
Copyright (C) 1984-2003, Award Software, Inc.		
Intel i875P AGPset BIOS (C) 8KNNP Ultra Fba		
Check System Health OK, VC 1.5350		
Main Processor : Intel Pentium(R) 4 1.6GHz (133x12)		
<CPUID : 0F27 Patch ID : 0027>		
Memory Testing : 131072K OK		
Memory Frequency 266 MHz in Single Channel		
Primary Master : FUJITSU MPE3170AT ED-03-08		
Primary Slave : None		
Secondary Master : CREATIVEDVD-RM DVD1242E BC101		
Secondary Slave : None		
Press DEL to enter SETUP / Dual BIOS / Q-Flash / F9 For Xpress Recovery		
09/23/2003-i875P-6A79BG03C-00		

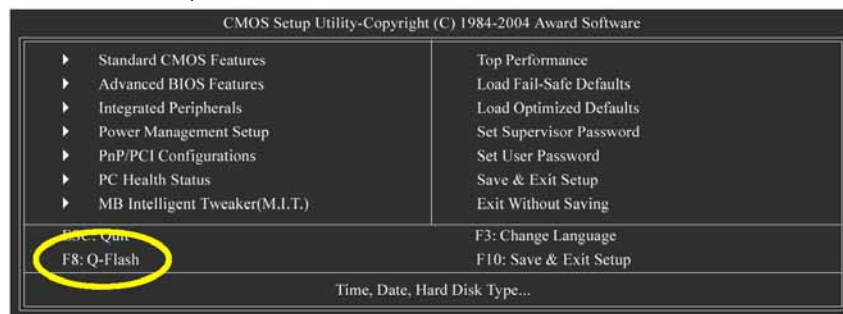
6. Load Fail-Safe Defaults, Del BIOS 가 BIOS
Enter BIOS 가 BIOS Fail-Safe Defaults
BIOS 가 BIOS



7. Save & Exit Setup CMOS BIOS
BIOS 가

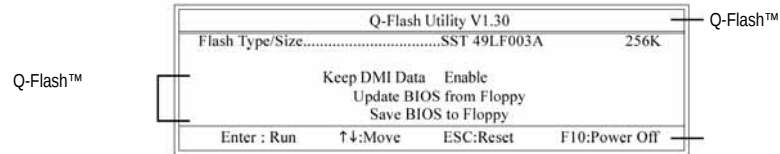


- 2 : BIOS Q-Flash™ BIOS
Q-Flash™ BIOS BIOS



Q-Flash™

Q-Flash BIOS



Q-Flash

3
Enter

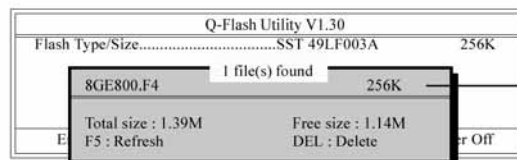
Q-Flash

Q-Flash™

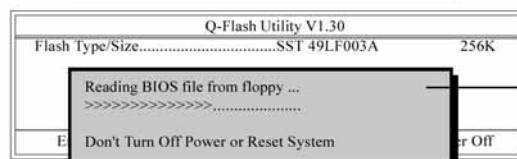
Q-Flash " " BIOS
BIOS
BIOS
Q-Flash 가
1. Enter Q-Flash "Update BIOS from Floppy"
가 BIOS
BIOS , "Save BIOS to Floppy" 1

2.

BIOS Enter
BIOS
BIOS 8GE800.F4 1
BIOS



BIOS



BIOS



BIOS

, "Are you sure to update BIOS (BIOS

)?"

BIOS



가



. Q-Flash



BIOS

, "BIOS Fail-Safe

BIOS Fail-Safe Defaults 가

7

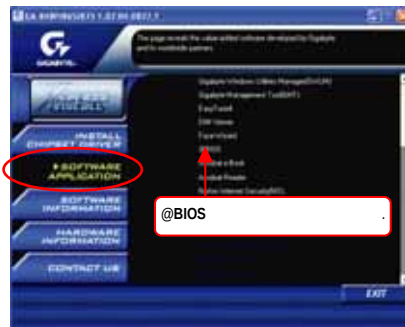
!!



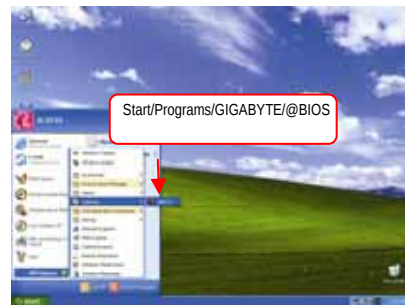
2: @BIOS™

DOS 가 , @BIOS
 . @BIOS
 BIOS
 @BIOS

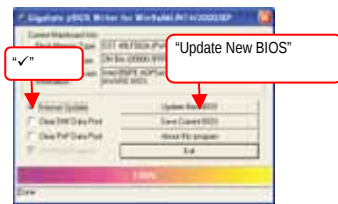
1. @BIOS



2. @BIOS



3. @BIOS

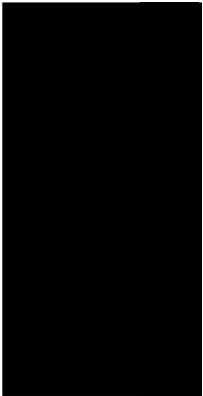


4. @BIOS



1.
 - I. BIOS
 - a. "Internet Update"
 - b. "Update New BIOS"
 - c. @BIOS™
 - d.
 - e. BIOS

- II. BIOS
 - a. "Internet Update"
 - b. "Update New BIOS"
 - c. " BIOS unzip (: 8IPEKG4.E8)
 - d.
 - e.



- III. BIOS :
"Save Current BIOS"
- BIOS
- IV. Flash ROM :
"About this program"
- Flash Rom

- 2. :
 - I. 1 ,
 - II. 2 , BIOS unzip
 - III. 1 , BIOS @BIOS™ , Gigabyte
가 2
 - IV.



4-1-3 2-/4-/6-/8-

Windows 98/2000/ME/XP

. (Windows XP)

:

가

1 :

Out”

“Line



2 :

Sound Effect



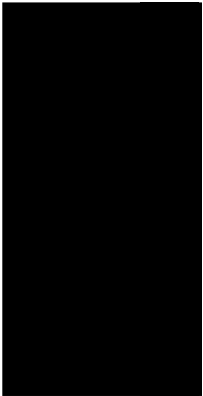
3 :

“Speaker Configuration”

“2CH Speaker”

2





4

1 :
"Line Out" ,
"Line In"



Line In ()
Line Out ()

2 :



3 :
"Speaker Cn
Function"



6

1 :

"Line Out" ,
"Line In" , /
"MIC In"



Line In ()
Line Out ()
Mic In (/)

2 :



Sound Effect



3 :

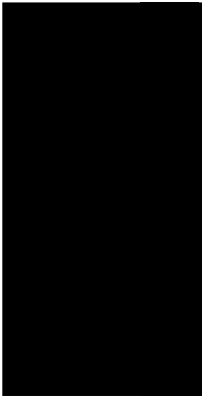
"Speaker Configuration"
Function"

"UAJ

"6CH Speaker"

6





8 (Audio Combo Kit ,):

Audio Combo Kit SPDIF -
R/L ,
/



1 :
Audio Combo Kit



2 :
SUR_CEN



3 :
8 가
1:

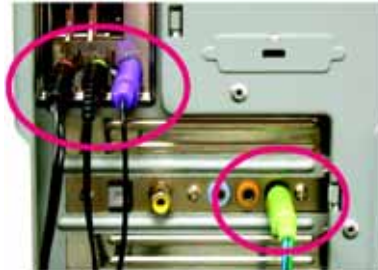
"REAR R/L"
/ "CENTER"
"SUR BACK" , R/L

"Line Out"
"SUB"



2:

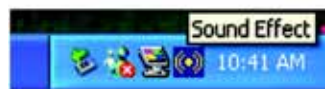
“Line Out”
“Line In”
“MIC In”
R/L
“SUR BACK”
UAJ



4 :



Sound Effect



5 :

“Speaker Configuration”
“Only Surround-Kit”

“UAJ Function”

“8CH Speaker”

8



sound effect



SPDIF ()
 “SPDIF ”
 “SPDIF ” 가
 Fiber



1.
 SPDIF PC



2.
 SPDIF



3.
 SPDIF SPDIF



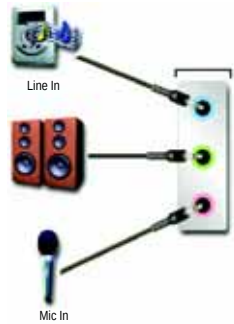
Jack-Sensing UAJ

Jack-Sensing

 Windows 98/98SE/2000/ME Jack-Sensing 가 Microsoft
DirectX 8.1

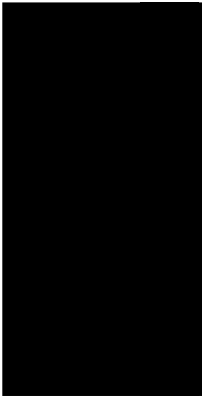
Jack-Sensing AUTO() MANUAL() . (Windows XP .):

CD-ROM,
Line In
Line Out
MIC In



3D 가 3D





가



:
"Manual Selection"



UAJ

UAJ (Universal Audio Jack)

가

: 가

, UAJ

Line-in

Line-out

UAJ

"UAJ Automatic"

가

UAJ



4-2

<http://tw.giga-byte.com/faq/faq.htm>

- 1: BIOS
? BIOS
: BIOS
Ctrl F1
- 2:
? /
: 가
- 3: EasyTune 4
: EasyTune 4 MB ? EasyTune 4
- 4: HDD IDE3 IDE4 RAID Win
2000 XP RAID ATA CD-ROM ?
: RAID
5: CMOS ?
: Clear CMOS 가 CMOS
CMOS 가
1.
2. MB
3. 10 ().
4. 1
5. MB
6. Del BIOS 가 Load Fail-Safe Defaults
7.
- 6: BIOS ?
: BIOS Load Fail-Safe Defaults (BIOS Defaults) CMOS
- 7:
: 가 가 ? / 가
- 8: VGA 가 VGA
: Gigabyte VGA 가

9: IDE 2 ?
:
USB USB Over Current

10:
:
가 ?

→ AMI BIOS Beep

*
1
* beep 8
1 beep
2 beeps
3 beeps 64K
4 beeps
5 beeps
6 beeps 8042 - gate A20
7 beeps
8 beeps /
9 beeps ROM checksum
10 beeps CMOS
/
11 beeps

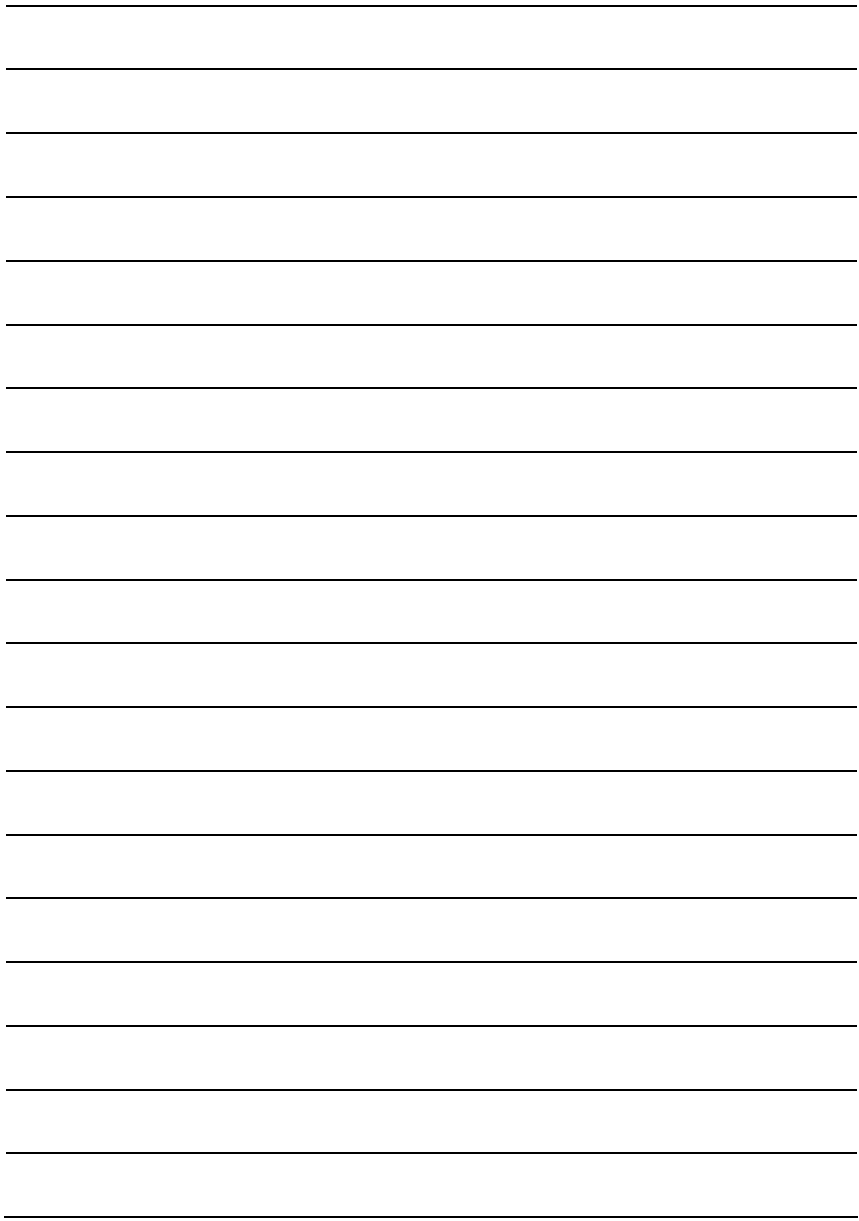
11: RAID 가 M/B RAID ATA IDE3, 4
BIOS ?

- : BIOS :
1. Advanced BIOS features --> (SATA)/RAID/SCSI boot order: "SATA"
 2. Advanced BIOS features --> First boot device: "SCSI"
 3. Integrated Peripherals --> Onboard H/W ATA/RAID: "enable"
RAID : RAID controller function RAID
"RAID" , ATA "ATA"

12: IDE/SCSI/RAID BIOS ?

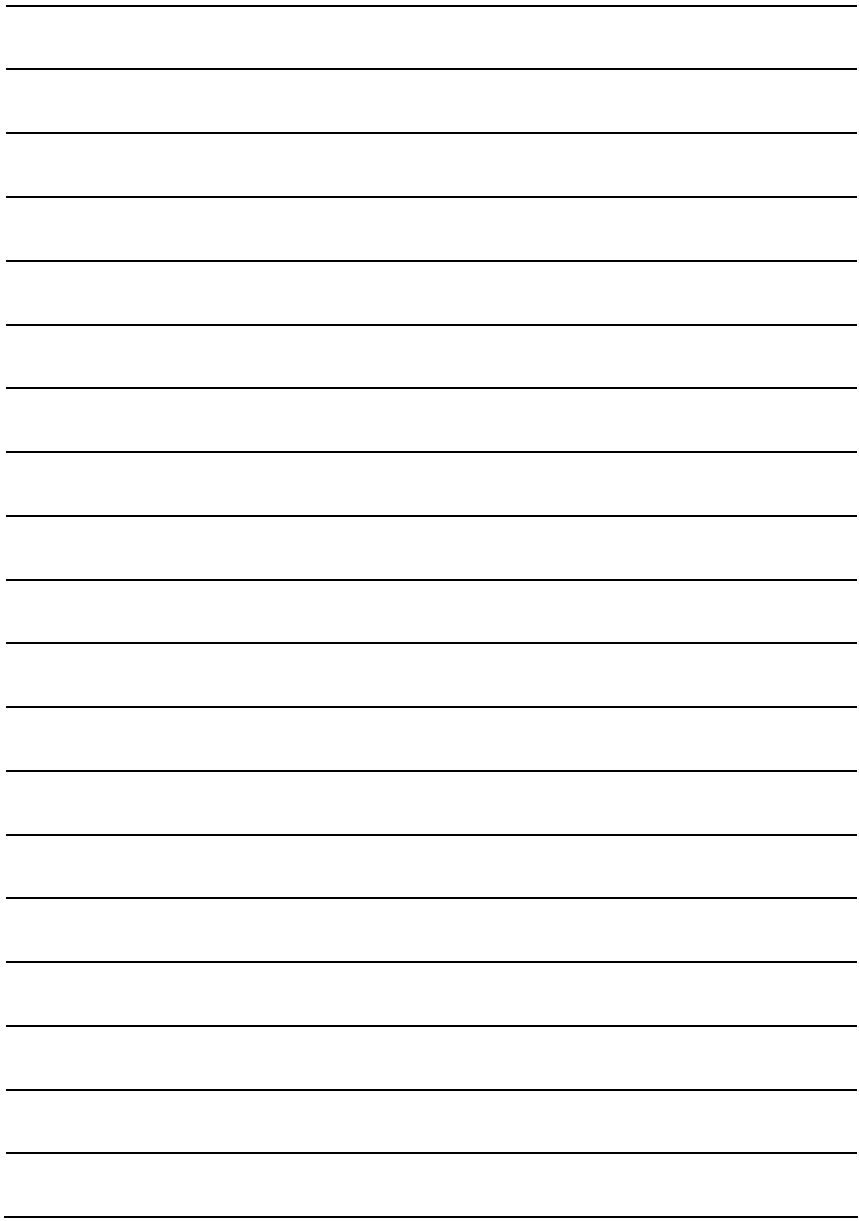
- : BIOS :
1. Advanced BIOS features --> (SATA)/RAID/SCSI boot order: "SCSI"
 2. Advanced BIOS features --> First boot device: "SCSI"
RAID/SCSI BIOS (RAID ATA)

[illegible]





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<http://ggts.gigabyte.com.tw/nontech.asp>
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<http://ggts.gigabyte.com.tw/nontech.asp>
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6-1

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<http://www.gigabyte.co.kr>

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Non-Tech. Support(Sales/Marketing) :
<http://ggts.gigabyte.com.tw/nontech.asp>
WEB address : <http://www.gigabyte.fr>

- **Russia**

Moscow Representative Office Of Giga-Byte Technology Co., Ltd.
Tech. Support :
<http://tw.giga-byte.com/TechSupport/ServiceCenter.htm>
Non-Tech. Support(Sales/Marketing) :
<http://ggts.gigabyte.com.tw/nontech.asp>
WEB address : <http://www.gigabyte.ru>

- **Poland**

Representative Office Of Giga-Byte Technology Co., Ltd.
POLAND
Tech. Support :
<http://tw.giga-byte.com/TechSupport/ServiceCenter.htm>
Non-Tech. Support(Sales/Marketing) :
<http://ggts.gigabyte.com.tw/nontech.asp>
WEB address : <http://www.gigabyte.pl>
