



# Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for GIGABYTE GA-7N400. You'll find the answers to all your questions on the GIGABYTE GA-7N400 in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

**User manual GIGABYTE GA-7N400**  
**User guide GIGABYTE GA-7N400**  
**Operating instructions GIGABYTE GA-7N400**  
**Instructions for use GIGABYTE GA-7N400**  
**Instruction manual GIGABYTE GA-7N400**



When you installing AGP card, please make sure the following notice is fully understood and practiced. If your AGP card has "AGP 4X/8X (1.5V) notch"(show below), please make sure your AGP card is AGP 4X/8X.



Caution: AGP 2X card is not supported by nVIDIA® nForce™ 2 Ultra 400. You might experience system unable to boot up normally. Please insert an AGP Pro 4X/8X card.



Example 1: Diamond Viper V770 golden finger is compatible with 2X/4X mode AGP slot. It can be switched between AGP 2X(3.3V) or 4X(1.5V) mode by adjusting the jumper. The factory default for this card is 2X(3.3V). The GA-7N400 Pro2 / GA-7N400 / GA-7N400-L (or any AGP 4X/8X only) motherboards might not function properly, if you install this card without switching the jumper to 4X(1.5V) mode in it.

Example 2: Some ATI Rage 128 Pro graphics cards made by "Power Color", the graphics card manufacturer & some SIS 305 cards, their golden finger is compatible with 2X(3.3V) / 4X(1.5V) mode AGP slot, but they support 2X(3.3V) only. The GA-7N400 Pro2 / GA-7N400 / GA-7N400-L (or any AGP 4X/8X only) motherboards might not function properly, if you install this card in it.

Note : Although Ggabyte's AG32S(G) graphics card is based on ATI Rage 128 Pro chip, the design of AG32S(G) is compliance with AGP 4X(1.5V) specification. Therefore, AG32S(G) will work fine with nVIDIA® nForce2 Ultra 400 based motherboards.



Before you install PCI cards, please remove the Dual BIOS label from PCI slots if there is one.

GA-7N400-1.012.0-065

1

2003/14-04E-00-01



**[You're reading an excerpt. Click here to read official GIGABYTE GA-7N400 user guide](http://yourpdfguides.com/dref/4129571)**  
**<http://yourpdfguides.com/dref/4129571>**







.....  
.....  
.....  
.....

..... 23 Chapter 3 BIOS Setup ..

.....  
.....  
.....  
.....  
.....  
.....

. 39 The Main Menu (For example: BIOS Ver. : E2) .....

.....  
.....  
.....  
.....

.. 40 Standard CMOS Features .....

.....  
.....  
.....  
.....  
.....  
.....

42 N400 Pro2 / N400 Series Motherboard -2- 7n400pro2\_1002\_q.p65 2 2003/7/4, 03:27 English Advanced BIOS Features ....

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

44 Advanced Chipset Features .....

.....  
.....  
.....  
.....  
.....  
.....

47 Integrated Peripherals .....

.....  
.....  
.....

.....  
.....  
.....

..... 49 Power Management Setup ..

.....  
.....  
.....  
.....  
.....  
.....  
.....

..... 54 PnP/PCI Configurations .

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

..... 57 PC Health Status ....

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

.... 58 Frequency/Voltage Control .....

.....  
.....  
.....  
.....  
.....  
.....  
.....

..... 60 Load Fail-Safe Defaults ....

.....  
.....  
.....  
.....  
.....



... 67 @BIOS™ Introduction .....

.....  
.....  
.....

.....  
.....  
.....  
.....

.....  
.....  
.....

.... 67 Flash BIOS Method Introduction .....

.....  
.....  
.....  
.....

.....  
.....  
.....

..... 68 2- / 4- / 6-Channel Audio Function Introduction ...

.....  
.....  
.....  
.....

..... 78 Xpress Recovery Introduction .

.....  
.....  
.....

.....  
.....  
.....  
.....

.....  
.....  
.....

. 84 Chapter 5 Appendix ....

.....  
.....  
.....

.....  
.....  
.....

.....  
.....  
.....

.....  
.....  
.....

... 89 -3- Table of Content 7n400pro2\_1002\_q.p65 3 2003/7/4, ¼U¼È 03:27 English Item Checklist The N400 Pro2 / N400 Series motherboard CD for motherboard driver & utility The N400 Pro2 / N400 Series user's manual Quick PC Installation Guide GigaRAID manual (j) SATA RAID manual (j) GC-SATA Card (optional) (Manual; SATA cable x 1; Power cable x 1) IDE cable x 1 / Floppy cable x 1(kl) Serial ATA cable x 2 (j) IEEE1394 cable x 1 (j) 2 Port USB Cable x 1 Audio Combo Kit x 1 (j) (SURROUND-Kit + SPDIF Out Kit) I/O Shield Motherboard Settings Label ATX 12V Cable (\*) IDE cable x 3 / Floppy cable x 1 (j) 1.



[You're reading an excerpt. Click here to read official GIGABYTE GA-7N400 user guide](http://yourpdfguides.com/dref/4129571)  
<http://yourpdfguides.com/dref/4129571>





With peak bandwidth of 2.664GB per second, DDR memory enables system OEMs to build high performance and low latency DRAM subsystems that are suitable for servers, workstations, high-end PC's and value desktop SMA systems. N400 Pro2 / N400 Series Motherboard - 18 - 7n400pro2\_1002\_q.p65 18 2003/7/4, 03:27 Dual Channel DDR: GA-7N400 Pro2 / GA-7N400 / GA-7N400-L support Dual Channel Technology. When Dual Channel Technology is activated, the bandwidth of memory bus will be double the original one, with the fastest speed at 6.4GB/s(DDR400) . GA-7N400 Pro2 / GA-7N400 / GA-7N400-L include 4 DIMM slots, and each Channel has 2 DIMMs as following: Channel A : DIMM 1, 2 Channel B : DIMM 3, 4 Below are the explanations: If you want to operate the Dual Channel Technology, please note the following explanations due to the limitation of Intel chipset specifications.

1. Only one DDR memory module is installed: The Dual Channel Technology can't operate when only one DDR memory module is installed. 2. Two DDR memory modules are installed: The Dual Channel Technology will operate when two memory modules are inserted individually into Channel A and B. If you install two memory modules in the same channel, the Dual Channel Technology will not operate.

3. Three or Four DDR memory modules are installed: Please follow figure 1 to achieve the Dual Technology. The following tables include all memory-installed combination types: (Please note that those types not in the tables will not boot up.) l Figure 1: Dual Channel Technology (DS: Double Side, SS: Single Side) DIMM 1 2 memory modules DS/SS X DS/SS X 3 memory modules DS/SS DS/SS X DS/SS 4 memory modules DS/SS DIMM 2 X DS/SS X DS/SS DS/SS DS/SS DS/SS X DS/SS DIMM 3 DS/SS DS/SS X X DS/SS X SS SS SS DIMM 4 X X DS DS X DS SS SS SS English l Figure 2: Non Dual Channel Technology (DS: Double Side, SS: Single Side) DIMM 1 1 memory module DS/SS X X X 2 memory modules DS/SS X DIMM 2 X DS/SS X X DS/SS X DIMM 3 X X DS/SS X X SS DIMM 4 X X X DS X SS If memories are inserted on dimm3 and dimm4 at the same time, please note that the memories must be exactly identical in device, type, size and single side. This is essential to let system boot up correctly - 19 Hardware Installation Process 7n400pro2\_1002\_q.p65 19 2003/7/4, 03:27 English Step 4: Install expansion cards 1. Read the related expansion card's instruction document before install the expansion card into the computer. 2. Remove your computer's chassis cover, screws and slot bracket from the computer. 3. Press the expansion card firmly into expansion slot in motherboard. 4. Be sure the metal contacts on the card are indeed seated in the slot. 5. Replace the screw to secure the slot bracket of the expansion card.

6. Replace your computer's chassis cover. 7. Power on the computer, if necessary, setup BIOS utility of expansion card from BIOS. 8. Install related driver from the operating system. Please carefully pull out the small white-drawable bar at the end of the AGP slot when you try to install / uninstall the AGP card. Please align the AGP card to the onboard AGP slot and press firmly down on the slot. Make sure your AGP card is locked by the small whitedrawable bar.

When an AGP 2X (3.

3V) card is installed the 2X\_DET will light up, indicating a non-supported graphics card is inserted. Informing users that system might not boot up normally due to AGP 2X (3.3V) is not supported by the chipset. N400 Pro2 / N400 Series Motherboard - 20 - 7n400pro2\_1002\_q.p65 20 2003/7/4, 03:27 Step 5:

Connect ribbon cables, cabinet wires and power supply Step 5-1: I/O Back Panel Introduction u v w x y English GA-7N400 Pro2 / GA-7N400-L u v w x y GA-7N400 u PS/2 Keyboard and PS/2 Mouse Connector PS/2 Mouse Connector (6 pin Female) PS/2 Keyboard Connector (6 pin Female) This connector supports standard PS/2 keyboard and PS/2 mouse.

v/x USB/LAN Connector Before you connect your device(s) into USB connector(s), please make sure your device(s) such as USB keyboard, mouse, scanner, zip, speaker...etc. Have a standard USB interface.

Also make sure your OS supports USB 2 USB 3 controller. If your OS does not support USB controller, please contact OS vendor for possible patch or driver upgrade. For more information please contact your OS or device (s) vendors. LAN (j1 ) USB 0 USB 1 j For GA-7N400 Pro2 only. l For GA-7N400-L only. - 21 Hardware Installation Process 7n400pro2\_1002\_q.p65 21 2003/7/4, 03:27 English w Parallel Port, Serial Ports COM1 / COM2 According to your motherboard, please see the following descriptions for the devices. Device like printer can be connected to Parallel port; mouse and modem etc. can be connected to Serial ports. COM1 COM2 Serial Port (9 pin Male) y Audio Connectors Line In (Rear Speaker) Line Out (Front Speaker) MIC In (Center and Subwoofer) After install onboard audio driver, you may connect speaker to Line Out jack, microphone to MIC In jack.

Device like CD-ROM, walkman etc. can be connected to Line-In jack. Please note: You are able to use 2-/4-/6-channel audio feature by S/W selection. If you want to enable 6-channel function, you have 2 choose for hardware connection. Method1: Connect "Front Speaker" to "Line Out" Connect "Rear Speaker" to "Line In" Connect "Center and Subwoofer" to "MIC Out ". Method2: You can refer to page 32, and contact your nearest dealer for optional SUR\_CEN cable.

If you want the detail information for 2-/4-/6-channel audio setup installation, please refer to page 79. N400 Pro2 / N400 Series Motherboard - 22 - 7n400pro2\_1002\_q.p65 22 2003/7/4, 03:27 Step 5-2: Connectors Introduction 1 3 14 5(j ) English 7 2 8 15 16 17 19 20 18 26 24 23 25 22(j ) 13 11 6(j ) 4 28 10 (j ) 12 9 (j ) 21 1) ATX\_12V 2) ATX 3) 4) 5) 6) 7) 8) 9) 10) CPU\_FAN SYS\_FAN PWR\_FAN(j ) NB\_FAN(j ) FDD IDE1 / IDE2 IDE3 (j ) / IDE4 (j ) SATA0 (j) / SATA1 (j ) 14) RAM\_LED 15) 2X\_DET 16) 17) 18) 19) 20) 21) 22) 23) F\_AUDIO SUR\_CEN SPDIF\_IO CD\_IN AUX\_IN F\_USB F1\_1394 (j) / F2\_1394 (j) IR 11) F\_PANEL 12) BAT 13) PWR\_LED 24) GAME 25) INFO\_LINK 26) CI j For GA-7N400 Pro2 only. k For GA-7N400 only.

l For GA-7N400-L only. - 23 Hardware Installation Process 7n400pro2\_1002\_q.p65 23 2003/7/4, 03:27 English 1) ATX\_12V (+12V Power Connector) This connector (ATX\_12V) supplies the CPU operation voltage (Vcore). If this "ATX\_12V connector" is not connected, system cannot boot. 13 Pin No.

l 2 3 Definition GND GND +12V +12V 2 4 4 2) ATX (ATX Power) AC power cord should only be connected to your power supply unit after ATX power cable and other related devices are firmly connected to the mainboard. Pin No. 1 2 3 Definition 3.3V 3.3V GND VCC GND VCC GND Power Good 5V SB (stand by +5V) 11 1 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 +12V 3.



[You're reading an excerpt. Click here to read official GIGABYTE](http://yourpdfguides.com/dref/4129571)

[GA-7N400 user guide](http://yourpdfguides.com/dref/4129571)

<http://yourpdfguides.com/dref/4129571>

3V -12V GND PS\_ON(soft on/off) GND GND GND -5V VCC VCC 20 10 N400 Pro2 / N400 Series Motherboard - 24 - 7n400pro2\_1002\_q.p65 24 2003/7/4, 03:27 3) CPU\_FAN (CPU Fan Connector) Please note, a proper installation of the CPU cooler is essential to prevent the CPU from running under abnormal condition or damaged by overheating. The CPU fan connector supports Max. current up to 600 mA. English Pin No. Definition GND +12V Sense 1 1 2 3 4) SYS\_FAN (System Fan Connector) This connector allows you to link with the cooling fan on the system case to lower the system temperature. Pin No. 1 2 Definition GND +12V Sense 1 3 - 25 - Hardware Installation Process 7n400pro2\_1002\_q.p65 25 2003/7/4, 03:27 English 5) PWR\_FAN (Power Fan Connector)(j ) This connector allows you to link with the cooling fan on the system case to lower the system temperature. Pin No.

Definition GND +12V Sense 1 1 2 3 6) NB\_FAN (Chip Fan Connector)(j ) If you installed wrong direction, the chip fan will not work. Sometimes will damage the chip fan. (Usually black cable is GND) 1 Pin No. 1 2 Definition VCC GND j For GA-7N400 Pro2 only. k For GA-7N400 only. l For GA-7N400-L only. N400 Pro2 / N400 Series Motherboard - 26 - 7n400pro2\_1002\_q.p65 26 2003/7/4, 03:27 7) FDD (Floppy Connector) Please connect the floppy drive ribbon cables to FDD. It supports 360K, 1.2M, 720K, 1.

44M and 2.88M bytes floppy disk types. The red stripe of the ribbon cable must be the same side with the Pin1. English 34 33 2 1 8) IDE1 / IDE2 (IDE1 / IDE2 Connector) Important Notice: Please connect first hard disk to IDE1 and connect CD-ROM to IDE2. The red stripe of the ribbon cable must be the same side with the Pin1.

40 39 2 IDE2 - 27 - 1 IDE1 Hardware Installation Process 7n400pro2\_1002\_q.p65 27 2003/7/4, 03:27 English 9) IDE3 / IDE4 (RAID/ATA133, Green Connector)(j) Important Notice: The red stripe of the ribbon cable must be the same side with the Pin1. If you wish to use IDE3 and IDE4, please use it in unity with BIOS (either RAID or ATA133). Then, install the correct driver to have proper operation. For details, please refer to the GigaRAID manual.

39 1 IDE4 IDE3 40 2 10) SATA0 / SATA1 (Serial ATA Connector)(j) You can connect the Serial ATA device to this connector, it provides you high speed transfer rates (150MB/sec). If you wish to use RAID function, please use it in unity with BIOS and install the correct driver to have proper operation. For details, please refer to the SATA RAID manual. Pin No. 1 Definition GND TXP TXN GND RXN RXP GND 1 7 1 7 2 3 4 5 6 7 SATA0 SATA1 Silicon Image Si13112 chip supports Serial ATA connectors hot plug function. j For GA-7N400 Pro2 only. k For GA-7N400 only. l For GA-7N400-L only. N400 Pro2 / N400 Series Motherboard - 28 - 7n400pro2\_1002\_q.p65 28 2003/7/4, 03:27 11) F\_PANEL (2 x 10 pins Connector) Please connect the power LED, PC speaker, reset switch and power switch etc.

of your chassis front panel to the F\_PANEL connector according to the pin assignment above. English Message LED/ Power/ Sleep LED Speaker Connector Soft Power Connector MSG+ MSGPW+ PW- SPEAK+ 2 1 1 1 1 1 HD+ IDE Hard Disk Active LED HD (IDE Hard Disk Active LED) (Blue) SPK (Speaker Connector) (Amber) RES (Reset Switch) (Green) PW (Soft Power Connector) (Red) MSG(Message LED/ Power/ Sleep LED) (Yellow) NC (Purple) Pin 1: LED anode(+) Pin 2: LED cathode(-) Pin 1: VCC(+) Pin 2- Pin 3: NC Pin 4: Data(-) Open: Normal Operation Close: Reset Hardware System Open: Normal Operation Close: Power On/Off Pin 1: LED anode(+) Pin 2: LED cathode(-) NC - 29 - RES- Reset Switch RES+ NC HD- SPEAK- 20 19 Introduction 7n400pro2\_1002\_q.p65 29 2003/7/4, 03:27 English 12) BATTERY + CAUTION Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. If you want to erase CMOS... 1. Turn OFF the computer and unplug the power cord.

2. Remove the battery, wait for 30 second. 3. Re-install the battery. 4.

Plug the power cord and turn ON the computer. 13) PWR\_LED PWR\_LED is connect with the system power indicator to indicate whether the system is on/off. It will blink when the system enters suspend mode. If you use dual color LED, power LED will turn to another color. 1 Pin No.

1 2 3 Definition MPD+ MPDMPD- N400 Pro2 / N400 Series Motherboard - 30 - 7n400pro2\_1002\_q.p65 30 2003/7/4, 03:27 14) RAM\_LED Do not remove memory modules while RAM\_LED is on. It might cause short or other unexpected damages due to the stand by voltage. Remove memory modules only when AC power cord is disconnected. English 15) 2X\_DET When an AGP 2X (3.3V) card is installed the 4X\_AGP will light up, indicating a non-supported graphics card is inserted. Informing users that system might not boot up normally due to AGP 2X (3.3V) is not supported by the chipset. - 31 - 7n400pro2\_1002\_q.p65 31 + + \_ Hardware Installation Process 2003/7/4, 03:27 \_ English 16) F\_AUDIO (Front Audio Connector) If you want to use Front Audio connector, you must remove 5-6, 9-10 Jumper.

In order to utilize the front audio header, your chassis must have front audio connector. Also please make sure the pin assignment on the cable is the same as the pin assignment on the MB header. To find out if the chassis you are buying support front audio connector, please contact your dealer. Please note, you can have the alternative of using front audio connector or of using rear audio connector to play sound. Pin No. 1 2 3 Definition MIC GND REF Power Front Audio (R) Rear Audio (R) Reserved No Pin Front Audio (L) Rear Audio (L) 10 2 9 1 4 5 6 7 8 9 10 17) SUR\_CEN (Surround Center Connector) Please contact your nearest dealer for optional SUR\_CEN cable. 26 15 Pin No. 1 2 3 4 5 6 Definition SUR OUTL SUR OUTR GND No Pin CENTER\_OUT BASS\_OUT N400 Pro2 / N400 Series Motherboard - 32 - 7n400pro2\_1002\_q.p65 32 2003/7/4, 03:28 18) SPDIF\_IO (SPDIF In / Out Connector) The SPDIF output is capable of providing digital audio to external speakers or compressed AC3 data to an external Dolby Digital Decoder. Use this feature only when your stereo system has digital input function.

Be careful with the polarity of the SPDIF\_IO connector. Check the pin assignment carefully while you connect the SPDIF\_IO cable, incorrect connection between the cable and connector will make the device unable to work or even damage it. For optional SPDIF\_IO cable, please contact your local dealer.



[You're reading an excerpt. Click here to read official GIGABYTE GA-7N400 user guide](http://yourpdfguides.com/dref/4129571)  
<http://yourpdfguides.com/dref/4129571>



English Integrated Peripherals This setup page includes all onboard peripherals. Power Management Setup This setup page includes all the items of Green function features. PnP/PCI Configurations This setup page includes all the configurations of PCI & PnP ISA resources. PC Health Status This setup page is the System auto detect Temperature, voltage, fan, speed.

Frequency/Voltage Control This setup page is control CPU's clock and frequency ratio. Load Fail-Safe Defaults Fail-Safe Defaults indicates the value of the system parameters which the system would be in safe configuration. Load Optimized Defaults Optimized Defaults indicates the value of the system parameters which the system would be in best performance configuration. Load Supervisor password Change, set, or disable password. It allows you to limit access to the system and Setup, or just to Setup.

Load User password Change, set, or disable password. It allows you to limit access to the system. Save & Exit Setup Save CMOS value settings to CMOS and exit setup. Exit Without Saving Abandon all CMOS value changes and exit setup. - 41 - BIOS Setup 7n400pro2\_1001\_b.p65 41 2003/7/4, 03:29

English Standard CMOS Features CMOS Setup Utility-Copyright (C) 1984-2003 Award Software Standard CMOS Features Date (mm:dd:yy) Time (hh:mm:ss) IDE Primary Master IDE Primary Slave IDE Secondary Master IDE Secondary Slave Drive A Drive B Floppy 3 Mode Support Halt On Base Memory Extended Memory Total Memory Tue, May 20 2003 22:31:24 Item Help Menu Level u Change the day, month, [None] [None] [None] [None] [1.44M, 3.5"] [None] [Disabled] <Day> [All, But Keyboard] 640K 95M 96M <Year> 1999 to 2098 F1: General Help 1 to 31 (or maximum allowed in the month) <Week> Sun. to Sat. <Month> Jan.

to Dec. year h i g f: Move Enter:Select +/-/PU/PD: Value F10: Save ESC:Exit F5: Previous Values F6: Fail-Safe Defaults Figure 2: Standard CMOS Features F7: Optimized Defaults Date The date format is <week>, <month>, <day>, <year>. Week Month Day Year The week, from Sun to Sat, determined by the BIOS and is display only The month, Jan. Through Dec. The day, from 1 to 31 (or the maximum allowed in the month) The year, from 1999 through 2098 N400 Pro2 / N400 Series Motherboard - 42 - 7n400pro2\_1001\_b.p65 42 2003/7/4, 03:29 Time The times format in <hour> <minute> <second>. The time is calculated base on the 24-hour military-time clock. For example, 1 p.m. is 13:00:00.

English IDE Primary Master, Slave / IDE Secondary Master, Slave The category identifies the types of hard disk from drive C to F that has been installed in the computer. There are two types: auto type, and manual type. Manual type is user-definable; Auto type which will automatically detect HDD type. Note that the specifications of your drive must match with the drive table. The hard disk will not work properly if you enter improper information for this category. If you select User Type, related information will be asked to enter to the following items. Enter the information directly from the keyboard and press <Enter>. Such information should be provided in the documentation from your hard disk vendor or the system manufacturer. CYLS. HEADS PRECOMP LANDZONE SECTORS Number of cylinders Number of heads Write precomp Landing zone Number of sectors If a hard disk has not been installed select NONE and press <Enter>.

Drive A / Drive B The category identifies the types of floppy disk drive A or drive B that has been installed in the computer. None 360K, 5.25" 1.2M, 5.25" No floppy drive installed 5.25 inch PC-type standard drive; 360K byte capacity. 5.25 inch AT-type high-density drive; 1.2M byte capacity (3.5 inch when 3 Mode is Enabled).

720K, 3.5" 1.44M, 3.5" 2.88M, 3.5" 3.5 inch double-sided drive; 720K byte capacity 3.5 inch double-sided drive; 1.44M byte capacity. 3.5 inch double-sided drive; 2.88M byte capacity. - 43 - BIOS Setup 7n400pro2\_1001\_b.p65 43 2003/7/4, 03:29 English Floppy 3 Mode Support (for Japan Area) Disabled Drive A Drive B Both Normal Floppy Drive. (Default value) Drive A is 3 mode Floppy Drive.

Drive B is 3 mode Floppy Drive. Drive A & B are 3 mode Floppy Drives. Halt on The category determines whether the computer will stop if an error is detected during power up. NO Errors All Errors The system boot will not stop for any error that may be detected and you will be prompted. Whenever the BIOS detects a non-fatal error the system boot will be stopped.

All, But Keyboard The system boot will not stop for all errors except a keyboard error. (Default value) All, But Diskette All, But Disk/Key The system boot will not stop for all errors except a disk error. The system boot will not stop for all errors except keyboard and disk errors. Memory The category is display-only which is determined by POST (Power On Self Test) of the BIOS. Base Memory The POST of the BIOS will determine the amount of base (or conventional) memory installed in the system. The value of the base memory is typically 512 K for systems with 512K memory installed on the motherboard, or 640 K for systems with 640 K or more memory installed on the motherboard. ExtendedMemory The BIOS determines how much extended memory is present during the POST. This is the amount of memory located above 1MB in the CPU's memory address map. N400 Pro2 / N400 Series Motherboard - 44 - 7n400pro2\_1001\_b.p65 44 2003/7/4, 03:29 Advanced BIOS Features CMOS Setup Utility-Copyright (C) 1984-2003 Award Software Advanced BIOS Features First Boot Device Second Boot Device Third Boot Device x SATA/RAID/SCSI Boot Order Boot Up Floppy Seek Flexible AGP 8X Init Display First [Floppy] [HDD-0] [CDROM] SCSI [Disabled] [Auto] [PCI] Item Help Menu Level u Select onboard RAID or PCI SCSI boot rom order English h i g f: Move Enter:Select +/-/PU/PD: Value F10: Save ESC:Exit F5: Previous Values F6: Fail-Safe Defaults Figure 3: Advanced BIOS Features F1: General Help F7: Optimized Defaults First / Second / Third Boot Device Floppy LS120 HDD 0~3 SCSI CDROM ZIP USB-FDD USB-ZIP USB-CDROM USB-HDD LAN Disabled Select your boot device priority by Floppy.

Select your boot device priority by LS120. Select your boot device priority by Hard Disk 0~3. Select your boot device priority by SCSI. Select your boot device priority by CDROM. Select your boot device priority by ZIP. Select your boot device priority by USB-FDD. Select your boot device priority by USB-ZIP.

Select your boot device priority by USB-CDROM. Select your boot device priority by USB-HDD. Select your boot device priority by LAN.

Select your boot device priority by Disabled. - 45 - BIOS Setup 7n400pro2\_1001\_b.p65 45 2003/7/4, 03:29 English SATA/RAID/SCSI Boot Order This function will available when Boot up device set at "SCSI".



[You're reading an excerpt. Click here to read official GIGABYTE](#)

[GA-7N400 user guide](#)

<http://yourpdfguides.com/dref/4129571>

This feature allows you to select the boot order Serial ATA, RAID or SCSI device. SCSI RAID SATA Select your boot device priority by PCI SCSI. Select your boot device priority by RAID. Select your boot device priority by Serial ATA. Boot Up Floppy Seek During POST, BIOS will determine the floppy disk drive installed is 40 or 80 tracks. 360K type is 40 tracks 720K, 1.2M and 1.

44M are all 80 tracks. Enabled BIOS searches for floppy disk drive to determine it is 40 or 80 tracks. Note that BIOS can not tell from 720K, 1.2M or 1.44M drive type as they are all 80tracks. BIOS will not search for the type of floppy disk drive by track number. Note that there will not be any warning message if the drive installed is 360K. (Default value) Disabled Flexible AGP 8X Auto 4X Automatically set AGP transfer rate according to AGP compatibility and stability. (Default value) Set AGP transfer rate to 4X mode no matter what the AGP transfer rate the card is. Init Display First This feature allows you to select the first initiation of the monitor display from which card when you install an AGP card and a PCI VGA card on board.

PCI AGP Set initial display first to PCI slot. (Default value) Set initial display first to AGP. N400 Pro2 / N400 Series Motherboard - 46 - 7n400pro2\_1001\_b.p65 46 2003/7/4, 03:29 Advanced Chipset Features CMOS Setup Utility-Copyright (C) 1984-2003 Award Software Advanced Chipset Features System Performance FSB Frequency Memory Frequency Resulting Frequency AGP Frequency [Normal] [133MHz] By SPD 266MHz [Normal] [Normal] - Use the most stable settings. Item Help Menu Level u English [Turbo] -Use over colocked settings for higher performance but with higher risk of instability. h i g f : Move Enter:Select +/-/PU/PD: Value F10: Save ESC:Exit F5: Previous Values F6: Fail-Safe Defaults F1: General Help F7: Optimized Defaults Figure 4: Advanced Chipset Features System Performance Normal Turbo Manual Set system at the most stable settings. (Default Value) Use over colocked settings for higher performance but with higher risk of instability. Allows full customization of performance options. Incorrect using it may cause your system to fail. For power End-User use only! FSB Frequency 100 MHz; 133 MHz; 166 MHz; 200 MHz Set FSB frequency at 100MHz. Set FSB frequency at 133MHz. (Default Value) Set FSB frequency at 166MHz. Set FSB frequency at 200MHz. - 47 - BIOS Setup 7n400pro2\_1001\_b.p65 47 2003/7/4, 03:29 English Memory Frequency By SPD 50%~200% Auto Set memory frequency by SPD. (Default Value) Set the memory frequency manually. Set the best memory frequency for system. Incorrect using it may cause your system to fail. For power End-User use only! Resulting Frequency The value depends on FSB/Memory Frequency. AGP Frequency Normal Set the best AGP frequency for system. (Default Value) 50MHz ~ 100MHz Set the AGP frequency manually. Incorrect using it may cause your system broken. For power End-User use only! N400 Pro2 / N400 Series Motherboard - 48 - 7n400pro2\_1001\_b.p65 48 2003/7/4, 03:29 Integrated Peripherals CMOS Setup Utility-Copyright (C) 1984-2003 Award Software Integrated Peripherals On-Chip Primary PCI IDE On-Chip Secondary PCI IDE USB Host Controller USB Keyboard Support USB Mouse Support AC97 Audio Onboard LAN Chip(jl ) Onboard 1394 j ( ) English [Enabled] [Enabled] [V1.1+V2.0] [Disabled] [Disabled] [Auto] [Enabled] [Enabled] [Enabled] [RAID] [Enabled] [Disabled] [3F8/IRQ4] [2F8/IRQ3] [Normal] Half [378/IRQ7] [ECP] [3] [201] [330] [10] Item Help Menu Level u If a hard disk controller card is used, set at Disabled [Enabled] Enabled onboard IDE Port Onboard H/W Serial ATA( j ) Serial ATA Function (j ) Onboard H/W RAID j ( ) [Disabled] Disabled onboard IDE Port Onboard LAN Boot ROM( jl ) Onboard Serial Port 1 Onboard Serial Port 2 UART Mode Select x UR2 Duplex Mode Onboard Parallel Port Parallel Port Mode ECP Mode Use DMA Game Port Address Midi Port Address Midi Port IRQ h i g f : Move Enter:Select +/-/PU/PD: Value F10: Save ESC:Exit F5: Previous Values F6: Fail-Safe Defaults Figure 5: Integrated Peripherals F1: General Help F7: Optimized Defaults j For GA-7N400 Pro2 only. k For GA-7N400 only. @@@@Set USB controller at USB1.1 and USB2.0.

@@Disable USB Keyboard Support. @@Disable USB Mouse Support. @@@@ (Default Value) Disable this function. j For GA-7N400 Pro2 only. k For GA-7N400 only. @@@@ (Default value) Disable this function. Onboard LAN Boot ROM(jl) This function decide whether to invoke the boot ROM of the onboard LAN chip. Enabled Disabled Enable Onboard LAN chip function. Disable this function. (Default value) Onboard Serial Port 1 Disabled 3F8/IRQ4 2F8/IRQ3 3E8/IRQ4 2E8/IRQ3 Auto Disable onboard Serial port 1.

Enable onboard Serial port 1 and address is 3F8, using IRQ4. (Default value) Enable onboard Serial port 1 and address is 2F8, using IRQ3. Enable onboard Serial port 1 and address is 3E8, using IRQ4. Enable onboard Serial port 1 and address is 2E8, using IRQ3. BIOS will automatically setup the port 1 address.

j For GA-7N400 Pro2 only. k For GA-7N400 only. l For GA-7N400-L only. - 51 - BIOS Setup 7n400pro2\_1001\_b.p65 51 2003/7/4, 03:29 Onboard Serial Port 2 English Disabled 3F8/IRQ4 2F8/IRQ3 3E8/IRQ4 2E8/IRQ3 Auto Disable onboard Serial port 2.

Enable onboard Serial port 2 and address is 3F8, using IRQ4. Enable onboard Serial port 2 and address is 2F8, using IRQ3. (Default value) Enable onboard Serial port 2 and address is 3E8, using IRQ4. Enable onboard Serial port 2 and address is 2E8, using IRQ3. BIOS will automatically setup the port 2 address.

UART Mode Select This item allows you to determine which Infra Red(IR) function of Onboard I/O chip. Normal IrDA ASKIR Set onboard I/O chip UART to Normal Mode. (Default Value) Set onboard I/O chip UART to IrDA Mode. Set onboard I/O chip UART to ASKIR Mode. UR2 Duplex Mode This feature allows you to select IR mode.

This function will available when "UART Mode Select" doesn't set at "Normal" nor "SCR". Half Full IR Function Duplex Half. (Default Value) IR Function Duplex Full. Onboard Parallel port This feature allows you to select from a given set of parameters if the parallel port uses the onboard I/O controller.

Disabled 378/IRQ7 278/IRQ5 3BC/IRQ7 Disable onboard LPT port. Enable onboard LPT port and address is 378, using IRQ7. @@@@SPP EPP ECP ECP+EPP Using Parallel port as Standard Parallel Port. Using Parallel port as Enhanced Parallel Port. Using Parallel port as Extended Capabilities Port.

@@@@3 1 Set ECP Mode Use DMA to 3.

@@Set Game Port Address to 201. @@Set Midi Port Address to 330. @@Set Midi Port IRQ to 10. @@@@Press power button then Power off instantly. (Default value) Press power button 4 sec.

to Power off. @@Enable PME Event Wake up. @@Disabled Enabled Disable Modem Ring on function.



[You're reading an excerpt. Click here to read official GIGABYTE](#)

[GA-7N400 user guide](#)

<http://yourpdfguides.com/dref/4129571>







Main The means that the Backup BIOS works normally and could automatically recover the Main BIOS. (This auto recovery utility is set by system automatically and can't be changed by user.) · Load Default Settings Load dual BIOS default value. · Save Settings to CMOS Save revised setting.  
N400 Pro2 / N400 Series Motherboard - 70 - 7n400pro2\_1002\_t.p65 70 2003/7/4, 03:30 C.



[You're reading an excerpt. Click here to read official GIGABYTE](#)

[GA-7N400 user guide](#)

<http://yourpdfguides.com/dref/4129571>