Manual abstract:

In no event shall ASRock, its directors, officers, employees, or agents be liable for any indirect, special, incidental, or consequential damages (including damages for loss of profits, loss of business, loss of data, interruption of business and the like), even if ASRock has been advised of the possibility of such damages arising from any defect or error in the manual or product. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. CALIFORNIA, USA ONLY The Lithium battery adopted on this motherboard contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance. "Perchlorate Material-special handling may apply, see www.dtsc.ca.gov/hazardouswaste/perchlorate" ASRock Website: http://www.asrock.
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4 cm x 24.4 cm - LGA 775 for Intel® Dual Core CoreTM 2 Extreme / CoreTM 2 Duo / Pentium® D / Pentium® 4 / Celeron® D - Compatible with all FSB1333/1066/800/533MHz CPUs except Quad Core (see CAUTION 1) - Supports Hyper-Threading Technology (see CAUTION 2) - Supports Untied Overclocking Technology (see CAUTION 3) - Supports EM64T CPU - Northbridge: Intel® 945G - Southbridge: Intel® ICH7 - Dual Channel DDRII Memory Technology (see CAUTION 4) - 4 x DDRII DIMM slots - Support DDRII667/533 (see CAUTION 5) - Max. capacity: 4GB (see CAUTION 6) - CPU Frequency Stepless Control (see CAUTION 7) - ASRock U-COP (see CAUTION 8) - Boot Failure Guard (B.F.G.) - 1 x PCI Express x16 slot - 1 x PCI Express x1 slot - 2 x PCI slots - 1 x HDMR slot - Intel® Graphics Media Accelerator 950 - Pixel Shader 2.0, DirectX 9.0 - Max. shared memory 224MB (see CAUTION 9) - Dual VGA Output: support D-Sub and DVI-D ports with DVI Graphics-HDCP card by independent display controllers - Supports HDCP function with DVI Graphics-HDCP card - 7.1 CH Windows® VistaTM Premium Level HD Audio (ALC888 Audio Codec) - PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111B - Supports Wake-On-LAN HD 8CH I/O - 1 x PS/2 Mouse Port - 1 x PS/2 Keyboard Port - 1 x VGA Port - 1 x Parallel Port (ECP/EPP Support) - 4 x Ready-to-Use USB 2.
0 Ports - 1 x RJ-45 LAN Port Platform CPU Chipset Memory Hybrid Booster Expansion Slot Graphics Audio LAN Rear Panel I/O 6 Connector BIOS Feature Support CD Hardware Monitor OS Certifications WARNING - HD Audio Jack: Side Speaker/Rear Speaker/Central/Bass/ Line in/Front Speaker/Microphone (see CAUTION 10) - 4 x SATAII 3.0 Gb/s connectors (No Support for RAID and "Hot Plug" functions) (see CAUTION 11) - 1 x ATA100 IDE connector (supports 2 x IDE devices) - 1 x Floppy connector - 1 x IR header - 1 x COM port header - CPU/Chassis FAN connector - 20 pin ATX power connector - 4 pin 12V power connector - CD in header - Front panel audio connector - 2 x USB 2.0 headers (support 4 USB 2.0 ports) (see CAUTION 12) - 4Mb AMI BIOS - AMI Legal BIOS - Supports "Plug and Play" - ACPI 1.1 Compliance Wake Up Events - Supports jumperfree - AMBIOS 2.
3.1 Support - Drivers, Utilities, AntiVirus Software (Trial Version) - CPU Temperature Sensing - Chassis Temperature Sensing - CPU Fan Tachometer - Chassis Fan Tachometer - CPU Quiet Fan - Voltage Monitoring: +12V, +5V, +3.3V, Vcore - Microsoft® Windows® 2000/XP/XP 64-bit/VistaTM/ VistaTM 64-bit compliant (see CAUTION 13) - FCC, CE, WHQL Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS, applying Untied Overclocking Technology, or using the thirdparty overclocking tools. Overclocking may affect your system stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense.

We are not responsible for possible damage caused by overclocking. 7 CAUTION! 1. 2. 3. 4. FSB1333-CPU will operate in overclocking mode. Under this situation, PCIE frequency will also be overclocked to 115MHz. About the setting of "Hyper Threading Technology", please check page 31. This motherboard supports Untied Overclocking Technology. Please read "Untied Overclocking Technology" on page 27 for details.

This motherboard supports Dual Channel Memory Technology. Before you implement Dual Channel Memory Technology, make sure to read the installation guide of memory modules on page 16 for proper installation. Please check the table below for the CPU FSB frequency and its corresponding memory support frequency. CPU FSB Frequency Memory Support Frequency 1333 1066 800 533 DDRII533, DDRII667 DDRII400, DDRII533, DDRII667 DDRII400, DDRII533, DDRII667 DDRII400, DDRII533 5. * When you use a FSB1333-CPU on this motherboard, it will run at DDRII500 if you adopt a DDRII533 memory module. 6. Due to the chipset limitation, the actual memory size may be less than 4GB for the reservation for system usage under Windows® XP, Windows® XP 64-bit, Windows® VistaTM and Windows® VistaTM 64-bit. Although this motherboard offers stepless control, it is not recommended to perform over-clocking. Frequencies other than the recommended CPU bus frequencies may cause the instability of the system or damage the 8. CPU. While CPU overheat is detected, the system will automatically shutdown. Before you resume the system, please check if the CPU fan on the motherboard functions properly and unplug the power cord, then plug it back again. To improve heat dissipation, remember to spray thermal grease between the CPU and the heatsink when you install the PC system. 9. The maximum shared memory size is defined by the chipset vendor and is subject to change. Please check Intel® website for the latest information. 7. 10. For microphone input, this motherboard supports both stereo and mono modes. For audio output, this motherboard supports 2-channel, 4-channel, 6-channel, and 8-channel modes. Please check the table on page 11 for proper connection. 11. Before installing SATAII hard disk to SATAII connector, please read the "SATAII Hard Disk Setup Guide" on page 26 to adjust your SATAII hard disk drive to SATAII mode. You can also connect SATA hard disk to SATAII connector directly. 12. Power Management for US 13 1 2 3 4 5 6 12 11 10 8 9 10 11 12 13 9 Microphone (Pink) USB 2.0 Ports (USB01) USB 2.0 Ports (USB23) VGA Port PS/2 Keyboard Port (Purple) PS/2 Mouse Port (Green) Parallel Port RJ-45 Port Side Speaker (Gray) Rear Speaker (Black) Central / Bass (Orange) Line In (Light Blue) Front Speaker (Lime) *7 * If you use 2-channel speaker, please connect the speaker's plug into "Front Speaker Jack". See the table below for connection details in accordance with the type of speaker you use. TABLE for Audio Output Connection Audio Output Channels Front Speaker Rear Speaker 2 4 6 8 (No.*

*7) V V V V (No. 4) -V V V Central / Bass (No. 5) --V V Side Speaker (No. 3) ---V * To enable Multi-Streaming function, you need to connect a front panel audio cable to the front panel audio header. After restarting your computer, you will find "Mixer" tool on your system. Please select "Mixer ToolBox" , click "Enable playback multi-streaming", and click "ok". Choose "2CH", "4CH", "6CH", or "8CH" and then you are allowed to select "Realtek HDA Primary output" to use Rear Speaker, Central/Bass, and Front Speaker, or select "Realtek HDA Audio 2nd output" to use front panel audio. 11 Chapter 2 Installation ConRoe1333-DVI/H is a Micro ATX form factor (9.6" x 9.6", 24.*
4 x 24.4 cm) motherboard. Before you install the motherboard, study the configuration of your chassis to ensure that the motherboard fits into it. Make sure to unplug the power cord before installing or removing the motherboard. Failure to do so may cause physical injuries to you and damages to motherboard components.
2.1 Screw Holes Place screws into the holes indicated by circles to secure the motherboard to the chassis. Do not over-tighten the screws! Doing so may damage the motherboard. 2.2 Pre-installation Precautions Take note of the following precautions before you install motherboard components or change any motherboard settings.
1. Unplug the power cord from the wall socket before touching any component. 2. To avoid damaging the motherboard components due to static electricity, NEVER place your motherboard directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before you handle components. 3. Hold components by the edges and do not touch the ICs. 4. Whenever you uninstall any component, place it on a grounded antistatic pad or in the bag that comes with the component. Before you install or remove any component, ensure that the power is switched off or the power cord is detached from the power supply.

Failure to do so may cause severe damage to the motherboard, peripherals, and/or components. 12 2.3 CPU Installation For the installation of Intel 775-LAND CPU, please follow the steps below. 775-Pin Socket Overview Before you insert the 775-LAND CPU into the socket, please check if the CPU surface is unclean or if there is any bent pin on the socket. Do not force to insert the CPU into the socket if above situation is found. Otherwise, the CPU will be seriously damaged. CPU Marked Corner Step 1. Open the socket: Step 1-1. Disengaging the lever by depressing Lift Lever Up to 90° down and out on the Socket Marked Corner hook to clear retention tab. Step 1-2.
Rotate the load lever to fully open position at approximately 135 degrees. Step 1-3. Rotate the load plate to fully open position at approximately 100 degrees. Step 2. Insert the 775-LAND CPU: Step 2-1.
Hold the CPU by the edges where are marked with black lines. black line black line Step 2-2. Orient the CPU with IHS (Integrated Heat Sink) up. Locate Pin1 and the two orientation key notches. Pin1 orientation key notch orientation key notch Pin1 alignment key alignment key 775-Pin Socket 775-LAND CPU 13 For proper inserting, please ensure to match the two orientation key notches of the CPU with the two alignment keys of the socket.
Step 2-3. Carefully place the CPU into the socket by using a purely vertical motion. Step 2-4. Verify that the CPU is within the socket and properly mated to the orient keys. Step 3. Remove PnP Cap (Pick and Place Cap): Use your left hand index finger and thumb to support the load plate edge, engage PnP cap with right hand thumb and peel the cap from the socket while pressing on center of PnP cap to assist in removal. 1. It is recommended to use the cap tab to handle and avoid kicking off the PnP cap. 2. This cap must be placed if returning the motherboard for after service.

Step 4. Close the socket: Step 4-1. Rotate the load plate onto the IHS. Step 4-2. While pressing down lightly on load plate, engage the load lever. Step 4-3. Secure load lever with load plate tab under retention tab of load lever. 14 2.4 Installation of CPU Fan and Heatsink This motherboard is equipped with 775-Pin socket that supports Intel 775-LAND CPU. Please adopt the type of heatsink and cooling fan compliant with Intel 775-LAND CPU to dissipate heat. Before you installed the heatsink, you need to spray thermal interface material between the CPU and the heatsink to improve heat dissipation. Ensure that the CPU and the heatsink are securely fastened and in good contact with each other. Then connect the CPU fan to the CPU_FAN connector (CPU_FAN1, see page 10, No. 3). For proper installation, please kindly refer to the instruction manuals of your CPU fan and heatsink.

Below is an example to illustrate the installation of the heatsink for 775-LAND CPU. Step 1. Apply thermal interface material onto center of IHS on the socket surface. Step 2. Step 3.

Step 4. Place the heatsink onto the socket. Ensure fan cables are oriented on side closest to the CPU fan connector on the motherboard (CPU_FAN1, see page 10, No. 3). Align fasteners with the motherboard throughholes. Rotate the fastener clockwise, then press down on fastener caps with thumb to install and lock. Repeat with remaining fasteners. If you press down the fasteners without rotating them clockwise, the heatsink cannot be secured on the motherboard. Step 5. Step 6.

Connect fan header with the CPU fan connector on the motherboard. Secure excess cable with tie-wrap to ensure cable does not interfere with fan operation or contact other components. 15 2.5 Installation of Memory Modules (DIMM) ConRoe1333-DVI/H motherboard provides four 240-pin DDRII (Double Data Rate II) DIMM slots, and supports Dual Channel Memory Technology. For dual channel configuration, you always need to install identical (the same brand, speed, size and chip-type) DDRII DIMM pair in the slots of the same color. In other words, you have to install identical DDRII DIMM pair in Dual Channel A (DDRII_1 and DDRII_3; Yellow slots; see p.10 No.7) or identical DDRII DIMM pair in Dual Channel B (DDRII_2 and DDRII_4; Orange slots; see p.10 No.8), so that Dual Channel Memory Technology can be activated.

This motherboard also allows you to install four DDRII DIMMs for dual channel configuration, and please install identical DDRII DIMMs in all four slots. You may refer to the Dual Channel Memory Configuration Table below. Dual Channel Memory Configurations DDRII_1 (Yellow Slot) Populated Populated DDRII_2 DDRII_3 (Orange Slot) (Yellow Slot) Populated Populated Populated Populated DDRII_4 (Orange Slot) Populated Populated (1) (2) (3) * For the configuration (3), please install identical DDRII DIMMs in all four slots. 1. If you want to install two memory modules, for optimal compatibility and reliability, it is recommended to install them in the slots of the same color.*

In other words, install them either in the set of yellow slots (DDRII_1 and DDRII_3), or in the set of orange slots (DDRII_2 and DDRII_4). 2. If only one memory module or three memory modules are installed in the DDRII DIMM slots on this motherboard, it is unable to activate the Dual Channel Memory Technology. If a pair of memory modules is NOT installed in the same Dual Channel, for example, installing a pair of memory modules in DDRII_1 and DDRII_2, it is unable to activate the Dual Channel Memory 4. Technology .

It is not allowed to install a DDR memory module into DDRII slot; otherwise, this motherboard and DIMM may be damaged. 3. 16 Installing a DIMM Please make sure to disconnect power supply before adding or removing DIMMs or the system components. Step 1. Step 2. Unlock a DIMM slot by pressing the retaining clips outward. Align a DIMM on the slot such that the notch on the DIMM matches the break on the slot. notch break notch break The DIMM only fits in one correct orientation. It will cause permanent damage to the motherboard and the DIMM if you force the DIMM into the slot at incorrect orientation. Step 3.

Firmly insert the DIMM into the slot until the retaining clips at both ends fully snap back in place and the DIMM is properly seated. 17 2.6 Expansion Slots (PCI, HDMR and PCI Express Slots) There are 2 PCI slots, 1 HDMR slot and 2 PCI Express slots on this motherboard. PCI slots: PCI slots are used to install expansion cards that have the 32-bit PCI interface. HDMR slot: HDMR slot is used to insert a HDMR card with v.92 Modem functionality. The HDMR slot is shared with PCI2 slot. PCIE Slots: PCIE1 (PCIE x16 slot) is used for PCI Express cards with x16 lane width graphics cards or ASRock DVI Graphics-HDCP card. PCIE2 (PCIE x1 slot) is used for PCI Express cards with x1 lane width cards, such as Gigabit LAN card, SATA2 card, etc. 1.

If you install the add-on PCI Express VGA card to PCIE1 (PCIE x16 slot), the onboard VGA will be disabled. If you install the add-on PCI Express VGA card to PCIE1 (PCIE x16 slot) and adjust the "Internal Graphics Mode Select" BIOS option to [Enabled], the onboard VGA will be enabled, and the primary screen will be onboard VGA. 2. You can only choose either PCI Express VGA card or DVI Graphics-HDCP card to install to PCIE1 (PCIE x16 slot). Installing an expansion card Step 1.

Before installing the expansion card, please make sure that the power supply is switched off or the power cord is unplugged. Please read the documentation of the expansion card and make necessary hardware settings for the card before you start the installation. Remove the bracket facing the slot that you intend to use. Keep the screws for later use. Align the card connector with the slot and press firmly until the card is completely seated on the slot.

Fasten the card to the chassis with screws. Step 2. Step 3. Step 4. 18 2.7 DVI Graphics-HDCP Card Installation Guide With the onboard VGA/D-Sub output and the external installation of our DVI Graphics-HDCP card, this motherboard provides users with dual VGA output support: DVI-D and D-Sub. You can easily enjoy the benefits of dual VGA output support by connecting the D-Sub monitor to the VGA/D-Sub port on the I/O panel and connecting the DVI-D monitor to our DVI Graphics-HDCP card inserted to PCIE1 (PCIE x16 slot) on this motherboard. Please refer to below procedures for proper installation of DVI Graphics-HDCP card. Step 1. Install the DVI Graphics-HDCP card to PCIE1 (PCIE x16 slot).

Please refer to the expansion card installation procedures on page 18 for details. DVI Graphics-HDCP DVI Graphics-HDCP card Step 2. Connect the DVI-D monitor to the DVI-D output connector of DVI GraphicsHDCP card which is inserted to PCIE1 (PCIE x16 slot) on this motherboard. DVI-D connector of DVI-D monitor DVI-D output connector of DVI Graphics-HDCP card 19 Step 3. Step 4. Connect the D-Sub monitor to the VGA/D-Sub port on the I/O panel of this motherboard.

If you have installed Intel® VGA driver from our support CD to your system already, you can freely enjoy the benefits of DVI-D output function with this motherboard after your system boots. If you haven't installed Intel® VGA driver yet, please install Intel® VGA driver from our support CD to your system and restart your computer. Then you can start to use DVI-D output function with this motherboard. HDCP Function with DVI Graphics-HDCP Card HDCP function is supported with DVI Graphics-HDCP card.

With the installation of DVI Graphics-HDCP card, this motherboard is equipped with HDCP function. To use HDCP function with this motherboard, you need to adopt the monitor that supports HDCP function as well. Therefore, you can enjoy the superior display quantity with highdefinition HDCP encryption contents. Please refer to below instruction for more details about HDCP function. What is HDCP? HDCP stands for High-Bandwidth Digital Content Protection, a specification developed by Intel® for protecting digital entertainment content that uses the DVI interface.

HDCP is a copy protection scheme to eliminate the possibility of intercepting digital data midstream between the video source, or transmitter - such as a computer, DVD player or set-top box - and the digital display, or receiver - such as a monitor, television or projector. In other words, HDCP specification is designed to protect the integrity of content as it is being transmitted. Products compatible with the HDCP scheme such as DVD players, satellite and cable HDTV set-top-boxes, as well as few entertainment PCs requires a secure connection to a compliant display. Due to the increase in manufacturers employing HDCP in their equipment, it is highly recommended that the HDTV you purchase is compatible. 20 2.

8 Jumpers Setup The illustration shows how jumpers are setup. When the jumper cap is placed on pins, the jumper is "Short". If no jumper cap is placed on pins, the jumper is "Open". The illustration shows a 3-pin jumper whose pin1 and pin2 are "Short" when jumper cap is placed on these 2 pins. Jumper Setting PS2_USB_PWR1 2_3 1_2 Description Short pin2, pin3 to enable (see p.10 No. 1) +5VSB (standby) for PS/2 +5V +5VSB or USB wake up events. Note: To select +5VSB, it requires 2 Amp and higher standby current provided by power supply. Clear CMOS (CLRCMOS1, 2-pin jumper) (see p.10 No.

6) 2-pin jumper Note: CLRCMOS1 allows you to clear the data in CMOS. The data in CMOS includes system setup information such as system password, date, time, and system setup parameters. To clear and reset the system parameters to default setup, please turn off the computer and unplug the power cord from the power supply. @@Do NOT place jumper caps over these headers and connectors. @@@@Primary IDE connector (Blue) (39-pin IDE1, see p.10 No. @@Serial ATAII Connectors (SATAII_1: see p.10, No. 16) (SATAII_2: see p.10, No.

14) (SATAII_3: see p.10, No. 15) (SATAII_4: see p.10, No. @@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@2.

@@Connect Mic_IN (MIC) to MIC2_L. B. Connect Audio_R (RIN) to OUT2_R and Audio_L (LIN) to OUT2_L. C. Connect Ground (GND) to Ground (GND).

D. MIC_RET and OUT_RET are for HD audio panel only. You don't need to connect them for AC'97 audio panel. E. Enter BIOS Setup Utility. Enter Advanced Settings, and then select Chipset Configuration. @@Enter Windows system. @@Click "Audio I/O", select "Connector Settings" , choose "Disable front panel jack detection", and save the change by clicking "OK". System Panel Header (9-pin PANEL1) (see p.10 No.

12) 1 PLED+ PLEDPWRBTN# GND This header accommodates several system front panel functions. DUMMY RESET# GND HDLEDHDLED+ Chassis Speaker Header (4-pin SPEAKER 1) (see p.10 No. 11) 1 SPEAKER DUMMY DUMMY +5V Please connect the chassis speaker to this header. Chassis Fan Connector (3-pin CHA_FAN1) (see p.10 No. 17) GND +12V CHA_FAN_SPEED Please connect a chassis fan cable to this connector and match the black wire to the ground pin. Please connect a CPU fan cable to this connector and match the black wire to the ground pin. CPU Fan Connector (4-pin CPU_FAN1) (see p.10 No.

3) GND +12V CPU_FAN_SPEED FAN_SPEED_CONTROL 1234 Though this motherboard provides 4-Pin CPU fan (Quiet Fan) support, the 3-Pin CPU fan still can work successfully even without the fan speed control function. If you plan to connect the 3-Pin CPU fan to the CPU fan connector on this motherboard, please connect it to Pin 1-3. Pin 1-3 Connected 3-Pin Fan Installation ATX Power Connector (20-pin ATXPWR1) (see p.10 No. 27) Please connect an ATX power supply to this connector.

ATX 12V Connector (4-pin ATX12V1) (see p.10 No. 2) Please note that it is necessary to connect a power supply with ATX 12V plug to this connector so that it can provides sufficient power. Failing to do so will cause the failure to power up. 24 Serial port Header (9-pin COM1) (see p.

10 No. 29) 1 RRXD1 DDTR#1 DDSR#1 CCTS#1 This COM1 header supports a serial port module. RRI#1 RRTS#1 GND TTXD1 DDCD#1 25 SAT 2.10 SATAII Hard Disk Setup Guide Before installing SATAII hard disk to your computer, please carefully read below SATAII hard disk setup guide. Some default setting of SATAII hard disks may not be at SATAII mode, which operate with the best performance. In order to enable SATAII function, please follow the below instruction with different vendors to correctly adjust your SATAII hard disk to SATAII mode in advance; otherwise, your SATAII hard disk may fail to run at SATAII mode. Western Digital 7 8 5 6 3 4 1 2 If pin 5 and pin 6 are shorted, SATA 1.5Gb/s will be enabled. On the other hand, if you want to enable SATAII 3.0Gb/s, please remove the jumpers from pin 5 and pin 6.

SAMSUNG 7 8 5 6 3 4 1 2 If pin 3 and pin 4 are shorted, SATA 1.5Gb/s will be enabled. On the other hand, if you want to enable SATAII 3.0Gb/s, please remove the jumpers from pin 3 and pin 4. HITACHI Please use the Feature Tool, a DOS-bootable tool, for changing various ATA features. Please visit HITACHI's website for details: http://www.hitachigst.com/hdd/support/download.htm The above examples are just for your reference. For different SATAII hard disk products of different vendors, the jumper pin setting methods may not be the same.

Please visit the vendors' website for the updates. 26 AT (SAT AT (SAT 2.11 Serial ATA (SATA) / Serial ATAII (SATAII) Hard Disks Installation This motherboard adopts Intel® ICH7 south bridge chipset that supports Serial ATA (SATA) / Serial ATAII (SATAII) hard disks. You may install SATA / SATAII hard disks on this motherboard for internal storage devices. This section will guide you to install the SATA / SATAII hard disks.

STEP 1: Install the SATA / SATAII hard disks into the drive bays of your chassis. STEP 2: Connect the SATA power cable to the SATA / SATAII hard disk. STEP 3: Connect one end of the SATA data cable to the motherboard's SATAII connector.

STEP 4: Connect the other end of the SATA data cable to the SATA / SATAII hard disk. 2.
12 Driver Installation Guide To install the drivers to your system, please insert the support CD to your optical drive first. Then, the drivers compatible to your system can be auto-detected and listed on the support CD driver page. Please follow the order from up to bottom side to install those required drivers. Therefore, the drivers you install can work properly. 2.13 HDMR Card and Driver Installation If you do not insert HDMR card to this motherboard, and you finish installing all drivers to your system now, but in the future, you plan to use HDMR card function on this motherboard, please follow the steps below then. 1. Insert HDMR card to HDMR slot on this motherboard. Please make sure that the HDMR card is completely seated on the slot. 2.

Install HDMR card driver from our support CD to your system. 3. Reboot your system. Technology 2.14 Untied Overclocking Technology This motherboard supports Untied Overclocking Technology, which means during overclocking, FSB enjoys better margin due to fixed PCI / PCIE buses. Before you enable Untied Overclocking function, please enter "Overclock Mode" option of BIOS setup to set the selection from [Auto] to [CPU, PCIE, Async.]. Therefore, CPU FSB is untied during overclocking, but PCI / PCIE buses are in the fixed mode so that FSB can operate under a more stable overclocking environment. Please refer to the warning on page 7 for the possible overclocking risk before you apply Untied Overclocking Technology. 27 Chapter 3 BIOS SETUP UTILITY 3. 1 Introduction This section explains how to use the BIOS SETUP UTILITY to configure your system. The BIOS FWH chip on the motherboard stores the BIOS SETUP UTILITY. You may run the BIOS SETUP UTILITY when you start up the computer. Please press <F2> during the Power-On-Self-Test (POST) to enter the BIOS SETUP UTILITY, otherwise, POST will continue with its test routines. If you wish to enter the BIOS SETUP UTILITY after POST, restart the system by pressing <Ctl> + <Alt> + <Delete>, or by pressing the reset button on the system chassis.
You may also restart by turning the system off and then back on. Because the BIOS software is constantly being updated, the following BIOS setup screens and descriptions are for reference purpose only, and they may not exactly match what you see on your screen. 3.1.1 BIOS Menu Bar The top of the Main Advanced PCIPnP Boot screen has a menu bar with the following selections: To set up the system time/date information To set up the advanced BIOS features To set up the PCI features To set up the default system device to locate and load the Operating System Security To set up the security features Chipset To set up the chipset features Exit To exit the current screen or the BIOS SETUP UTILITY Use < > key or < > key to choose among the selections on the menu bar, and then press <Enter> to get into the sub screen.
28 3.1.2 Navigation Keys Please check the following table for the function description of each navigation key. Navigation Key(s) / / +/<Enter> <F1> <F9> <F10> <ESC> Function Description Moves cursor left or right to select Screens Moves cursor up or down to select items To change option for the selected items To bring up the selected screen To display the General Help Screen To load optimal default values for all the settings To save changes and exit the BIOS SETUP UTILITY To jump to the Exit Screen or exit the current screen 3.2 Main Screen When you enter the BIOS SETUP UTILITY, the Main screen will appear and display the system overview Advanced BIOS SETUP UTILITY H/W Monitor Boot Security Exit Main System Overview System Time System Date BIOS Version Processor Type [14:00:09] [Thu 01/18/2007] Use [Enter], [TAB] or [SHIFT-TAB] to select a field. Use [+] or [-] to configure system Time. : ConRoe1333-DVI/H BIOS P1.00 : Intel (R) CPU 3.40 GHz (64bit supported) : 3400 MHz Processor Speed Microcode Update : F34/17 : 1024KB Cache Size Total Memory DDRII1 DDRII2 DDRII3 DDRII4 : 512MB with 8MB shared memory Dual-Channel Memory Mode : 256MB/266MHz (DDRII533) : None : 256MB/266MHz (DDRII533) : None +Tab F1 F9 F10 ESC Select Screen Select Item Change Field Select Field General Help Load Defaults Save and Exit Exit v02.54 (C) Copyright 1985-2005, American Megatrends, Inc.

System Time [Hour:Minute:Second] Use this item to specify the system time. System Date [Day Month/Date/Year] Use this item to specify the system date. 3.3 Advanced Screen In this section, you may set the configurations for the following items: CPU Configuration, Chipset Configuration, ACPI Configuration, IDE Configuration, PCIPnP Configuration, Floppy Configuration, SuperIO Configuration, and USB Configuration. 29 Main Advanced BIOS SETUP UTILITY H/W Monitor Boot Security Configure CPU Exit Advanced Settings WARNING : Setting wrong values in below sections may cause system to malfunction. CPU Configuration Chipset Configuration ACPI Configuration IDE Configuration PCIPnP Configuration Floppy Configuration SuperIO Configuration USB Configuration Enter F1 F9 F10 ESC Select Screen Select Item Go to Sub Screen General Help Load Defaults Save and Exit Exit v02.54 (C) Copyright 1985-2005, American Megatrends, Inc. Setting wrong values in this section may cause the system to malfunction. 3.3.
1 CPU Configuration BIOS SETUP UTILITY Advanced CPU Configuration Overclock Mode CPU Frequency (MHz) PCIE Frequency (MHz) Boot Failure Guard Spread Spectrum Ratio Actual Value Enhance Halt State Max CPUID Value Limit Intel (R) Virtualization tech. CPU Thermal Throttling No-Excute Memory Protection Hyper Threading Technology Intel (R) SpeedStep(tm) tech. [Auto] [133] [100] [Enabled] [Auto] 9 [Disabled] [Disabled] [Enabled] [Enabled] [Disabled] [Enabled] [Auto] Select Screen Select Item Change Option General Help Load Defaults Save and Exit Exit Select the over clock mode. +F1 F9 F10 ESC v02.54 (C) Copyright 1985-2005, American Megatrends, Inc.
Overclock Mode Use this to select Overclock Mode. The default value is [Auto]. Cnfiguration options: [Auto], [CPU, PCIE, Sync.] and [CPU, PCIE, Async.]. CPU Frequency (MHz) Use this option to adjust CPU frequency. The default value is [133]. PCIE Frequency (MHz) Use this option to adjust PCIE frequency. The default value is [100]. Boot Failure Guard Enable or disable the feature of Boot Failure Guard. Spread Spectrum This item should always be [Auto] for better system stability. 30 Ratio Status This is a read-only item, which displays whether the ratio status of this motherboard is "Locked" or "Unlocked". If it shows "Unlocked", you will find an item Ratio CMOS Setting appears to allow you changing the ratio value of this motherboard. Ratio Actual Value This is a read-only item, which displays the ratio actual value of this motherboard.

Ratio CMOS Setting If the ratio status is unlocked, you will find this item appear to allow you changing the ratio value of this motherboard.

If the CPU you adopt supports EIST (Intel (R) SpeedStep(tm) tech.), and you plan to adjust the ratio value, please disable the option " Intel (R) SpeedStep(tm) tech." in advance. Enhance Halt State All processors support the Halt State (C1). The C1 state is supported through the native processor instructions HLT and MWAIT and requires no hardware support from the chipset. In the C1 power state, the processor maintains the context of the system caches. Max CPUID Value Limit For Prescott CPU only, some OSes (ex. NT4.0) cannot handle the function with disable. This should be enabled in order to boot legacy OSes that cannot support CPUs with extended CPUID functions.

Intel (R) Virtualization tech. When this option is set to [Enabled], a VMM (Virtual Machine Architecture) can utilize the additional hardware capabilities provided by Vanderpool Technology. This option will be hidden if the installed CPU does not support Intel (R) Virtualization Technology. CPU Thermal Throttling You may select [Enabled] to enable P4 CPU internal thermal control mechanism to keep the CPU from overheated. This option will be hidden if the current CPU does not support CPU Thermal Throttling.

No-Excute Memory Protection No-Execution (NX) Memory Protection Technology is an enhancement to the IA-32 Intel Architecture. An IA-32 processor with "No Execute (NX) Memory Protection" can prevent data pages from being used by malicious software to execute code. This option will be hidden if the current CPU does not support No-Excute Memory Protection. Hyper Threading Technology To enable this feature, it requires a computer system with an Intel Pentium® 4 processor that supports Hyper-Threading technology and an operating system that includes optimization for this technology, such as Microsoft® Windows® XP. Set to [Enabled] if using Microsoft® Windows® XP, or Linux 31 kernel version 2.

4.18 or higher. This option will be hidden if the installed CPU does not support Hyper-Threading technology. Intel (R) SpeedStep(tm) tech. Intel (R) SpeedStep(tm) tech. is Intel's new power saving technology. Processor can switch between multiple frequency and voltage points to enable power savings. The default value is [Auto]. Configuration options: [Auto], [Enabled] and [Disabled]. If you install Windows® XP and select [Auto], you need to set the "Power Schemes" as "Portable/Laptop" to enable this function.

If you install Windows® VistaTM and want to enable this function, please set this item to [Enabled]. This item will be hidden if the current CPU does not support Intel (R) SpeedStep(tm) tech.. Please note that enabling this function may reduce CPU voltage and lead to system stability or compatibility issue with some power supplies. Please set this item to [Disable] if above issue occurs. 3.3.2 Chipset Configuration BIOS SETUP UTILITY Advanced Chipset Configuration [Auto] DRAM Frequency [Disabled] Flexibility Option Configure DRAM Timing by SPD [Enabled] [Auto] DRAM CAS# Latency Primary Graphics Adapter Internal Graphics Mode Select DVMT Mode Select DVMT/FIXED Memory OnBoard HD Audio Front Panel CD-In OnBoard Lan PCI Fix Function VCCM Voltage [PCI] [Auto] [DVMT Mode] [Maximum DVMT] [Auto] [Enabled] [Enabled] [Enabled] [Enabled] [Auto] +F1 F9 F10 ESC Options Auto 200MHz 266MHz 333MHz (DDRII400) (DDRII533) (DDRII667) Select Screen Select Item Change Option General Help Load Defaults Save and Exit Exit v02.54 (C) Copyright 1985-2005, American Megatrends, Inc. 32 DRAM Frequency If [Auto] is selected, the motherboard will detect the memory module(s) inserted and assigns appropriate frequency automatically.

You may also select other value as operating frequency: [200MHz (DDRII 400)], [266MHz (DDRII 533)], [333MHz (DDRII 667)]. The configuration options may change according to the corresponding FSB frequency of the CPU you adopt. Flexibility Option The default value of this option is [Disabled]. It will allow better tolerance for memory compatibility when it is set to [Enabled]. Configure DRAM Timing by SPD Select [Enabled] will configure the following items by the contents in the SPD (Serial Presence Detect) device.

If you select [Disabled], you will find the items "DRAM RAS# to CAS# Delay", "DRAM RAS# Precharge", and "DRAM RAS# Activate to Precharge" appear to allow you adjusting them. DRAM CAS# Latency Use this item to adjust the means of memory accessing. Configuration options are [6], [5], [4], [3], and [Auto]. DRAM RAS# to CAS# Delay This controls the latency between the DRAM active command and the read / write command. Configuration options: [2 DRAM Clocks], [3 DRAM Clocks], [4 DRAM Clocks], [5 DRAM Clocks], and [6 DRAM Clocks].

DRAM RAS# Precharge This controls the idle clocks after a precharge command is issued. Configuration options: [2 DRAM Clocks], [3 DRAM Clocks], [4 DRAM Clocks], [5 DRAM Clocks], and [6 DRAM Clocks]. DRAM RAS# Activate to Precharge This controls the number of DRAM clocks for TRAS. Configuration options: [4 DRAM Clocks], [5 DRAM Clocks], [6 DRAM Clocks], [7 DRAM Clocks], [8 DRAM Clocks], [9 DRAM Clocks], [10 DRAM Clocks], [11 DRAM Clocks], [12 DRAM Clocks], [13 DRAM Clocks], [14 DRAM Clocks], and [15 DRAM Clocks]. Primary Graphics Adapter This item shows the primary graphics adapter. The default value is [PCI]. Configuration options: [Onboard], [PCI] and [PCI Express]. Internal Graphics Mode Select If you select [Auto], the onboard VGA will be automatically disabled when you install VGA card; the onboard VGA will be enabled without the installation of any add-on VGA card. If you select [Enabled, 8MB] or [Enabled, 1MB], the onboard VGA will be enabled. DVMT Mode Select Use this option to adjust DVMT mode.

Configuration options: [Fixed Mode], [DVMT Mode] and [Fixed+DVMT Mode]. The default value is [DVMT Mode]. DVMT (Dynamic Video Memory Technology) is an architecture that offers breakthrough performance for the motherboard through efficient memory utilization. In Fixed mode, a fixed-size fragment of the system memory is allocated to the graphics core. In DVMT mode, the graphics driver allocates memory as needed for running graphics applications and is cooperatively using this memory with other system components. In Fixed+DVMT mode, the graphics processor gets a fixed-size chunk of 64MB of memory and up to 64MB of dynamically-allotted memory. This mode guarantees that at least 64MB of memory is available to the graphics core, with a possibility to increase this amount to 128MB, if necessary. 33 DVMT/FIXED Memory You are allowed to adjust the shared memory size in this item if you set DVMT Mode Select as [DVMT Mode]. Configuration options: [64MB], [128MB] and [Maximum DVMT]. OnBoard HD Audio Select [Auto], [Enabled] or [Disabled] for the onboard HD Audio feature.

If you select [Auto], the onboard HD Audio will be disabled when PCI Sound Card is plugged.

Front Panel Control Select [Auto], [Enabled] or [Disabled] for the onboard HD Audio Front Panel. CD-In Use this item to enable or disable CD-In of OnBoard HD Audio. If you plan to use this motherboard to submit Windows® VistaTM logo test, please disable this option. OnBoard Lan This allows you to enable or disable the "OnBoard Lan" feature.

PCI Fix Function This allows you to enable or disable PCI Fix Function. The default value is [Enabled]. If this item is set to [Enabled], PCI frequency can be fixed at 33.3 MHz. If this item is set to [Disabled], PCI clock can be synchronized to PCIE clock.

VCCM Voltage Use this to select VCCM Voltage. Configuration options: [High], [Middle], [Low], and [Auto]. The default value of this feature is [Auto]. VDDQ Voltage Configuration options: [High], [Low] and [Auto]. The default value is [Auto]. 34 3.3.3 ACPI Configuration BIOS SETUP UTILITY Advanced ACPI Configuration Suspend To RAM Restore on AC/Power Loss Ring-In Power On PCI Devices Power On PS / 2 Keyboard Power On RTC Alarm Power On ACPI HPET Table [Disabled] [Power Off] [Disabled] [Disabled] [Disabled] [Disabled] [Disabled] +F1 F9 F10 ESC Select Screen Select Item Change Option General Help Load Defaults Save and Exit Exit Select auto-detect or disable the STR feature. v02.54 (C) Copyright 1985-2005, American Megatrends, Inc.

Suspend to RAM This field allows you to select whether to auto-detect or disable the Suspend-to-RAM feature. Select [Auto] will enable this feature if the system supports it. Restore on AC/Power Loss This allows you to set the power state after an unexpected AC/Power loss. If [Power Off] is selected, the AC/Power remains off when the power recovers. If [Power On] is selected, the AC/Power resumes and the system starts to boot up when the power recovers. Ring-In Power On Use this item to enable or disable Ring-In signals to turn on the system from the power-soft-off mode. PCI Devices Power On Use this item to enable or disable PCI devices to turn on the system from the power-soft-off mode. PS/2 Keyboard Power On Use this item to enable or disable PS/2 keyboard to turn on the system from the power-soft-off mode. RTC Alarm Power On Use this item to enable or disable RTC (Real Time Clock) to power on the system. ACPI HPET Table Use this item to enable or disable ACPI HPET Table.

The default value is [Disabled]. Please set this option to [Enabled] if you plan to use this motherboard to submit Windows® VistaTM certification. 35 3.3.4 IDE Configuration BIOS SETUP UTILITY Advanced IDE Configuration ATA/IDE Configuration SATAII 1 SATAII 2 SATAII 3 SATAII 4 IDE1 Master IDE1 Slave [Enhanced] [Hard Disk] [Not Detected] [Not Detected] [Not Detected] [ATAPI CDROM] [Not Detected] Set [Compatible] when Legacy OS (MS-DOS, Win NT) device is used.

Set [Enhanced] when Native OS (Win2000 / XP) is used. +F1 F9 F10 ESC Select Screen Select Item Change Option General Help Load Defaults Save and Exit Exit v02.54 (C) Copyright 1985-2005, American Megatrends, Inc. ATA/IDE Configuration Please select [Compatible] when you install legacy OS (Windows NT). If native OS (Windows 2000 / XP) is installed, please select [Enhanced].

When [Compatible] is selected Combined Option It allows you to select between [SATA 1, SATA 2, SATA 3, SATA 4], [SATA 1, SATA 3, IDE 1], and [IDE 1, SATA 2, SATA 4]. If it is set to [SATA 1, SATA 3, IDE 1], then SATAII_2, SATAII_4 will not work. Likewise, if it is set to [IDE 1, SATA 2, SATA 4], then SATAII_1, SATAII_3 will not work. Because Intel® ICH7 south bridge only supports four IDE devices under legacy OS (Windows NT), you have to choose [SATA 1, SATA 2, SATA 3, SATA 4], [SATA 1, SATA 3, IDE 1], or [IDE 1, SATA 2, SATA 4] when the installed device is used with legacy OS. [SATA 1, SATA 2, SATA 3, SATA 4] Master Slave SATAII 1, SATAII 2 SATAII 3, SATAII 4 [SATA 1, SATA 3, IDE 1] SATAII 1 SATAII 3 [IDE 1, SATA 2, SATA 4] SATAII 2 SATAII 4 IDE Device Configuration You may set the IDE configuration for the device that you specify. We will use the "Primary IDE Master" as the example in the following instruction. 36 BIOS SETUP UTILITY Advanced Primary IDE Master Device Vendor Size LBA Mode Block Mode PIO Mode Async DMA Ultra DMA S.M.A.R.

T. Type LBA/Large Mode Block (Multi-Sector Transfer) PIO Mode DMA Mode S.M.A.R.T. 32Bit Data Transfer :Hard Disk :ST340014A :40.0 GB :Supported :16Sectors :4 :MultiWord DMA-2 :Ultra DMA-5 :Supported [Auto] [Auto] [Auto] [Auto] [Auto] [Disabled] [Enabled] Select the type of device connected to the system. +F1 F9 F10 ESC Select Screen Select Item Change Option General Help Load Defaults Save and Exit Exit v02.54 (C) Copyright 1985-2005, American Megatrends, Inc.

TYPE Use this item to configure the type of the IDE device that you specify. Configuration options: [Not Installed], [Auto], [CD/DVD], and [ARMD]. [Not Installed]: Select [Not Installed] to disable the use of IDE device. [Auto]: Select [Auto] to automatically detect the hard disk drive. After selecting the hard disk information into BIOS, use a disk utility, such as FDISK, to partition and format the new IDE hard disk drives.

This is necessary so that you can write or read data from the hard disk. Make sure to set the partition of the Primary IDE hard disk drives to active. [CD/DVD]: This is used for IDE CD/DVD drives. [ARMD]: This is used for IDE ARMD (ATAPI Removable Media Device), such as MO. LBA/Large Mode Use this item to select the LBA/Large mode for a hard disk > 512 MB under DOS and Windows; for Netware and UNIX user, select [Disabled] to disable the LBA/Large mode.

Block (Multi-Sector Transfer) The default value of this item is [Auto]. If this feature is enabled, it will enhance hard disk performance by reading or writing more data during each transfer. PIO Mode Use this item to set the PIO mode to enhance hard disk performance by optimizing the hard disk timing. DMA Mode DMA capability allows the improved transfer-speed and data-integrity for compatible IDE devices. 37 S.M.A.R.T. Use this item to enable or disable the S.

M.A.R.T. (Self-Monitoring, Analysis, and Reporting Technology) feature. Configuration options: [Disabled], [Auto], [Enabled]. 32-Bit Data Transfer Use this item to enable 32-bit access to maximize the IDE hard disk data transfer rate. 3.3.5 PCIPnP Configuration BIOS SETUP UTILITY Advanced Advanced PCI / PnP Settings PCI Latency Timer PCI IDE BusMaster [32] [Enabled] Value in units of PCI clocks for PCI device latency timer register.

+F1 F9 F10 ESC Select Screen Select Item Change Option General Help Load Defaults Save and Exit Exit v02.54 (C) Copyright 1985-2005, American Megatrends, Inc. PCI Latency Timer The default value is 32. It is recommended to keep the default value unless the installed PCI expansion cards' specifications require other settings. PCI IDE BusMaster Use this item to enable or disable the PCI IDE BusMaster feature.

38 3.3.6 Floppy Configuration In this section, you may configure the type of your floppy drive.

BIOS SETUP UTILITY Advanced Floppy Configuration Floppy A [1.44 MB 31 2"] Select the type of floppy drive connected to the system. +F1 F9 F10 ESC Select Screen Select Item Change Option General Help Load Defaults Save and Exit Exit v02.54 (C) Copyright 1985-2005, American Megatrends, Inc. 3.3.7 Super IO Configuration BIOS SETUP UTILITY Advanced Configure Super IO Chipset OnBoard Floppy Controller Serial Port Address Infrared Port Address Parallel Port Address Parallel Port Mode EPP Version ECP Mode DMA Channel Parallel Port IRQ [Enabled] [3F8 / IRQ4] [Disabled] [378] [ECP + EPP] [1.9] [DMA3] [IRQ7] Allow BIOS to Enable or Disable Floppy Controller. +F1 F9 F10 ESC Select Screen Select Item Change Option General Help Load Defaults Save and Exit Exit v02.54 (C) Copyright 1985-2005, American Megatrends, Inc. OnBoard Floppy Controller Use this item to enable or disable floppy drive controller. Serial Port Address Use this item to set the address for the onboard serial port or disable it.

Configuration options: [Disabled], [3F8 / IRQ4], [2F8 / IRQ3], [3E8 / IRQ4], [2E8 / IRQ3]. Infrared Port Address Use this item to set the address for the onboard infrared port or disable it. Configuration options: [Disabled], [2F8 / IRQ3], and [2E8 / IRQ3]. 39 Parallel Port Address Use this item to set the address for the onboard parallel port or disable it. Configuration options: [Disabled], [378], and [278]. Parallel Port Mode Use this item to set the operation mode of the parallel port. The default value is [ECP+EPP]. If this option is set to [ECP+EPP], it will show the EPP version in the following item, "EPP Version". Configuration options: [Normal], [Bi-Directional], and [ECP+EPP]. EPP Version Use this item to set the EPP version. Configuration options: [1.9] and [1.7]. ECP Mode DMA Channel Use this item to set the ECP mode DMA channel. Configuration options: [DMA0], [DMA1], and [DMA3].

Parallel Port IRQ Use this item to set the IRQ for the parallel port. Configuration options: [IRQ5] and [IRQ7]. 3.3.8 USB Configuration BIOS SETUP UTILITY Advanced USB Configuration USB Controller USB 2.

0 Support Legacy USB Support [Enabled] [Enabled] [Disabled] To enable or disable the onboard USB controllers. +F1 F9 F10 ESC Select Screen Select Item Change Option General Help Load Defaults Save and Exit Exit v02.54 (C) Copyright 1985-2005, American Megatrends, Inc. USB Controller Use this item to enable or disable the use of USB controller. USB 2.0 Support Use this item to enable or disable the USB 2.0 support. @@etc. @@@@@@The default value is [Disabled]. You are allowed to enable this function only when you install 4-pin CPU fan.

Target CPU Temperature (C) The target temperature will be between 45 C and 65 C. The default value is [50]. Tolerance (C) The default value of tolerance is [2], which means the error of the target CPU temperature will be within 2 C. Target Fan Speed Use this option to set the target fan speed. You can freely adjust the target fan speed according to the target CPU temperature that you choose. The default value is [Fast]. Configuration options: [Fast], [Middle] and [Slow]. 41 3.5 Boot Screen In this section, it will display the available devices on your system for you to configure the boot settings and the boot priority. Main Advanced BIOS SETUP UTILITY H/W Monitor Boot Security Exit Boot Settings Boot Settings Configuration 1st Boot Device 2nd Boot Device 3rd Boot Device 4th Boot Device Hard Disk Drives Removable Drives CD/DVD Drives [1st Floppy Device] [HDD: PM - HDS722580VL] [CD / DVD: 3S - CD - ROM C] [USB] Configure Settings during System Boot.

Enter F1 F9 F10 ESC Select Screen Select Item Go to Sub Screen General Help Load Defaults Save and Exit Exit v02.54 (C) Copyright 1985-2005, American Megatrends, Inc. 3.5.1 Boot Settings Configuration BIOS SETUP UTILITY Boot Boot Settings Configuration Boot From Onboard LAN Bootup Num-Lock [Disabled] [On] To enable or disable the boot from onboard LAN feature.

+F1 F9 F10 ESC Select Screen Select Item Change Option General Help Load Defaults Save and Exit Exit v02.54 (C) Copyright 1985-2005, American Megatrends, Inc. Boot From Onboard LAN Use this item to enable or disable the Boot From Onboard LAN feature. Boot Up Num-Lock If this item is set to [On], it will automatically activate the Numeric Lock function after boot-up. 42 3.

6 Security Screen In this section, you may set or change the supervisor/user password for the system. For the user password, you may also clear it. BIOS SETUP UTILITY H/W Monitor Boot Main Advanced Security Exit Security Settings Supervisor Password : Not Installed User Password : Not Installed Change Supervisor Password Change User Password Install or Change the password. Enter F1 F9 F10 ESC Select Screen Select Item Change General Help Load Defaults Save and Exit Exit v02.54 (C) Copyright 1985-2005, American Megatrends, Inc. 43 3.7 Exit Screen Main Exit Options Save Changes and Exit Discard Changes and Exit Discard Changes Load Optimal Defaults Advanced BIOS SETUP UTILITY H/W Monitro Boot Security Exit system setup after saving the changes. Exit F10 key can be used for this operation. Enter F1 F9 F10 ESC Select Screen Select Item Go to Sub Screen General Help Load Defaults Save and Exit Exit v02.54 (C) Copyright 1985-2005, American Megatrends, Inc.

Save Changes and Exit When you select this option, it will pop-out the following message, "Save configuration changes and exit setup?" Select [OK] to save the changes and exit the BIOS SETUP UTILITY. Discard Changes and Exit When you select this option, it will pop-out the following message, "Discard changes and exit setup?" Select [OK] to exit the BIOS SETUP UTILITY without saving any changes. Discard Changes When you select this option, it will pop-out the following message, "Discard changes?" Select [OK] to discard all changes. Load Optimal Defaults When you select this option, it will pop-out the following message, "Load optimal defaults?" Select [OK] to load the default values for all the setup configurations. 44 Support Chapter 4 Software Suppor t 4 . 1 Install Operating System This motherboard supports various Microsoft® Windows® operating systems: 2000 / XP / XP 64-bit / VistaTM / VistaTM 64-bit. Because motherboard settings and hardware options vary, use the setup procedures in this chapter for general reference only. Refer to your OS documentation for more information. 4 . 2 Support CD Information The Support CD that came with the motherboard contains necessary drivers and useful utilities that enhance the motherboard features.

4 . 2 . 1 Running The Support CD To begin using the support CD, insert the CD into your CD-ROM drive. The CD automatically displays the Main Menu if "AUTORUN" is enabled in your computer. If the Main Menu did not appear automatically, locate and double click on the file "ASSETUP.

EXE" from the BIN folder in the Support CD to display the menus. 4 . 2 . 2 Drivers Menu The Drivers Menu shows the available devices drivers if the system detects installed devices. Please install the necessary drivers to activate the devices.

4 . 2 . 3 Utilities Menu The Utilities Menu shows the applications software that the motherboard supports. Click on a specific item then follow the installation wizard to install it. 4.2.4 Contact Information If you need to contact ASRock or want to know more about ASRock, welcome to visit ASRock's website at http://www.asrock.com; or you may contact your dealer for further information. 45 .