

## GA-Z77-DS3H (rev. 1.0)

Intel® Z77 Chipset

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| <b>CPU</b>              | <ol style="list-style-type: none"><li>1. Support for Intel® Core™ i7 processors/Intel® Core™ i5 processors/ Intel® Core™ i3 processors/Intel® Pentium® processors/Intel® Celeron® processors in the LGA1155 package</li><li>2. L3 cache varies with CPU</li></ol> <p>(Some Intel® Core™ processors require a graphic card, please refer "CPU support List" for more information.)</p>   |
| <b>Chipset</b>          | <ol style="list-style-type: none"><li>1. Intel® Z77 Express Chipset</li></ol>   |
| <b>Memory</b>           | <ol style="list-style-type: none"><li>1. 4 x 1.5V DDR3 DIMM sockets supporting up to 32 GB of system memory<ul style="list-style-type: none"><li>* Due to Windows 32-bit operating system limitation, when more than 4 GB of physical memory is installed, the actual memory size displayed will be less than 4 GB.</li></ul></li><li>2. Dual channel memory architecture</li><li>3. Support for DDR3 1600/1333/1066 MHz memory modules</li><li>4. Support for non-ECC memory modules</li><li>5. Support for Extreme Memory Profile (XMP) memory modules</li></ol> <p>(Please refer "Memory Support List" for more information.)</p>                            |
| <b>Onboard Graphics</b> | <p>Integrated Graphics Processor:</p> <ol style="list-style-type: none"><li>1. 1 x D-Sub port</li><li>2. 1 x DVI-D port, supporting a maximum resolution of 1920x1200<ul style="list-style-type: none"><li>* The DVI-D port does not support D-Sub connection by adapter.</li></ul></li><li>3. 1 x HDMI port, supporting a maximum resolution of 1920x1200</li></ol>  |
| <b>Audio</b>            | <ol style="list-style-type: none"><li>1. Realtek ALC887 codec</li><li>2. High Definition Audio</li><li>3. 2/4/5.1/7.1-channel<ul style="list-style-type: none"><li>* To configure 7.1-channel audio, you have to use an HD front panel audio module and enable the multi-channel audio feature through the audio driver.</li></ul></li><li>4. Support for S/PDIF Out</li></ol>  |
| <b>LAN</b>              | <ol style="list-style-type: none"><li>1. Atheros GbE LAN chip (10/100/1000 Mbit)</li></ol>  |
| <b>Expansion Slots</b>  | <ol style="list-style-type: none"><li>1. 1 x PCI Express x16 slot, running at x16 (PCIEX16)<br/>(The PCIEX16 slot conforms to PCI Express 3.0 standard.)<ul style="list-style-type: none"><li>* For optimum performance, if only one PCI Express graphics card is to be installed, be sure to install it in the PCIEX16 slot.</li><li>* The PCI Express x16 slot supports up to PCI Express 2.0 standard when an Intel 32nm (Sandy Bridge) CPU is installed.</li></ul></li><li>2. 1 x PCI Express x16 slot, running at x4 (PCIEX4)</li><li>3. 2 x PCI Express x1 slots<br/>(The PCIEX4 and PCI Express x1 slots conform to PCI Express 2.0 standard.)</li></ol> |

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|                                  | <ol style="list-style-type: none"> <li>2 x PCI slots</li> </ol>  |
| <b>Multi-Graphics Technology</b> | <ol style="list-style-type: none"> <li>Support for AMD CrossFireX™ technology <ul style="list-style-type: none"> <li>The PCIEX16 slot operates at up to x4 mode when AMD CrossFireX™ is enabled.</li> </ul> </li> </ol>  |
| <b>Storage Interface</b>         | <p>Chipset:</p> <ol style="list-style-type: none"> <li>2 x SATA 6Gb/s connectors (SATA3 0/1) supporting up to 2 SATA 6Gb/s devices</li> <li>3 x SATA 3Gb/s connectors (SATA2 2/3/4) supporting up to 3 SATA 3Gb/s devices</li> <li>1 x mSATA connector</li> <li>Support for RAID 0, RAID 1, RAID 5, and RAID 10 <ul style="list-style-type: none"> <li>When a RAID set is built across the SATA 6Gb/s and SATA 3Gb/s channels, the system performance of the RAID set may vary depending on the devices being connected.</li> </ul> </li> </ol>  |
| <b>USB</b>                       | <p>Chipset:</p> <ol style="list-style-type: none"> <li>Up to 4 USB 3.0/2.0 ports (2 ports on the back panel, 2 ports available through the internal USB header) <ul style="list-style-type: none"> <li>In Windows XP, the Intel USB 3.0 ports can support up to USB 2.0 transfer speed.</li> </ul> </li> <li>Up to 8 USB 2.0/1.1 ports (4 ports on the back panel, 4 ports available through the internal USB headers)</li> </ol>  |
| <b>Internal I/O Connectors</b>   | <ol style="list-style-type: none"> <li>1 x 24-pin ATX main power connector</li> <li>1 x 4-pin ATX 12V power connector</li> <li>2 x SATA 6Gb/s connectors</li> <li>3 x SATA 3Gb/s connectors</li> <li>1 x mSATA connector</li> <li>1 x CPU fan header</li> <li>3 x system fan headers</li> <li>1 x front panel header</li> <li>1 x front panel audio header</li> <li>1 x S/PDIF Out header</li> <li>2 x USB 2.0/1.1 headers</li> <li>1 x USB 3.0/2.0 header</li> <li>1 x Clear CMOS jumper</li> <li>1 x serial port header</li> <li>1 x Trusted Platform Module (TPM) header</li> </ol> |
| <b>Back Panel Connectors</b>     | <ol style="list-style-type: none"> <li>1 x PS/2 keyboard/mouse port</li> <li>1 x D-Sub port</li> <li>1 x DVI-D port</li> <li>1 x HDMI port</li> <li>4 x USB 2.0/1.1 ports</li> <li>2 x USB 3.0/2.0 ports</li> <li>1 x RJ-45 port</li> <li>3 x audio jacks (Line In/Line Out/Microphone)</li> </ol>   |
| <b>I/O Controller</b>            | <ol style="list-style-type: none"> <li>ITE I/O Controller Chip</li> </ol>  |
| <b>H/W Monitoring</b>            | <ol style="list-style-type: none"> <li>System voltage detection</li> <li>CPU/System temperature detection</li> <li>CPU/System fan speed detection</li> <li>CPU overheating warning</li> <li>CPU/System fan fail warning</li> <li>CPU/System fan speed control <ul style="list-style-type: none"> <li>Whether the CPU/system fan speed control function is supported will depend on the CPU/system cooler you install.</li> </ul> </li> </ol>   |
| <b>BIOS</b>                      | <ol style="list-style-type: none"> <li>2 x 64 Mbit flash</li> <li>Use of licensed AMI EFI BIOS</li> <li>Support for DualBIOS™</li> <li>PnP 1.0a, DMI 2.0, SM BIOS 2.6, ACPI 2.0a</li> </ol>  |
| <b>Unique Features</b>           | <ol style="list-style-type: none"> <li>Support for @BIOS</li> <li>Support for Q-Flash</li> <li>Support for Xpress Install</li> <li>Support for Xpress Recovery2</li> <li>Support for eXtreme Hard Drive (X.H.D)</li> <li>Support for Auto Green</li> </ol>   |

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|                         | 7. Support for ON/OFF Charge<br>8. Support for Q-Share<br>9. Support for LAN Optimizer (Intelligent optimization network management tool)   |
| <b>Bundle Software</b>  | 1. Norton Internet Security (OEM version)<br>2. Intel® Smart Response Technology<br>3. Intel® Rapid Start Technology<br>4. Intel® Smart Connect Technology  |
| <b>Operating System</b> | 1. Support for Microsoft® Windows 7/XP  |
| <b>Form Factor</b>      | 1. ATX Form Factor; 30.5cm x 21.5cm   |
| <b>Remark</b>           | 1. Due to different Linux support condition provided by chipset vendors, please download Linux driver from chipset vendors' website or 3rd party website.<br>2. Most hardware/software vendors may no longer offer drivers to support Win9X/ME/2000/XP SP1/SP2. If drivers are available from the vendors, we will update them on the GIGABYTE website. |

\* The entire materials provided herein are for reference only. GIGABYTE reserves the right to modify or revise the content at anytime without prior notice.

\* Advertised performance is based on maximum theoretical interface values from respective Chipset vendors or organization who defined the interface specification. Actual performance may vary by system configuration.

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\* Due to standard PC architecture, a certain amount of memory is reserved for system usage and therefore the actual memory size is less than the stated amount.