

GA-Z87M-HD3 (rev. 1.0)

Intel® Z87 Chipset [Print](#) | [Microsite](#)



- Supports 4th Generation Intel® Core™ processors
- GIGABYTE Ultra Durable™ 4 Plus Technology
- GIGABYTE Hybrid Digital Power Engine
- GIGABYTE UEFI DualBIOS™
- 15µ gold plated CPU socket
- All solid capacitors
- GIGABYTE On/Off Charge™ for USB devices
- LAN with high ESD Protection
- HDMI 1.4, DVI, D-SUB

[Add to Comparison List](#)

[Product Comparison](#)

[Where to Buy](#)



[Overview](#)

[Specification](#)

[Support & Downloads](#)

[FAQ](#)

[News/Awards](#)

[Learn more](#)



<p>CPU</p>	<ol style="list-style-type: none"> 1. Support for Intel® Core™ i7 processors/Intel® Core™ i5 processors/Intel® Core™ i3 processors/Intel® Pentium® processors/Intel® Celeron® processors in the LGA1150 package 2. L3 cache varies with CPU <p>(Please refer "CPU Support List" for more information.)</p>
<p>Chipset</p>	<ol style="list-style-type: none"> 1. Intel® Z87 Express Chipset
<p>Memory</p>	<ol style="list-style-type: none"> 1. 2 x 1.5V DDR3 DIMM sockets supporting up to 16 GB of system memory * Due to a 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 the size of the physical memory installed. 2. Dual channel memory architecture 3. Support for DDR3 2933(O.C.)/1600/1333 MHz memory modules 4. Support for non-ECC memory modules 5. Support for Extreme Memory Profile (XMP) memory modules <p>(Please refer "Memory Support List" for more information.)</p>
<p>Onboard Graphics</p>	<p>Integrated Graphics Processor:</p> <ol style="list-style-type: none"> 1. 1 x D-Sub port, supporting a maximum resolution of 1920x1200@60 Hz 2. 1 x DVI-D port, supporting a maximum resolution of 1920x1200@60 Hz * The DVI-D port does not support D-Sub connection by adapter. 3. 1 x HDMI port, supporting a maximum resolution of 4096x2160@24 Hz * Support for HDMI 1.4a version. 4. Maximum shared memory of 1 GB

Audio	<ol style="list-style-type: none"> 1. Realtek® ALC887 codec 2. High Definition Audio 3. 2/4/5.1/7.1-channel <p>* 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.</p>
LAN	<ol style="list-style-type: none"> 1. Realtek® GbE LAN chip (10/100/1000 Mbit)
Expansion Slots	<ol style="list-style-type: none"> 1. 1 x PCI Express x16 slot, running at x16 (The PCI Express x16 slot conforms to PCI Express 3.0 standard.) 2. 2 x PCI Express x1 slots (The PCI Express x1 slot conforms to PCI Express 2.0 standard.) 3. 1 x PCI slot
Storage Interface	<p>Chipset:</p> <ol style="list-style-type: none"> 1. 6 x SATA 6Gb/s connectors supporting up to 6 SATA 6Gb/s devices 2. Support for RAID 0, RAID 1, RAID 5, and RAID 10
USB	<p>Chipset:</p> <ol style="list-style-type: none"> 1. Up to 6 USB 3.0/2.0 ports (4 ports on the back panels, 2 ports available through the internal USB header) 2. Up to 6 USB 2.0/1.1 ports (2 ports on the back panel, 4 ports available through the internal USB headers)
Internal I/O Connectors	<ol style="list-style-type: none"> 1. 1 x 24-pin ATX main power connector 2. 1 x 8-pin ATX 12V power connector 3. 6 x SATA 6Gb/s connectors 4. 1 x CPU fan header 5. 1 x system fan header 6. 1 x front panel header 7. 1 x front panel audio header 8. 1 x USB 3.0/2.0 header 9. 2 x USB 2.0/1.1 headers 10. 1 x serial port header 11. 1 x parallel port header 12. 1 x Clear CMOS jumper
Back Panel Connectors	<ol style="list-style-type: none"> 1. 1 x PS/2 keyboard/mouse port 2. 1 x D-Sub port 3. 1 x DVI-D port 4. 1 x HDMI port 5. 4 x USB 3.0/2.0 ports 6. 2 x USB 2.0/1.1 ports 7. 1 x RJ-45 port 8. 3 x audio jacks (Line In/Line Out/Microphone)
I/O Controller	<ol style="list-style-type: none"> 1. iTE® I/O Controller Chip
H/W Monitoring	<ol style="list-style-type: none"> 1. System voltage detection 2. CPU/System temperature detection 3. CPU/System fan speed detection 4. CPU/System overheating warning

	<ol style="list-style-type: none"> CPU/System fan fail warning CPU/System fan speed control <p>* Whether the fan speed control function is supported will depend on the cooler you install.</p>
BIOS	<ol style="list-style-type: none"> 2 x 64 Mbit flash Use of licensed AMI EFI BIOS Support for DualBIOS™ PnP 1.0a, DMI 2.0, SM BIOS 2.6, ACPI 2.0a
Unique Features	<ol style="list-style-type: none"> Support for Q-Flash Support for Xpress Install Support for APP Center <p>* Available applications in APP Center may differ by motherboard model. Supported functions of each application may also differ depending on motherboard specifications.</p> <p>@BIOS EasyTune EZ Setup USB Blocker</p> <ol style="list-style-type: none"> Support for ON/OFF Charge
Bundle Software	<ol style="list-style-type: none"> Norton Internet Security (OEM version) Intel® Rapid Start Technology Intel® Smart Connect Technology Intel® Smart Response Technology
Operating System	<ol style="list-style-type: none"> Support for Windows 8/7
Form Factor	<ol style="list-style-type: none"> Micro ATX Form Factor; 24.4cm x 17.4cm
Remark	<ol style="list-style-type: none"> Due to different Linux support condition provided by chipset vendors, please download Linux driver from chipset vendors' website or 3rd party website. 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.

* All trademarks and logos are the properties of their respective holders.

* 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.