$GA-Z87X-D3H \ \ (rev.\ 1.0)$

Intel® Z87 Chipset

Microsite



- Supports 4th Generation Intel[®] CoreTM processors
- All IR Digital Power design
- GIGABYTE UEFI DualBIOS™
- 15μ gold plated CPU socket
- Multi-GPU Support
- · All solid capacitors
- GIGABYTE On/Off Charge $^{\text{\tiny{TM}}}$ 2 for USB devices
- Intel® LAN with high ESD Protection
- Supports CFOS Speed Internet Accelerator Software
- 10 USB 3.0 ports

Where to Buy



СРИ	 Support for Intel[®] Core[™] i7 processors/Intel[®] Core[™] i5 processors/Intel[®] Core[™] i3 processors/Intel[®] Pentium[®] processors/Intel[®] Celeron[®] processors in the LGA1150 package L3 cache varies with CPU (Please refer "CPU Support List" for more information.)
Chipset	1. Intel® Z87 Express Chipset
Memory	 4 x 1.5V DDR3 DIMM sockets supporting up to 32 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. Dual channel memory architecture Support for DDR3 2933(O.C.)/1600/1333 MHz memory modules Support for non-ECC memory modules Support for Extreme Memory Profile (XMP) memory modules (Please refer "Memory Support List" for more information.)
Onboard Graphics	Integrated Graphics Processor: 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	 Realtek[®] ALC892 codec High Definition Audio 2/4/5.1/7.1-channel

	4. Support for S/PDIF In
	5. Support for S/PDIF Out
LAN	1. Intel [®] GbE LAN chip (10/100/1000 Mbit)
	 1. 1 x PCI Express x16 slot, running at x16 (PCIEX16) * For optimum performance, if only one PCI Express graphics card is to be installed, be sure to install it in the PCIEX16 slot.
	 2. 1 x PCI Express x16 slot, running at x8 (PCIEX8) (The PCIEX16 and PCIEX8 slots conform to PCI Express 3.0 standard.) * The PCIEX8 slot shares bandwidth with the PCIEX16 slot. When the PCIEX8 slot is populated, the PCIEX16 slot will operate at up to x8 mode.
Expansion Slots	3. 1 x PCI Express x16 slot, running at x4 (PCIEX4) * The PCIEX4 slot shares bandwidth with all PCI Express x1 slots. All PCI Express x1 slots will become unavailable when a PCIe x4 expansion card is installed.
	* When installing a x8 or above card in the PCIEX4 slot, make sure to set PCIE Slot Configuration in BIOS Setup to x4.
	4. 3 x PCI Express x1 slots (The PCIEX4 and PCI Express x1 slots conform to PCI Express 2.0 standard.)
	5. 1 x PCI slot
Multi-Graphics Technology	1. Support for 2-Way AMD CrossFire™/NVIDIA® SLI™ technology (PCIEX16 and PCIEX8)
	Chipset:
Storage Interface	 6 x SATA 6Gb/s connectors (SATA3 0~SATA3 5) supporting up to 6 SATA 6Gb/s devices Support for RAID 0, RAID 1, RAID 5, and RAID 10
	Chipset:
USB	 Up to 2 USB 3.0/2.0 ports (available through the internal USB headers) Up to 6 USB 2.0/1.1 ports (2 ports on the back panel, 4 ports available through the internal USB headers)
	Chipset + 2 Renesas® uPD720210 USB 3.0 Hubs:
	1. Up to 8 USB 3.0/2.0 ports (6 ports on the back panel, 2 ports available through the internal USB headers)
Internal I/O Connectors	1. 1 x 24-pin ATX main power connector
	2. 1 x 8-pin ATX 12V power connector
	3. 6 x SATA 6Gb/s connectors4. 1 x CPU fan header
	5. 3 x system fan headers
	6. 1 x water cooling fan header (CPU_OPT)
	7. 1 x front panel header8. 1 x front panel audio header
	9. 1 x S/PDIF Out header
	10. 1 x S/PDIF In header
	11. 2 x USB 3.0/2.0 headers
	12. 2 x USB 2.0/1.1 headers 13. 1 x serial port header
	14. 1 x Clear CMOS jumper

	15. 1 x Trusted Platform Module (TPM) header
Back Panel Connectors	 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. 6 x USB 3.0/2.0 ports 6. 2 x USB 2.0/1.1 ports 7. 1 x RJ-45 port 8. 1 x optical S/PDIF Out connector 9. 5 x audio jacks (Center/Subwoofer Speaker Out, Rear Speaker Out, Side Speaker Out, Line In/Line Out, Microphone)
I/O Controller	1. iTE [®] I/O Controller Chip
H/W Monitoring	 System voltage detection CPU/System temperature detection CPU/CPU OPT/System fan speed detection CPU/System overheating warning CPU/CPU OPT/System fan fail warning CPU/CPU OPT/System fan speed control * Whether the fan speed control function is supported will depend on the cooler you install.
BIOS	 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	 Support for Q-Flash Support for Xpress Install Support for APP Center * Available applications in APP Center may differ by motherboard model. Supported functions of each application may also differ depending on motherboard specifications. ßBIOS EasyTune EZ Setup ON/OFF Charge2 USB Blocker
Bundle Software	 Norton Internet Security (OEM version) Intel[®] Rapid Start Technology Intel[®] Smart Connect Technology Intel[®] Smart Response Technology cFosSpeed
Operating System	1. Support for Windows 8/7
Form Factor	1. ATX Form Factor; 30.5cm x 24.4cm
Remark	

- 1. Due to different Linux support condition provided by chipset vendors, please download Linux driver from chipset vendors' website or 3rd party website.
- 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.
- * 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.