Product List

Intel Socket 2011
Intel Socket 1366
Intel Socket 1155
Intel Socket 1156
Intel Socket 775
Intel BGA 559
Intel Socket 479/437

AMD Socket FM2
AMD Socket FM1
AMD Socket AM3+
AMD Socket AM3
AMD Socket AM2+
AMD Socket AM2
AMD BGA FT1

Other Sockets

Downloads

Warranty Service

Technical Support

Social Media

GIGABYTE Channel

GA-Z77X-UP4 TH (rev. 1.0)

Intel® Z77 Chipset

Print | Microsite

Add to Comparison List

Product Comparison

Where to Buy

CPU Support List

Memory Support List

Overview | Specification | Downloads | FAQ | News/Awards | Learn more

RSS

CPU	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 2. L3 cache varies with CPU (Some Intel® Core™ processors require a graphic card, please refer "CPU support List" for more information.)
Chipset	1. Intel® Z77 Express Chipset
Memory	1. 4 x 1.5V DDR3 DIMM sockets supporting up to 32 GB of system memory * 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. 2. Dual channel memory architecture 3. Support for DDR3 2400+ (OC)/1600/1333/1066 MHz memory modules 4. Support for non-ECC memory modules 5. 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 2. 1 x DVI-D port, supporting a maximum resolution of 1920x1200 * The DVI-D port does not support D-Sub connection by adapter. * Simultaneous output for DVI-D and the MDP2 Thunderbolt port is not supported. 3. 1 x HDMI port, supporting a maximum resolution of 1920x1200 Intel DSL3510L chip: 1. 2 Thunderbolt ports (MDP1/MDP2) support for Mini-DisplayPort and Thunderbolt monitor(s), and supporting a maximum resolution of 2560x1600. * When a monitor connected to the DVI-D port, the MDP2 Thunderbolt port can support Thunderbolt storage device(s) only. * Due to PC architecture I/O resources limitation, the amount of the Thunderbolt devices can be used is dependent on the quantity of PCI Express and PCI devices be installed. (Refer to Chapter 1-7, "Back Panel Connectors", and Chapter 2, "Peripherals\Intel(R) Thunderbolt" for more information.)

Audio	1. Realtek ALC892 codec 2. High Definition Audio 3. 2/4/5.1/7.1-channel 4. Support for S/PDIF Out 5. Support for S/PDIF In
LAN	1. 1 x Realtek GbE LAN chip (10/100/1000 Mbit)
Expansion Slots	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 PCIEX8 slot shares bandwidth with the PCIEX16 slot. When the PCIEX8 slot is populated, the PCIEX16 slot will operate at up to x8 mode. 3. 1 x PCI Express x16 slot, running at x4 (PCIEX4) * The PCIEX4 slot is available only when an Intel 22nm (Ivy Bridge) CPU is installed. * The PCIEX4 slot shares bandwidth with the PCIEX8 and PCIEX16 slots. When the PCIEX4 slot is populated, the PCIEX16 slot will operate at up to x8 mode and the PCIEX8 will operate at up to x4 mode. (The PCIEX16, PCIEX8 and PCIEX4 slots conform to PCI Express 3.0 standard.) * Whether PCI Express 3.0 is supported depends on CPU and graphics card compatibility. 4. 3 x PCI Express x1 slots (The PCIEX1 slot conforms to PCI Express 2.0 standard.) 5. 1 x PCI slot
Multi-Graphics Technology	1. Support for AMD CrossFireX™ / NVIDIA SLI technology
Storage Interface	Chipset: 1. 2 x SATA 6Gb/s connectors (SATA3 0/SATA3 1) supporting up to 2 SATA 6Gb/s devices 2. 4 x SATA 3Gb/s connectors (SATA2 2~SATA2 5) supporting up to 4 SATA 3Gb/s devices 3. 1 x mSATA connector * The SATA2 5 connector will become unavailable when the mSATA connector is installed with a solid state drive. 4. Support for RAID 0, RAID 1, RAID 5, and RAID 10 * 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.
USB	Chipset: 1. Up to 4 USB 3.0/2.0 ports (2 ports on the back panel, 2 ports available through the internal USB headers) * In Windows XP, the Intel USB 3.0 ports can support up to USB 2.0 transfer speed. 2. Up to 6 USB 2.0/1.1 ports (available through the internal USB headers) VIA VL800 chip: 1. Up to 4 USB 3.0/2.0 ports on the back panel * Due to a Windows 7 limitation, please connect your USB device(s) to the USB 2.0/1.1 port(s) before the VIA USB 3.0 controller driver is installed.
Thunderbolt	Intel DSL3510L chip: 1. 2 Thunderbolt ports on the back panel Intel® Certified Thunderbolt™ Device
	1. 1 x 24-pin ATX main power connector 2. 1 x 8-pin ATX 12V power connector 3. 2 x SATA 6Gb/s connectors 4. 4 x SATA 3Gb/s connectors

Internal I/O Connectors	4. 4 x SATA 3Gb/s connectors 5. 1 x mSATA connector 6. 1 x CPU fan header 7. 4 x system fan headers 8. 1 x front panel header 9. 1 x front panel audio header 10. 1 x S/PDIF In header 11. 1 x S/PDIF Out header 12. 1 x USB 3.0/2.0 header 13. 3 x USB 2.0/1.1 headers 14. 1 x serial port header 15. 1 x Clear CMOS jumper 16. 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 Thunderbolt 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, Line In, Line Out, Mic In)
I/O Controller	1. iTE I/O Controller Chip
H/W Monitoring	1. System voltage detection 2. CPU/System temperature detection 3. CPU/System fan speed detection 4. CPU overheating warning 5. CPU/System fan fail warning 6. CPU/System fan speed control * Whether the CPU/system fan speed control function is supported will depend on the CPU/system cooler you install.
BIOS	1. 2 x 64 Mbit flash 2. Use of licensed AMI EFI BIOS 3. Support for DualBIOS™ 4. PnP 1.0a, DMI 2.0, SM BIOS 2.6, ACPI 2.0a
Unique Features	1. Support for @BIOS 2. Support for Q-Flash 3. Support for Xpress Install 4. Support for Xpress Recovery2 5. Support for EasyTune * Available functions in EasyTune may differ by motherboard model. 6. Support for eXtreme Hard Drive (X.H.D) 7. Support for Auto Green 8. Support for ON/OFF Charge 9. Support for Q-Share 10. Support for 3D Power 11. Support for EZ Setup 12. Support for Cloud Station
Bundle Software	1. Norton Internet Security (OEM version) 2. Intel® Smart Response Technology 3. Intel® Rapid Start Technology 4. LucidLogix Virtu MVP * Make sure the monitor cable has been connected to the integrated graphics port on the back panel.

Operating System	1. Support for Microsoft® Windows 8/7/XP
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.

Socket 1155 - Intel Z77 - GA-Z77X-UP4 TH (rev. 1.0)

N/A = Not support

Socket 1155

Motherboard									Model	GA-Z77X-UP4 TH
									PCB	1.0
vendor	CPU Model	Frequency	L3 Cache	GPU Frequency	Core Name	Process	Stepping	Wattage	BCLK	Since BIOS Version
Intel	Core i7-3770K	3.50GHz	8MB	650 MHz	Ivy Bridge	22nm	E1	77W	100	F5
Intel	Core i7-3770	3.40GHz	8MB	650 MHz	Ivy Bridge	22nm	E1	77W	100	F5
Intel	Core i7-3770S	3.10GHz	8MB	650 MHz	Ivy Bridge	22nm	E1	65W	100	F5
Intel	Core i7-3770T	2.50GHz	8MB	650 MHz	Ivy Bridge	22nm	E1	45W	100	F5
Intel	Core i5-3570	3.40GHz	6MB	650 MHz	Ivy Bridge	22nm	N0	77W	100	F5
Intel	Core i5-3570K	3.40GHz	6MB	650 MHz	Ivy Bridge	22nm	E1	77W	100	F5
Intel	Core i5-3570S	3.10GHz	6MB	650 MHz	Ivy Bridge	22nm	N0	65W	100	F5
Intel	Core i5-3570T	2.30GHz	6MB	650 MHz	Ivy Bridge	22nm	E1	45W	100	F5
Intel	Core i5-3550S	3.00GHz	6MB	650 MHz	Ivy Bridge	22nm	E1	65W	100	F5
Intel	Core i5-3550	3.30GHz	6MB	650 MHz	Ivy Bridge	22nm	E1	77W	100	F5
Intel	Core i5-3475S	2.90GHz	6MB	650 MHz	Ivy Bridge	22nm	E1	65W	100	F5
Intel	Core i5-3470	3.20GHz	6MB	650 MHz	Ivy Bridge	22nm	N0	77W	100	F5
Intel	Core i5-3470S	2.90GHz	6MB	650 MHz	Ivy Bridge	22nm	N0	65W	100	F5
Intel	Core i5-3470T	2.90GHz	3MB	650 MHz	Ivy Bridge	22nm	L1	35W	100	F5
Intel	Core i5-3450	3.10GHz	6MB	650 MHz	Ivy Bridge	22nm	E1	77W	100	F5
Intel	Core i5-3450S	2.80GHz	6MB	650 MHz	Ivy Bridge	22nm	E1	65W	100	F5
Intel	Core i5-3350P	3.10GHz	6MB	N/A	Ivy Bridge	22nm	N0	69W	100	F6
Intel	Core i5-3350P	3.10GHz	6MB	N/A	Ivy Bridge	22nm	E1	69W	100	F6
Intel	Core i5-3330	3.00GHz	6MB	650 MHz	Ivy Bridge	22nm	N0	77W	100	F6
Intel	Core i5-3330	3.00GHz	6MB	650 MHz	Ivy Bridge	22nm	E1	77W	100	F5
Intel	Core i5-3330S	2.70GHz	6MB	650 MHz	Ivy Bridge	22nm	E1	65W	100	F5
Intel	Core i3-3240	3.40GHz	3MB	350 MHz	Ivy Bridge	22nm	P0	55W	100	F6
Intel	Core i3-3240	3.40GHz	3MB	350 MHz	Ivy Bridge	22nm	L1	55W	100	F6
Intel	Core i3-3240T	2.90GHz	3MB	350 MHz	Ivy Bridge	22nm	P0	35W	100	F6
Intel	Core i3-3240T	2.90GHz	3MB	350 MHz	Ivy Bridge	22nm	L1	35W	100	F6
Intel	Core i3-3225	3.30GHz	3MB	350 MHz	Ivy Bridge	22nm	L1	55W	100	F6
Intel	Core i3-3220	3.30GHz	3MB	350 MHz	Ivy Bridge	22nm	N0	55W	100	F6

Intel	Core i3-3220	3.30GHz	3MB	350 MHz	Ivy Bridge	22nm	P0	55W	100	F6
Intel	Core i3-3220	3.30GHz	3MB	350 MHz	Ivy Bridge	22nm	E1	55W	100	F6
Intel	Core i3-3220	3.30GHz	3MB	350 MHz	Ivy Bridge	22nm	L1	55W	100	F6
Intel	Core i3-3220T	2.80GHz	3MB	350 MHz	Ivy Bridge	22nm	P0	35W	100	F6
Intel	Core i3-3220T	2.80GHz	3MB	350 MHz	Ivy Bridge	22nm	L1	35W	100	F6
Intel	Pentium G2120	3.10GHz	3MB	350 MHz	Ivy Bridge	22nm	P0	55W	100	F6
Intel	Pentium G2100T	2.60GHz	3MB	350 MHz	Ivy Bridge	22nm	P0	35W	100	F6
Intel	Core i7-2700K	3.50GHz	8MB	850 MHz	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Core i7-2600	3.40GHz	8MB	850 MHz	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Core i7-2600K	3.40GHz	8MB	850 MHz	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Core i7-2600S	2.80GHz	8MB	850 MHz	Sandy Bridge	32nm	D2	65W	100	F5
Intel	Core i5-2550K	3.40GHz	6MB	N/A	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Core i5-2500	3.30GHz	6MB	850 MHz	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Core i5-2500K	3.30GHz	6MB	850 MHz	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Core i5-2500S	2.70GHz	6MB	850 MHz	Sandy Bridge	32nm	D2	65W	100	F5
Intel	Core i5-2500T	2.30GHz	6MB	650 MHz	Sandy Bridge	32nm	D2	45W	100	F5
Intel	Core i5-2450P	3.20GHz	6MB	N/A	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Core i5-2405S	2.50GHz	6MB	850 MHz	Sandy Bridge	32nm	D2	65W	100	F5
Intel	Core i5-2400	3.10GHz	6MB	850 MHz	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Core i5-2400S	2.50GHz	6MB	850 MHz	Sandy Bridge	32nm	D2	65W	100	F5
Intel	Core i5-2390T	2.70GHz	3MB	650 MHz	Sandy Bridge	32nm	Q0	35W	100	F5
Intel	Core i5-2380P	3.10GHz	6MB	N/A	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Core i5-2320	3.00GHz	6MB	850 MHz	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Core i5-2310	2.90GHz	6MB	850 MHz	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Core i5-2300	2.80GHz	6MB	850 MHz	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Core i3-2130	3.40GHz	3MB	850 MHz	Sandy Bridge	32nm	D2	65W	100	F5
Intel	Core i3-2125	3.30GHz	3MB	850 MHz	Sandy Bridge	32nm	D2	65W	100	F5
Intel	Core i3-2120	3.30GHz	3MB	850 MHz	Sandy Bridge	32nm	Q0	65W	100	F5
Intel	Core i3-2120T	2.60GHz	3MB	650 MHz	Sandy Bridge	32nm	Q0	35W	100	F5
Intel	Core i3-2105	3.10GHz	3MB	850 MHz	Sandy Bridge	32nm	D2	65W	100	F5
Intel	Core i3-2100T	2.50GHz	3MB	650 MHz		32nm	Q0	35W	100	F5

					Sandy Bridge					
Intel	Core i3-2100	3.10GHz	3MB	850 MHz	Sandy Bridge	32nm	Q0	65W	100	F5
Intel	Pentium G870	3.10GHz	3MB	850 MHz	Sandy Bridge	32nm	Q0	65W	100	F5
Intel	Pentium G860	3.00GHz	3MB	850 MHz	Sandy Bridge	32nm	Q0	65W	100	F5
Intel	Pentium G860T	2.60GHz	3MB	650 MHz	Sandy Bridge	32nm	Q0	35W	100	F5
Intel	Pentium G850	2.90GHz	3MB	850 MHz	Sandy Bridge	32nm	Q0	65W	100	F5
Intel	Pentium G840	2.80GHz	3MB	850 MHz	Sandy Bridge	32nm	Q0	65W	100	F5
Intel	Pentium G640	2.80GHz	3MB	850 MHz	Sandy Bridge	32nm	Q0	65W	100	F5
Intel	Pentium G640T	2.40GHz	3MB	650 MHz	Sandy Bridge	32nm	Q0	35W	100	F5
Intel	Pentium G630	2.70GHz	3MB	850 MHz	Sandy Bridge	32nm	Q0	65W	100	F5
Intel	Pentium G630T	2.30GHz	3MB	650 MHz	Sandy Bridge	32nm	Q0	35W	100	F5
Intel	Pentium G620	2.60GHz	3MB	850 MHz	Sandy Bridge	32nm	Q0	65W	100	F5
Intel	Pentium G620T	2.20GHz	3MB	650 MHz	Sandy Bridge	32nm	Q0	35W	100	F5
Intel	Pentium G645	2.90GHz	3MB	850 MHz	Sandy Bridge	32nm	Q0	65W	100	F6
Intel	Pentium G645T	2.50GHz	3MB	650 MHz	Sandy Bridge	32nm	Q0	35W	100	F6
Intel	Celeron G555	2.70GHz	2MB	850 MHz	Sandy Bridge	32nm	Q0	65W	100	F6
Intel	Celeron G550T	2.20GHz	2MB	650 MHz	Sandy Bridge	32nm	Q0	35W	100	F6
Intel	Celeron G550	2.60GHz	2MB	850 MHz	Sandy Bridge	32nm	Q0	65W	100	F5
Intel	Celeron G540	2.50GHz	2MB	850 MHz	Sandy Bridge	32nm	Q0	65W	100	F5
Intel	Celeron G530	2.40GHz	2MB	850 MHz	Sandy Bridge	32nm	Q0	65W	100	F5
Intel	Celeron G530T	2.00GHz	2MB	650 MHz	Sandy Bridge	32nm	Q0	35W	100	F5
Intel	Celeron G465	1.90GHz	1.5MB	650 MHz	Sandy Bridge	32nm	Q0	35W	100	F6
Intel	Celeron G460	1.80GHz	1.5MB	650 MHz	Sandy Bridge	32nm	Q0	35W	100	F5
Intel	Celeron G440	1.60GHz	1MB	650 MHz	Sandy Bridge	32nm	Q0	35W	100	F5
Intel	Xeon E3-1290v2	3.70GHz	8MB	N/A	Ivy Bridge	22nm	E1	87W	100	F5
Intel	Xeon E3-1280v2	3.60GHz	8MB	N/A	Ivy Bridge	22nm	E1	69W	100	F5
Intel	Xeon E3-1275v2	3.50GHz	8MB	650 MHz	Ivy Bridge	22nm	E1	77W	100	F5
Intel	Xeon E3-1270v2	3.50GHz	8MB	N/A	Ivy Bridge	22nm	E1	69W	100	F5
Intel	Xeon E3-1265Lv2	2.50GHz	8MB	650 MHz	Ivy Bridge	22nm	E1	45W	100	F5
Intel		3.40GHz	8MB	650 MHz	Ivy Bridge	22nm	E1	77W	100	F5

	Xeon E3-1245v2									
Intel	Xeon E3-1240v2	3.40GHz	8MB	N/A	Ivy Bridge	22nm	E1	69W	100	F5
Intel	Xeon E3-1230v2	3.30GHz	8MB	N/A	Ivy Bridge	22nm	E1	69W	100	F5
Intel	Xeon E3-1225v2	3.20GHz	8MB	650 MHz	Ivy Bridge	22nm	E1	77W	100	F5
Intel	Xeon E3-1220Lv2	2.30GHz	3MB	N/A	Ivy Bridge	22nm	L1	17W	100	F5
Intel	Xeon E3-1220v2	3.10GHz	8MB	N/A	Ivy Bridge	22nm	E1	69W	100	F5
Intel	Xeon E3-1275	3.40GHz	8MB	850 MHz	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Xeon E3-1245	3.30GHz	8MB	850 MHz	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Xeon E3-1235	3.20GHz	8MB	850 MHz	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Xeon E3-1225	3.10GHz	6MB	850 MHz	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Xeon E3-1280	3.50GHz	8MB	N/A	Sandy Bridge	32nm	D2	95W	100	F5
Intel	Xeon E3-1270	3.40GHz	8MB	N/A	Sandy Bridge	32nm	D2	80W	100	F5
Intel	Xeon E3-1240	3.30GHz	8MB	N/A	Sandy Bridge	32nm	D2	80W	100	F5
Intel	Xeon E3-1230	3.20GHz	8MB	N/A	Sandy Bridge	32nm	D2	80W	100	F5
Intel	Xeon E3-1220L	2.20GHz	3MB	N/A	Sandy Bridge	32nm	D2	20W	100	F5
Intel	Xeon E3-1220	3.10GHz	6MB	N/A	Sandy Bridge	32nm	D2	80W	100	F5