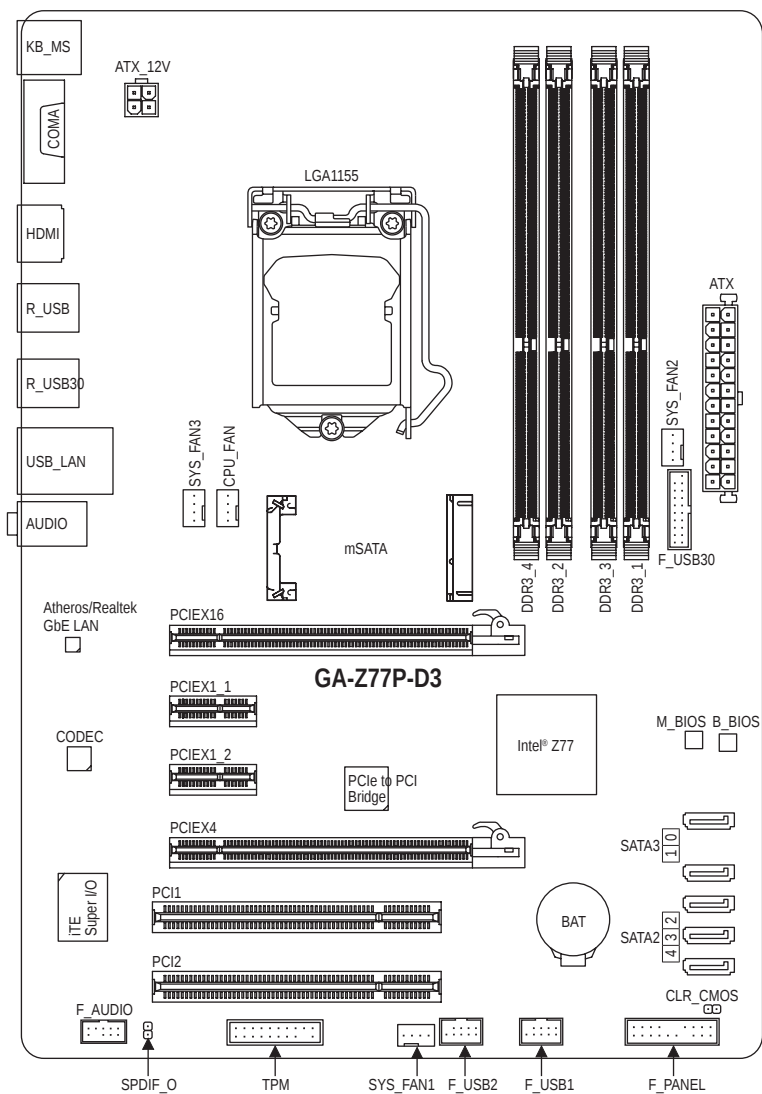
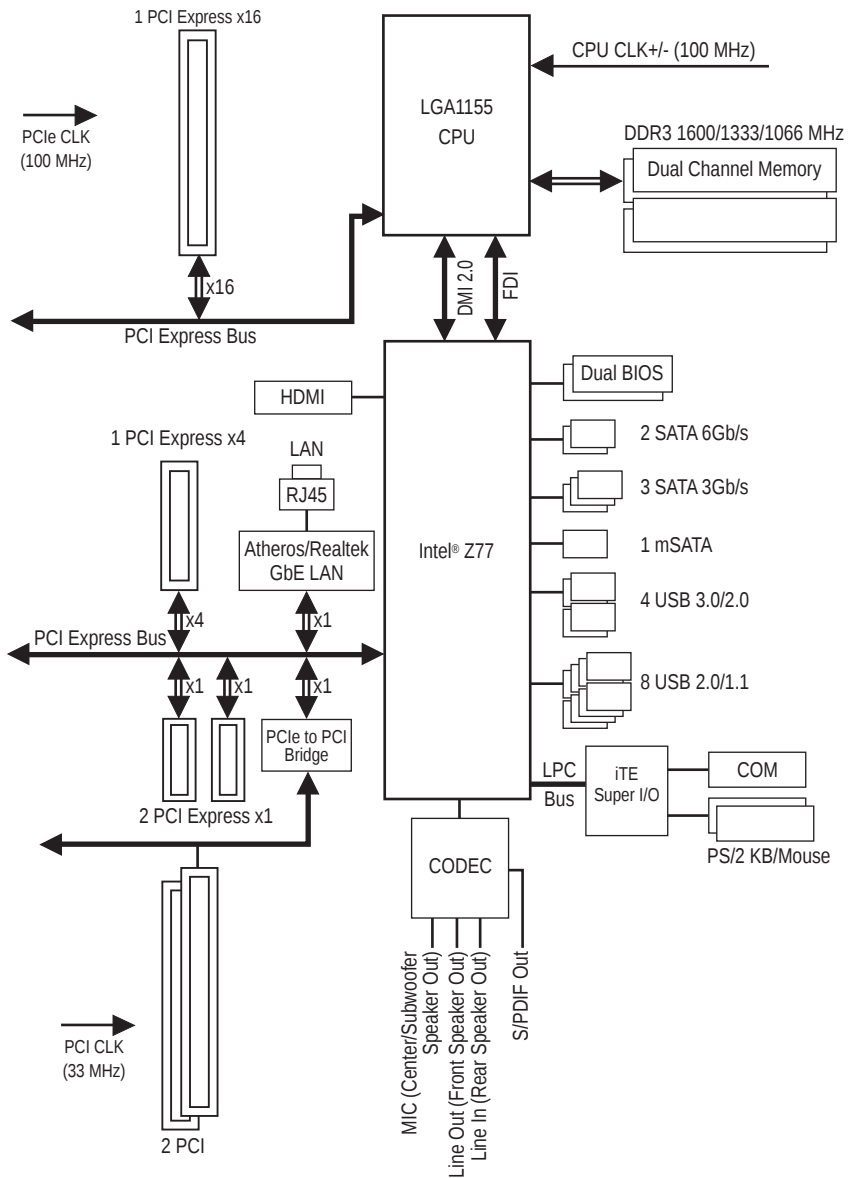


GA-Z77P-D3 Motherboard Layout



GA-Z77P-D3 Motherboard Block Diagram



Product Specifications

 CPU	- Support for Intel® Core™ i7 processors/Intel® Core™ i5 processors/Intel® Core™ i3 processors/Intel® Pentium® processors/Intel® Celeron® processors in the LGA1155 package (Go to GIGABYTE's website for the latest CPU support list.) - L3 cache varies with CPU
 Chipset	Intel® Z77 Express Chipset
 Memory	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. - Dual channel memory architecture - Support for DDR3 1600/1333/1066 MHz memory modules * To support DDR3 1600 MHz, you must install an Intel 22nm (Ivy Bridge) CPU. - Support for non-ECC memory modules - Support for Extreme Memory Profile (XMP) memory modules (Go to GIGABYTE's website for the latest supported memory speeds and memory modules.)
 Onboard Graphics	- Integrated Graphics Processor: - 1 x HDMI port, supporting a maximum resolution of 1920x1200
 Audio	- Realtek ALC887 codec - High Definition Audio 2/4/5.1/7.1-channel * 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. - Support for S/PDIF Out
 LAN	Atheros/Realtek GbE LAN chip (10/100/1000 Mbit)
 Expansion Slots	1 x PCI Express x16 slot, running at x16 (PCIEX16) (The PCIEX16 slot conforms to PCI Express 3.0 standard.) * For optimum performance, if only one PCI Express graphics card is to be installed, be sure to install it in the PCIEX16 slot. * The PCI Express x16 slot supports up to PCI Express 2.0 standard when an Intel 32nm (Sandy Bridge) CPU is installed. 1 x PCI Express x16 slot, running at x4 (PCIEX4) 2 x PCI Express x1 slots (The PCIEX4 and PCI Express x1 slots conform to PCI Express 2.0 standard.) 2 x PCI slots
 Multi-Graphics Technology	- Support for AMD CrossFireX™ technology * The PCIEX16 slot operates at up to x4 mode when AMD CrossFireX™ is enabled.

	Storage Interface ♦	♦ Chipset: - 2 x SATA 6Gb/s connectors (SATA3 0/1) supporting up to 2 SATA 6Gb/s devices - 3 x SATA 3Gb/s connectors (SATA2 2/3/4) supporting up to 3 SATA 3Gb/s devices - 1 x mSATA connector - 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: - Up to 4 USB 3.0/2.0 ports (2 ports on the back panel, 2 ports available through the internal USB header) * In Windows XP, the Intel USB 3.0 ports can support up to USB 2.0 transfer speed. - Up to 8 USB 2.0/1.1 ports (4 ports on the back panel, 4 ports available through the internal USB header)
	Internal Connectors ♦	♦ 1 x 24-pin ATX main power connector ♦ 1 x 4-pin ATX 12V power connector ♦ 2 x SATA 6Gb/s connectors ♦ 3 x SATA 3Gb/s connectors ♦ 1 x mSATA connector ♦ 1 x CPU fan header ♦ 3 x system fan headers ♦ 1 x front panel header ♦ 1 x front panel audio header ♦ 1 x S/PDIF Out header ♦ 1 x USB 3.0/2.0 header ♦ 2 x USB 2.0/1.1 headers ♦ 1 x Clear CMOS jumper ♦ 1 x Trusted Platform Module (TPM) header
	Back Panel Connectors ♦	♦ 1 x PS/2 mouse port ♦ 1 x PS/2 Keyboard port ♦ 1 x serial port ♦ 1 x HDMI port ♦ 2 x USB 3.0/2.0 ports ♦ 4 x USB 2.0/1.1 ports ♦ 1 x RJ-45 port ♦ 3 x audio jacks (Line In/Line Out/Microphone)
	I/O Controller ♦	♦ iTE I/O Controller Chip

	Hardware Monitor	◆ System voltage detection ◆ CPU/System temperature detection ◆ CPU/System fan speed detection ◆ CPU overheating warning ◆ CPU/System fan fail warning ◆ 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	◆ 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 @BIOS ◆ Support for Q-Flash ◆ Support for Xpress Install ◆ Support for Xpress Recovery2 ◆ Support for eXtreme Hard Drive (X.H.D) ◆ Support for Auto Green ◆ Support for ON/OFF Charge ◆ Support for Q-Share
	Bundled Software	◆ Norton Internet Security (OEM version) ◆ Intel® Rapid Start Technology ◆ Intel® Smart Connect Technology ◆ Intel® Smart Response Technology
	Operating System	◆ Support for Microsoft® Windows 7/XP
	Form Factor	◆ ATX Form Factor; 30.5cm x 21.5cm

* GIGABYTE reserves the right to make any changes to the product specifications and product-related information without prior notice.