# H77M-ITX Intel® H77 Chipset



	Compatible with	Detail Specification	
		Platform	- Mini-ITX Form Factor: 6.7-in x 6.7-in, 17.0 cm x 17.0 cm - All Solid Capacitor design (100% Japan-made high-quality Conductive Polymer Capacitors)
	Windows 7	CPU	- Supports 3 <sup>std</sup> and 2 <sup>std</sup> Generation Intel <sup>®</sup> Core <sup>TM</sup> 17 / 15 / 13 in LGA1155 Package - Digi Power Polsgo - 4 + 2 Power Phase Design - Supports Intel <sup>®</sup> Turbo Boost 2.0 Technology - Supports Intel <sup>®</sup> K-Series unlocked CPU
(intel) CHIPSET		Chinast	- Supports Hyper-Threading Technology     - Supports Hyper-Threading Technology and Smart Connect Technology with Intel <sup>®</sup> Ivy Bridge CPU     - Intel <sup>®</sup> H77
	H77 inside <sup>®</sup>	Chipset Memory	
	Supports	Memory	Dual Channel DDR3 memory technology     Z x DDR3 bloWM slots     Supports DDR3 1600/1333/1066 non-ECC, un-buffered memory     (DDR3 1600/1333/1066 non-ECC, un-buffered memory     (DDR3 1600 with Intel <sup>®</sup> Vsafdge CPU, DDR3 1333 with Intel <sup>®</sup> Sandy Bridge CPU)     Max. capacity of system memory: 16GB     Supports Intel <sup>®</sup> Extreme Memory Profile (XMP) 1.3 / 1.2
	cone	Expansion Slot	<ul> <li>1 x PCI Express 3.0 x16 slot (PCIE1: x16 mode)</li> <li>PCIE 3.0 sonly supported with Intel* Ivy Bridge CPU. With Intel* Sandy Bridge CPU, it only supports PCIE 2.0.</li> </ul>
		Graphics	Intel <sup>®</sup> HD Graphics Buill-In Visuals and the VGA outputs can be supported only with processors which are GPU Integrated     Supports Intel <sup>®</sup> HD Graphics Built-In Visuals: Intel <sup>®</sup> Ouck Sync Video 2.0, Intel <sup>®</sup> InTru <sup>™</sup> 3D, Intel <sup>®</sup> Char Video HD Technology, Intel <sup>®</sup> Insid <sup>®</sup> HD Graphics 32004000     Pixel Shader 5.0, DirectX 11 with Intel <sup>®</sup> by Bridge CPU. Pixel Shader 4.1, DirectX 10.1 with Intel <sup>®</sup> Supports Intel <sup>®</sup> HD Technology with <sup>®</sup> Insid <sup>®</sup> HD Graphics 32004000     Three VGA Output options: D-Sub, DVI-D and HDMI     Supports HDMI 1.4a Technology with max: resolution up to 1920x1200 @ 60Hz     Supports D-Sub with max: resolution up to 1920x1200 @ 60Hz     Supports D-Sub with max: resolution up to 20248x1536 @ 75Hz     Supports D-Sub up Synche Color (12bpc), x/YCC and HBR (High Bit Rate Audio) with HDMI (Compliant HDMI monitor is required)     Supports HDMI function VI and HDMI ports     Supports Fullon P1 function with DVI and HDMI ports     Supports Full HD 1080p Biu-ray (BD) / HD-DVD playback with DVI and HDMI ports     Supports Full HD 1080p Biu-ray (BD) / HD-DVD playback with DVI and HDMI ports     Supports Full HD 1080p Biu-ray (BD) / HD-DVD playback with DVI and HDMI ports     Supports Full HD 1080p Biu-ray (BD) / HD-DVD playback with DVI and HDMI ports
	Internet Flash	Audio	- 7.1 CH HD Audio with Content Protection (Realtek ALC892 Audio Codec) - Premium Blu-ray audio support
		LAN	- Supports THX TruStudio <sup>10 1</sup> - PCIE x1 Gipabit LAN 10/100/1000 Mb/s - PCIE x1 Gipabit LAN 10/100/1000 Mb/s - Supports Vake-On-LAN - Supports Vake-Cable Detection - Supports Foregy Efficient Ethernet 802.3az - Supports Foregy Efficient Ethernet 802.3az
PCI-E3.00 Intel HD Graphics	SYSTEM BROWSER	Rear Panel I/O	VO Panel - 1 x PS/2 Keyboard Port - 1 x D/SD Port - 1 x D/D Port - 1 x D/D Port - 1 x Optical SPDIF Out Port - 4 x Ready-to-Use USB 2.0 Ports - 1 x eSATA2 Connector - 1 x eSATA2 - 1 x eSATA
WINT .	ASRock OMG	SATA3	<ul> <li>2 x SATA3 6.0 Gb/s connectors, support RAID (RAID 0, RAID 1, RAID 5, RAID 10, Intel Rapid Storage and Intel Smart Response Technology), NCO, AHCI and "Hot Plug" functions</li> </ul>
		USB 3.0	- 2 x Rear USB 3.0 ports, support USB 1.0/2.0/3.0 up to 5Gb/s - 1 x Front USB 3.0 header (supports 2 USB 3.0 ports), supports USB 1.0/2.0/3.0 up to 5Gb/s
Trustudio Intel® Smart Connect In Technology	itel <sup>®</sup> Rapid Start Technology	Connector	2 x SATA2 3.0 Gb/s connectors, support RAID (RAID 0, RAID 1, RAID 5, RAID 10, Intel Rapid Storage and Intel Smart Response Technology), NCO, AHCI and Hot Plug functions 2 x SATA3 6.0 Gb/s connectors 1 x CIR header - CPU/Chassis FAN connector
Product Brief			- 24 pin ATX power connector - 4 pin 12V power connector - Front panel audio connector
- ASRock DuraCaps (100% Japan-made high-quality	/		- 1 x USB 2.0 header (supports 2 USB 2.0 ports) - 1 x USB 3.0 header (supports 2 USB 3.0 ports)
Conductive Polymer Capacitors) - Digi Power Design - Supports Dual Channel DDR3 1600		BIOS Feature	- 64Mb AMI UEFI Legal BIOS with GUI support - Supports "Plug and Play" - ACPI 1.1 Compliance Wake Up Events - Supports jumperfree - SMBIOS 2.3 i Support - CPU Core, IGPU, DRAM, 1.8V PLL, VTT, VCCSA Voltage Multi-adjustment
- 1 x PCle 3.0 x16 Slot		Support CD	Drivers, Utilities, AntiVirus Software (Trial Version), CyberLink MediaEspresso 6.5 Trial, ASRock MAGIX Multimedia Suite - OEM
<ul> <li>PCIE Gigabit LAN</li> <li>Supports Intel® HD Graphics with Built-in Visuals</li> <li>Multi-VGA Output Options : DVI-D, D-Sub, HDMI</li> <li>7.1 CH HD Audio with Content Protection (Realtek ALC892 Audio Codec), Supports THX TruStudio™</li> </ul>		Unique Feature	ASRock Extreme Tuning Utility (AXTU)     ASRock Instant Boot     ASRock Instant Flash     ASRock Arsant Flash     ASRock XFast USB     ASRock Crashless BIOS     ASRock Crashless BIOS     ASRock Internet Flash     ASRock Internet Flash     ASRock Internet Flash     ASRock UCOP     Boot Failure Guard (B.F.G.)     Good Ngalt LED
<ul> <li>Supports ASRock XFast RAM, XFast LAN, XFast USB, UEFI System Browser, OMG, Internet Flash, On/Off Play</li> <li>Supports Intel Smart Connect, Intel Rapid Start</li> <li>Free Bundle : CyberLink MediaEspresso 6.5 Trial, ASRock MAGIX Multimedia Suite</li> </ul>		Hardware Monitor	- CPU Temperature Sensing - Chassis Temperature Sensing - CPU Fan Tachometer - Chassis Fan Tachometer - CPU/Chassis Fan Multi-Speed Control - CPU/Chassis Fan Multi-Speed Control - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore
		OS Certifications	- Microsoft* Windows* 7 / 7 64-bit / Vista <sup>TM</sup> / Vista <sup>TM</sup> 64-bit / XP / XP 64-bit compliant
		Accessories	- Erb/EuP Ready (ErP/EuP ready power supply is required)     - Quick Installation Guide, Support CD, I/O Shield     - X SATA Data Cables (Optiona)

The specification is subject to change without notice. The brand and product names are trademarks of their respective companies. Any configuration other than original product specification is not guaranteed.





**(Fast USB** 

USB Performance

Comparison



Intel Smart Connect Intel Rapid Start



from the system memory to boost the performance. For Photoshop, it can even perform 5X faster than before.

The performance boost percentage may vary with a different configuration.

### **Digi Power**

# By adopting digital Pulse-width

rd with XFast LAN

Other Motherboard without XFast LAN

modulation (PWM), the H77 motherboard can provide CPU Vcore voltage more efficiently and smoothly.



Other Motherboard without XFast USB

- Higher bandwidth per lane 1GB/s
- Higher efficiency 98.5% encoding efficiency 100% backward compatible with previous PCI-E 2.0 / 1.0 standard

Note: Supported with 3rd Gen Intel Core Processor



Technology

Intel Smart Connect Technology keeps

content continuously updated while the PC is asleep! It will periodically wake up the PC

while in a sleep state and check updates for things like email, Twitter, Facebook, etc.

#### **ASRock OMG** (Online Management Guard)

Fast, Easy and Free – ASRock OMG technology allows you to establish an internet curfew or restrict internet access at specified times. Administrators are able to schedule the starting and ending hours of internet access granted to other users.



Technology

Quickly return to where you left off

with a PC that goes from deep-sleep to full awake in a flash.

Internet Flash searches for available UEFI firmware updates from ASRock servers System can auto-detect the latest UEFI from our servers and flash them within UEFI setup without entering Windows <sup>®</sup> OS.





Intel<sup>®</sup> HD Graphics

#### Cyberlink **MediaEspresso** 6.5 Trial

The fastest video media conversation software





### THX TruStudio

Delivering the fullest audio experience for games, music and movies



#### **UEFI System Browser**

UEFI system browser is a useful tool included in graphical UEFI. It can detect the devices and configurations that users are currently using in their PC.



## **On/Off Play**

Enjoy great audio experience from the portable audio devices via PC speaker even when the system is powered off.



#### **MAGIX Multimedia** Suite

The ultimate solutions to enhance your media experience. From music management, music creation, video editina to photo management. Simply do more with your media than you ever thought possible.





# **Intel HD Graphics**

by eliminating additional discrete graphics hardware, while integrating stunning visuals



