# H77 Pro4-M

Intel® H77 Chipset

**ASRock®**
www.asrock.com

Compatible with Windows® 7

intel® CHIPSET H77 inside™

Supports intel® inside™ CORE

ATI CROSSFIRE X TECHNOLOGY

555 XFast

ASRock OMG

Digi Power RAM Design

PCI-E 3.0

Intel HD Graphics

On/Off Play

THX TruStudio™

SYSTEM BROWSER
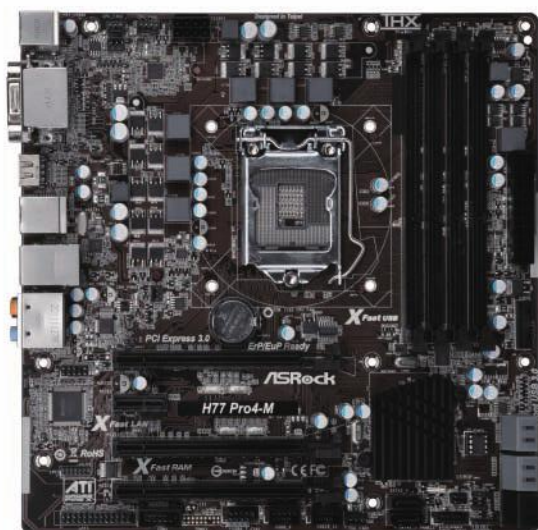
Intel® Smart Connect Technology

Intel® Rapid Start Technology

## Detail Specification

| | |
|---|---|
| **Platform** | - Micro ATX Form Factor: 9.6-in x 9.6-in, 24.4 cm x 24.4 cm<br>- All Solid Capacitor design (100% Japan-made high-quality Conductive Polymer Capacitors) |
| **CPU** | - Supports 3rd and 2nd Generation Intel® Core™ i7 / i5 / i3 in LGA1155 Package<br>- Digi Power Design<br>- 4 + 2 Power Phase Design<br>- Supports Intel® Turbo Boost 2.0 Technology<br>- Supports Intel® K-Series unlocked CPU<br>- Supports Hyper-Threading Technology<br>- Supports Intel® Rapid Start Technology and Smart Connect Technology with Intel® Ivy Bridge CPU |
| **Chipset** | - Intel® H77 |
| **Memory** | - Dual Channel DDR3 memory technology<br>- 4 x DDR3 DIMM slots<br>- Supports DDR3 1600/1333/1066 non-ECC, un-buffered memory<br>  (DDR3 1600 with Intel® Ivy Bridge CPU, DDR3 1333 with Intel® Sandy Bridge CPU)<br>- Max. capacity of system memory: 32GB<br>- Supports Intel® Extreme Memory Profile (XMP) 1.3 / 1.2 |
| **Expansion Slot** | - 1 x PCI Express 3.0 x16 slot (PCIE1: x16 mode)<br>* PCIE 3.0 is only supported with Intel® Ivy Bridge CPU. With Intel® Sandy Bridge CPU, it only supports PCIE 2.0.<br>- 2 x PCI Express 2.0 x16 slots (PCIE3: x1 mode; PCIE4: x4 mode)<br>- 1 x PCI Express 2.0 x1 slot<br>- Supports AMD Quad CrossFireX™ and CrossFireX™ |
| **Graphics** | * Intel® HD Graphics Built-in Visuals and the VGA outputs can be supported only with processors which are GPU integrated.<br>- Supports Intel® HD Graphics Built-in Visuals : Intel® Quick Sync Video 2.0, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 2500/4000<br>- Pixel Shader 5.0, DirectX 11 with Intel® Ivy Bridge CPU. Pixel Shader 4.1, DirectX 10.1 with Intel® Sandy Bridge CPU.<br>- Max. shared memory 1760MB<br>- Three VGA Output options: D-Sub, DVI-D and HDMI<br>- Supports HDMI 1.4a Technology with max. resolution up to 1920x1200 @ 60Hz<br>- Supports DVI with max. resolution up to 1920x1200 @ 60Hz<br>- Supports D-Sub with max. resolution up to 2048x1536 @ 75Hz<br>- Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio) with HDMI (Compliant HDMI monitor is required)<br>- Supports HDCP function with DVI and HDMI ports<br>- Supports Full HD 1080p Blu-ray (BD) / HD-DVD playback with DVI and HDMI ports |
| **Audio** | - 7.1 CH HD Audio with Content Protection (Realtek ALC892 Audio Codec)<br>- Premium Blu-ray audio support<br>- Supports THX TruStudio™ |
| **LAN** | - PCIE x1 Gigabit LAN 10/100/1000 Mb/s<br>- Realtek RTL8111E<br>- Supports Wake-On-LAN<br>- Supports LAN Cable Detection<br>- Supports Energy Efficient Ethernet 802.3az<br>- Supports PXE |
| **Rear Panel I/O** | I/O Panel<br>- 1 x PS/2 Keyboard Port<br>- 1 x D-Sub Port<br>- 1 x DVI-D Port<br>- 1 x HDMI Port<br>- 1 x Optical SPDIF Out Port<br>- 4 x Ready-to-Use USB 2.0 Ports<br>- 1 x eSATA3 Connector<br>- 2 x Ready-to-Use USB 3.0 Ports<br>- 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED)<br>- HD Audio Jack: Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone |
| **SATA3** | - 2 x SATA3 6.0 Gb/s connectors by Intel® H77, support RAID (RAID 0, RAID 1, RAID 5, RAID 10, Intel Rapid Storage and Intel Smart Response Technology), NCQ, AHCI and "Hot Plug" functions<br>- 2 x SATA3 6.0 Gb/s connectors by ASMedia ASM1061, support NCQ, AHCI and "Hot Plug" functions (SATA3_A1 connector is shared with eSATA3 port) |
| **USB 3.0** | - 2 x Rear USB 3.0 ports, support USB 1.0/2.0/3.0 up to 5Gb/s<br>- 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 |
| **Connector** | - 4 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), NCQ, AHCI and Hot Plug functions<br>- 4 x SATA3 6.0 Gb/s connectors<br>- 1 x IR header<br>- 1 x CIR header<br>- 1 x Print Port header<br>- 1 x COM port header<br>- 1 x HDMI_SPDIF header<br>- 1 x Power LED header<br>- 1 x TPM header<br>- 2 x CPU Fan connectors (1 x 4-pin, 1 x 3-pin)<br>- 2 x Chassis Fan connectors (1 x 4-pin, 1 x 3-pin)<br>- 1 x Power Fan connector (3-pin)<br>- 24 pin ATX power connector<br>- 8 pin 12V power connector<br>- Front panel audio connector<br>- 3 x USB 2.0 headers (support 6 USB 2.0 ports)<br>- 1 x USB 3.0 header (supports 2 USB 3.0 ports) |
| **BIOS Feature** | - 64Mb AMI UEFI Legal BIOS with GUI support<br>- Supports "Plug and Play"<br>- ACPI 1.1 Compliance Wake Up Events<br>- Supports jumperfree<br>- SMBIOS 2.3.1 Support<br>- CPU Core, IGPU, DRAM, 1.8V PLL, VTT, VCCSA Voltage Multi-adjustment |
| **Support CD** | - Drivers, Utilities, AntiVirus Software (Trial Version), CyberLink MediaEspresso 6.5 Trial, ASRock MAGIX Multimedia Suite - OEM |
| **Unique Feature** | - ASRock Extreme Tuning Utility (AXTU)<br>- ASRock Instant Boot<br>- ASRock Instant Flash<br>- ASRock APP Charger<br>- ASRock SmartView<br>- ASRock XFast USB<br>- ASRock XFast LAN<br>- ASRock XFast RAM<br>- ASRock Crashless BIOS<br>- ASRock OMG (Online Management Guard)<br>- ASRock On/Off Play Technology<br>- Hybrid Booster:<br>  - ASRock U-COP<br>  - Boot Failure Guard (B.F.G.)<br>- Combo Cooler Option (C.C.O.)<br>- Good Night LED |
| **Hardware Monitor** | - CPU Temperature Sensing<br>- Chassis Temperature Sensing<br>- CPU/Chassis/Power Fan Tachometer<br>- CPU/Chassis Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature)<br>- CPU/Chassis Fan Multi-Speed Control<br>- Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore |
| **OS** | - Microsoft® Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit compliant |
| **Certifications** | - FCC, CE, WHQL<br>- ErP/EuP Ready (ErP/EuP ready power supply is required) |
| **Accessories** | - Quick Installation Guide, Support CD, I/O Shield<br>- 2 x SATA Data Cables (Optional) |

## Product Brief

- 100% All Solid Capacitor Design
- Digi Power Design
- Supports Dual Channel DDR3 1600
- 1 x PCIe 3.0 x16 Slot, Supports AMD Quad CrossFireX™ and CrossFireX™
- PCIE Gigabit LAN
- Supports Intel® HD Graphics with Built-in Visuals
- Multi-VGA Output Options : DVI-D, D-Sub, HDMI
- Combo Cooler Option (C.C.O.)
- 7.1 CH HD Audio with Content Protection (Realtek ALC892 Audio Codec), Supports THX TruStudio™
- Supports ASRock XFast RAM, XFast LAN, XFast USB, UEFI System Browser, OMG, On/Off Play
- Supports Intel Smart Connect, Intel Rapid Start
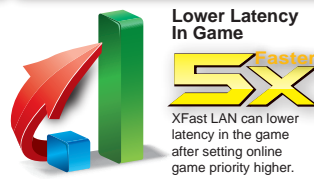- Free Bundle : CyberLink MediaEspresso 6.5 Trial, ASRock MAGIX Multimedia Suite

Intel® Smart Connect Technology

Intel® Rapid Start Technology

**555 XFast**

5X LAN SPEED
XFast LAN
XFast RAM
5X SYSTEM SPEED
XFast USB
5X USB SPEED

**XFast RAM** Fully Optimize Memory Usage

**XFast LAN** Faster Internet Access

**XFast USB** Boosts up your USB speed

**Photoshop 5X Faster**

**5X Faster for Photoshop Execution**

XFast RAM will create a virtual disk from the system memory to boost the performance for Photoshop. It can even perform 5X faster than before.

**Lower Latency In Game**

**5X Faster**

XFast LAN can lower latency in the game after setting online game priority higher.

Time latency in World of Warcraft: Cataclysm
*Lower is better
■ ASRock Motherboard with XFast LAN
■ Other Motherboard without XFast LAN

**USB Performance Comparison**

**5X Faster**

FNet
Power by FNet
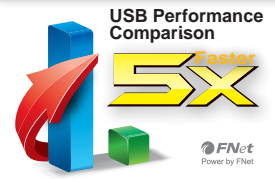
ATTO Disk Benchmark 4K Read
■ ASRock Motherboard with XFast USB
■ Other Motherboard without XFast USB

● The performance boost percentage may vary with a different configuration.

## Intel Smart Connect 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.

## Intel Rapid Start Technology

Quickly return to where you left off with a PC that goes from deep-sleep to full awake in a flash.

## Digi Power

By adopting digital Pulse-width modulation (PWM), the H77 motherboard can provide CPU Vcore voltage more efficiently and smoothly.

## Next-Gen PCIe 3.0

• Higher bit rate - 8.0GT/s
• 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

## Intel HD Graphics

Intel® HD Graphics, simplifies your designs by eliminating additional discrete graphics hardware, while integrating stunning visuals and performance for immersive gaming.

Intel® Quick Sync Video
Intel® InTru™ 3D
Intel® Clear Video HD Technology
Intel® Insider™
Intel® HD Graphics 2500/4000

## 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.

ASROCK UEFI SETUP UTILITY

## On/Off Play

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

On/Off Play

## 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.

## AXTU

ASRock Extreme Tuning Utility (AXTU) is an all-in-one software to fine-tune different features in an userfriendly interface, which includes Hardware Monitor, Fan Control, Overclocking, OC DNA, IES and XFast RAM.

## Cyberlink MediaEspresso 6.5 Trial

The fastest video media conversation software

Trial
MediaEspresso 6.5

## MAGIX Multimedia Suite

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

MAGIX