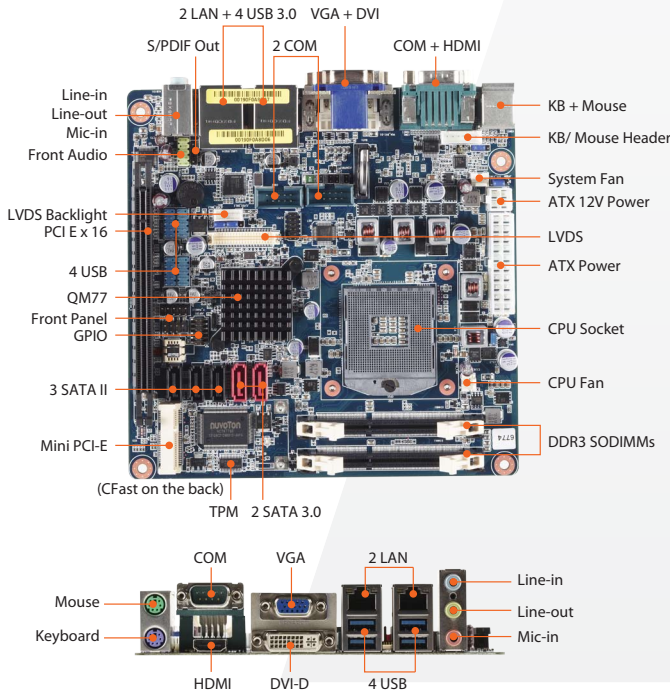


## SmITX-QM77

Intel® QM77 with Core™ i7/ i5/ i3 Mini-ITX Motherboard



### Features

- The 3<sup>rd</sup> generation Intel Core platform, Intel QM77 Chipset, delivers up to 20% performance enhanced than the 2<sup>nd</sup> generation Intel Core platform
- Intel rPGA988 Socket supports cross compatible with 22nm/ 32nm Intel Core i7/ i5/ i3 Mobile processor
- Two 204-pin SODIMM sockets support up to 16GB DDR3 1600/ 1333 SDRAM
- Advanced Intel GMA HD 4000/ 2500 supports DirectX 11, OpenGL 3.0, OpenCL 1.1 and outstanding 3D graphics performance, more than 30% 3D graphics performance improved
- Intel 82579LM Gigabit LAN chip enables AMT 8.0 proactive security and manageability
- Supports Multiple Dual Display Functions : VGA, LVDS, HDMI, DVI
- Realtek ALC892 supports 5.1 Channel HD Audio
- 1 PCI-E x 16 Gen. 3, 1 Mini PCI-E, 1 CFast
- 4 USB 3.0, 8 USB 2.0, 3 COM, 2 SATA 3.0, 3 SATA II
- 8-bit GPIO, TPM 1.2

### Specifications

#### System

<b>CPU</b>	Intel rPGA988 Socket supports 22nm/ 32nm Intel Core i7/ Core i5/ Core i3/ Pentium®/ Celeron® Mobile CPU
<b>BIOS</b>	AMI 64Mb SPI ROM
<b>System Chipset</b>	Intel QM77
<b>I/O Chip</b>	Nuvoton NCT6776F
<b>Memory Type</b>	Two 204-pin SODIMM support up to 16GB dual channel DDR3 1600/ 1333/ 1066 SDRAM, Non-ECC
<b>Watchdog Timer</b>	Reset : 1 to 255 sec/min per step
<b>H/W Status Monitor</b>	Monitoring temperature, voltage and cooling fan status. Auto throttling control when CPU overheats.
<b>Expansion</b>	1 PCI-E x 16 Gen. 3, 1 Mini PCI-E, 1 CFast
<b>TPM</b>	TPM 1.2 by Infineon SLB9635
<b>Power State</b>	S1, S3, S4, S5
<b>Wake up on LAN or Ring</b>	LAN (WOL, PXE)
<b>Smart Fan Control</b>	Yes

#### I/O

<b>MIO</b>	2 COM RS-232 with Power (5V/ 12V, internal), 1 COM RS-232 (Rear), 2 SATA 3.0, 3 SATA II, 1 HDMI, 1 DVI, 1 VGA, 1 LVDS, 1 LVDS Backlight, 2 LAN, 1 CFast Card, 1 PS/2 Keyboard, 1 PS/2 Mouse
<b>USB</b>	4 USB 3.0 (Rear), 8 USB 2.0 (Internal)
<b>GPIO</b>	8-bit General Purpose I/O for 4-bit DI and 4-bit DO

#### Display

<b>Chipset</b>	- Intel GMA HD 4000/ 2500 (22nm CPU) - Intel GMA HD 3000/ 2000 (32nm CPU)
<b>Video Memory</b>	Shared Memory, up to 256MB
<b>Dual Display</b>	VGA + LVDS, VGA + HDMI, VGA + DVI, LVDS + HDMI, LVDS + DVI, HDMI + DVI
<b>VGA</b>	Onboard, supports max resolution 2048 x 1536 (@75Hz)
<b>LVDS</b>	Onboard 24-bit LVDS, supports max resolution 1920 x 1200
<b>LVDS Backlight</b>	Yes, through internal LVDS Backlight Connector
<b>HDMI</b>	Onboard HDMI 1.3, supports max resolution 1920 x 1200
<b>DVI</b>	Onboard DVI-D, supports max resolution 1920 x 1200

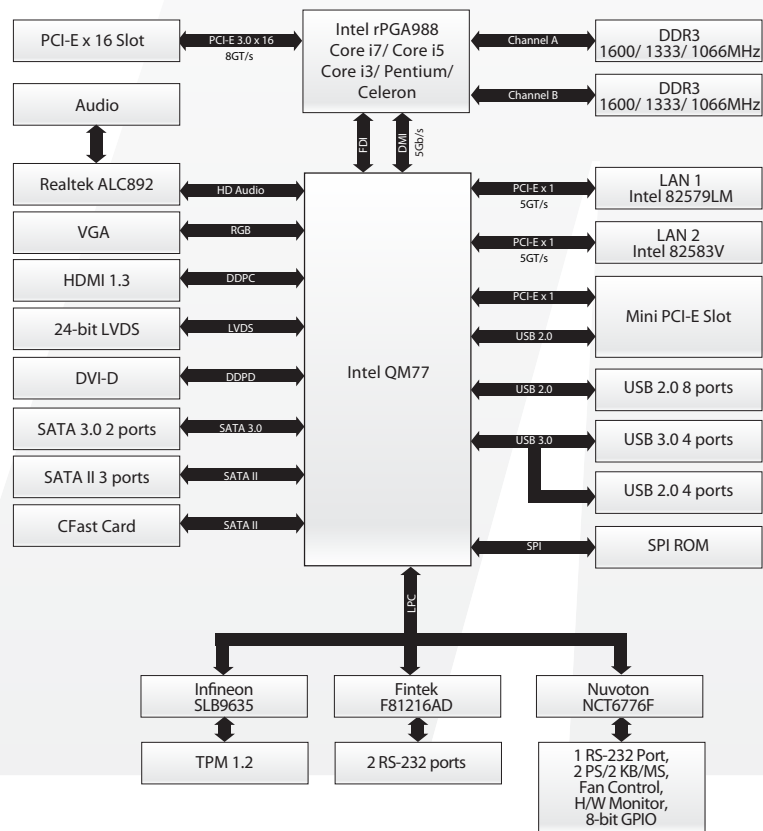
#### Audio

<b>Audio Codec</b>	Realtek ALC892, 5.1 Channel HD Audio
<b>Audio Interface</b>	Line-in, Line-out, Mic-in, S/PDIF Out, Front Audio Header

#### Ethernet

<b>LAN 1</b>	Intel 82579LM GbE LAN supports iAMT 8.0
<b>LAN 2</b>	Intel 82583V GbE LAN

## Block Diagram



### Back Panel I/O Port

- 1 PS/2 Keyboard
- 1 PS/2 Mouse
- 1 VGA Port
- 1 HDMI Port
- 1 COM RS-232 Port
- 1 DVI Port
- 4 USB 3.0 Ports
- 2 LAN RJ45 Ports
- 1 Audio I/O (3 Jacks)

### Internal I/O Connector

- 4 USB Connectors support 8 USB Ports
- 2 COM RS-232 Connectors
- 5 SATA Connectors (2 SATA 3.0, 3 SATA II)
- 1 Front Audio Connector
- 1 Front Panel Connector
- 1 CPU Fan Connector
- 1 System Fan Connector
- 1 S/PDIF Out Connector
- 1 Mini PCI-E Connector
- 1 CFast Connector
- 1 LVDS Connector
- 1 LVDS Backlight Power Connector
- 1 Keyboard/ Mouse Header
- 1 GPIO Connector

### Power

Power Requirement	+12V	+5V	+3.3V	-12V	5VSB
	11A	21A	18A	0.3A	2.5A

**Power Type** ATX (supports AT Mode)

**Power Connector** 1 20-pin ATX Power Connector,  
1 4-pin ATX 12V Power Connector

### Mechanical & Environmental

**Operating Temperature** 0°C to 60°C (32°F to 140°F)

**Operating Humidity** 0% to 90% relative humidity, non-condensing

**Size (L x W)** 6.69" x 6.69" (170 x 170 mm)

**Weight** 0.77 lbs (0.35 Kg)