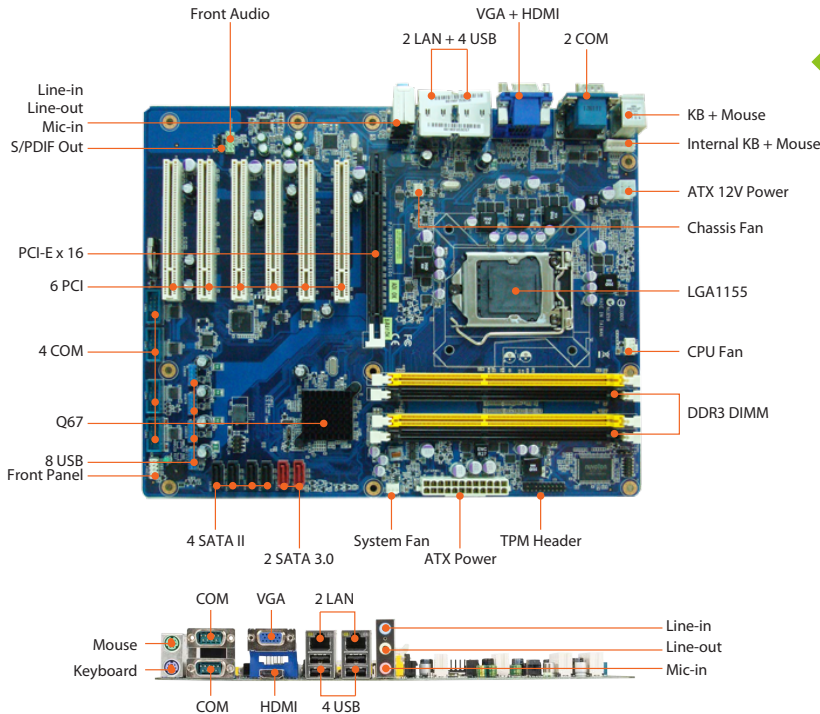


GMB-AQ670-LLVA

Intel® Q67 with Core™ i7/ i5/ i3 ATX Motherboard



Features

- Intel LGA1155 socket supports Intel Core i7/ i5/ i3 CPU
- Intel Q67 Chipset
- Intel GMA HD 2000/ 3000 supports DirectX 10.1, OpenGL 3.0 and VGA + HDMI dual display
- Four 240-pin DIMM slots support up to 16GB dual channel 1066/ 1333MHz DDR3 SDRAM
- Realtek ALC892 supports 5.1 Channel HD Audio
- Dual Intel Gigabit LAN : Intel 82579LM (LAN 1), Intel 82583V (LAN 2)
- 1 PCI-E x 16 , 6 PCI
- 2 SATA 3.0 and 4 SATA II supports AHCI, RAID 0, 1 and TPM 1.2 (optional)
- 6 COM, 12 USB 2.0
- 8-bit GPIO

Specifications

System

CPU	Intel LGA1155 socket supports Intel Core i7/ i5/ i3 CPU
BIOS	AMI 16Mb SPI
System Chipset	Intel Q67
I/O Chip	Nuvoton NCT6776F
System Memory	For 240-pin DIMM slots support up to 16GB dual channel DDR3 1066/ 1333 SDRAM
Watchdog Timer	Reset : 1 to 255 sec/min per step
H/W Status Monitor	Monitoring temperature, voltage and cooling fan status. Auto throttling control when CPU overheats.
Expansion	1 PCI-E x 16 , 6 PCI
Power State	S1, S3, S4, S5
Wake up on LAN or Ring	LAN (WOL) and Ring (WO)
SmartFan Control	Yes

I/O

MIO	6 COM RS-232, 2 SATA 3.0, 4 SATA II, 1 HDMI, 1 VGA, 2 LAN, 1 PS/2 Keyboard, 1 PS/2 Mouse
USB	12 USB 2.0 (4 Rear, 8 Internal)
GPIO	8-bit General Purpose I/O for 4-bit DI and 4-bit DO

Display

Chipset	Intel GMA HD 2000/ 3000
Display Memory	Shared Memory, up to 1.7GB
Dual Display	VGA + HDMI
VGA	Onboard, supports max resolution 2048 x 1536 (@60Hz)
HDMI	Onboard HDMI 1.3, supports max resolution 1920 x 1080

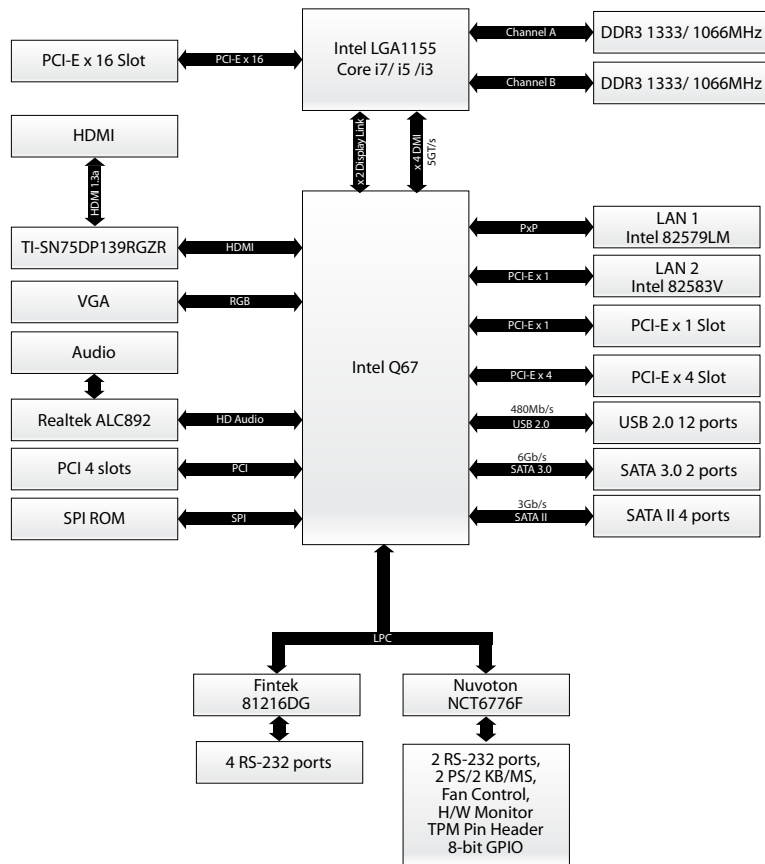
Audio

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

Ethernet

LAN 1	Intel 82579LM Gigabit LAN supports iAMT 7.0
LAN 2	Intel 82583V Gigabit LAN

Block Diagram



Back Panel I/O Port

- 1 PS/2 Mouse
- 1 PS/2 Keyboard
- 1 VGA Port
- 1 HDMI Port
- 2 COM RS-232 Ports
- 4 USB 2.0/ 1.1 Ports
- 2 LAN RJ45 Ports
- 1 Audio I/O (3 Jacks)

Internal I/O Connector

- 1 PS/2 KB/MS (6-pin)
- 4 USB Connectors support 8 USB Ports
- 4 COM RS-232 Connectors
- 6 SATA Connectors
- 1 Front Audio Header
- 1 CPU Fan Connector (4-pin)
- 1 System Fan Connector (3-pin)
- 1 Chassis Fan Connector (3-pin)
- 1 GPIO Header
- 1 TPM Pin Header (20-pin)

Mechanical & Environmental

Power Requirement	+12V 6.86A	+5V 2.33A	+3.3V 1.67A	5VSB 0.95A
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Power Type ATX (supports AT Mode)

Power Connector 1 24-pin ATX Power Connector,
1 4-pin ATX 12V Power Connector

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

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

Size (L x W) 12" x 9.6" (305 x 244 mm)

Weight 1.80 lbs (0.8 Kg)