

# SATX-Q87

## Intel® Q87 with Intel Core™ i7/ i5/ i3 ATX Motherboard



### Features

- ◆ Supports the 4th Generation Intel Core i7/ i5/ i3, Celeron® and Pentium® Processor family
- ◆ Supports triple/ dual independent display configuration by multiple display interface : VGA, HDMI, DVI-D and DisplayPort
- ◆ Supports DirectX 11.1, OpenGL 4.x, OpenCL 1.2 and outstanding 3D graphics performance
- ◆ Enhanced graphics technology supports up to 4K2K Ultra HD resolution
- ◆ Supports dual LANs and Intel AMT 9.0 proactive security and manageability function
- ◆ Supports 3 PCIe and 4 PCI expansion slots

### Specifications

Processor	
CPU	Intel Core i7/ i5/ i3/ Celeron/ Pentium processor
Socket	LGA1150
Max. Speed	Up to 3.9GHz
Cache	Up to 8MB
BIOS	AMI EFI 64Mbit SPI

Memory	
Technology	Dual channel DDR3 1600/ 1333 MHz SDRAM (Non-ECC)
Max. Capacity	8GB per socket
Socket	4 x 240-pin DIMM

Graphics	
Controller	Integrated Intel HD Graphics engine
VRAM	Shared memory up to 512MB
VGA	Up to SXGA 1920 x 1080 (@60Hz)
DVI-D	Up to 1920 x 1200 (@60Hz)
HDMI	Up to 4096 x 2304 (@24Hz)
DisplayPort	Up to 3200 x 2000 (@60Hz)
Dual Display	VGA+HDMI, VGA+DVI-D, VGA+DisplayPort, HDMI+DVI-D, HDMI+DisplayPort, DVI-D+DisplayPort
Triple Display	VGA+HDMI+DVI-D, VGA+HDMI+DisplayPort, HDMI+DVI-D+DisplayPort, VGA+DVI-D+DisplayPort

Ethernet	
Interface	10/100/1000 Mbps
LAN 1 Controller	Intel I210-AT GbE LAN w/ iAMT 9.0
LAN 2 Controller	Intel I217 GbE LAN
Connector	2 x RJ-45

Expansion Slot	
PCIe x1 (Gen2)	1 (500MB/s per direction)
PCIe x4 (Gen2)	1 (2GB/s per direction)
PCIe x16 (Gen3)	1 (16GB/s per direction)
PCI	4 (32-bit/ 33MHz)

Storage	
mSATA	1 (600MB/s per port)
SATA 3.0	4 (600MB/s per port)

Audio	
Codec	Realtek ALC892
Connector	Line-in, Line-out, Mic-in

Rear I/O Connector	
VGA	1
DVI-D	1
HDMI	1
DisplayPort	1
RJ-45	2
USB 3.0	4
Audio	3 (Line-in, Line-out, Mic-in)
PS/2	2

Internal Connector	
USB 2.0	4 for 8 x USB 2.0 port
USB 3.0	1
Serial	5 x RS-232, 1 x RS-232/ RS-422/ RS-485
SATA 3.0	4
mSATA	1
TPM	1
CPU Fan	1
System Fan	1
Chassis Fan	1
Front Audio	1
Front Panel	1
S/PDIF Out	1
GPIO	1 (8-bit)
PS/2	1
LPT	1

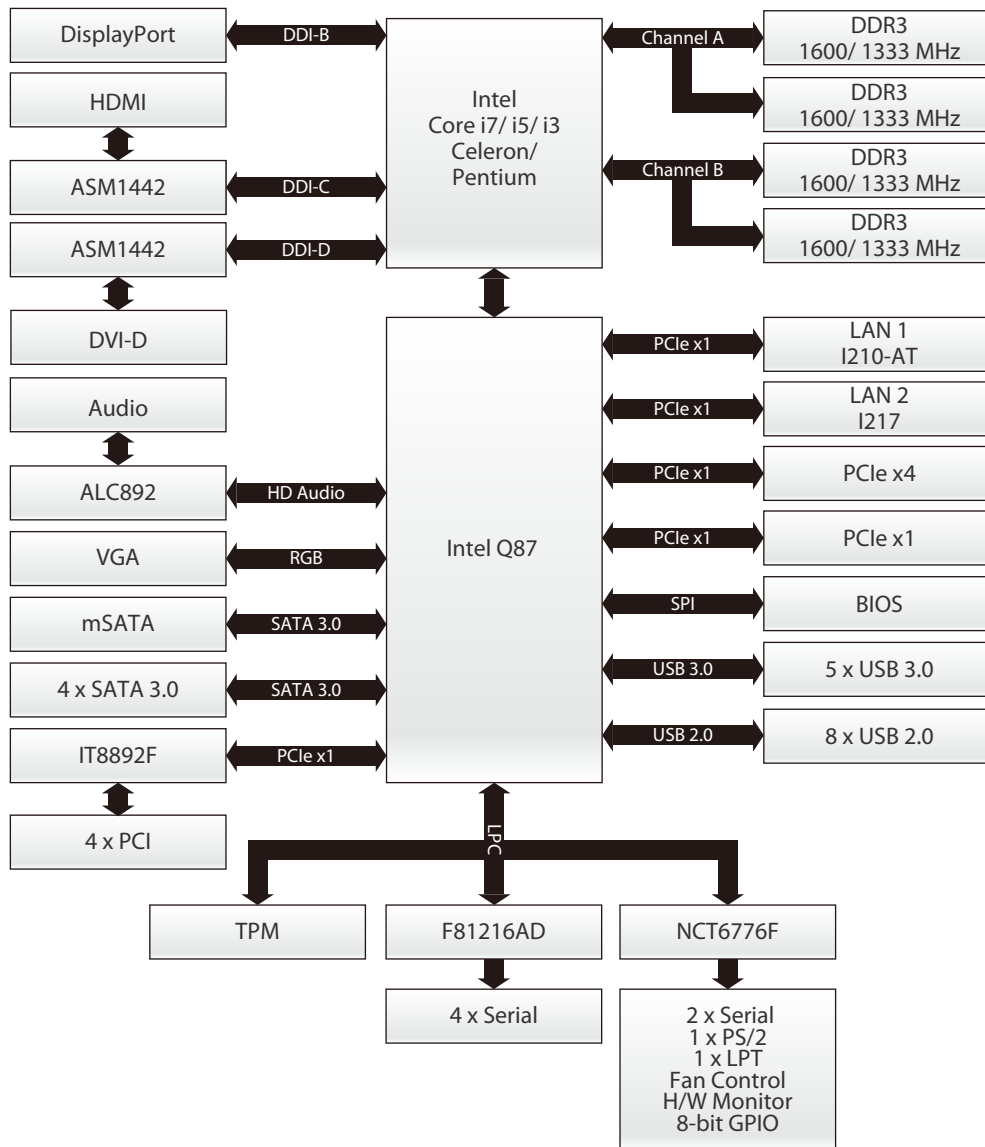
Watchdog Timer	
Output	System reset
Interval	Programmable 1-255 sec/min

Power	
Power Requirement	+12V +5V +3.3V -12V 5VSB (22A) (20A) (12A) (0.1A) (2A)
Power Type	ATX Mode (supports AT Mode)
Power Connector	1 x 24-pin ATX, 1 x 4-pin ATX 12V

Environment	
Operation Temperature	0 ~ 60° C (32 ~ 140° F)
Non-Operation Temperature	-40 ~ 85° C (-40 ~ 185° F)
Operation Humidity	0% ~ 90% relative humidity, non-condensing

Physical Characteristics	
Dimensions	304mm x 243.84mm (12" x 9.6")
Weight	0.65 Kg

## Block Diagram



## Ordering Information

Part Number	Chipset	VGA	DVI-D	HDMI	DisplayPort	LAN	USB	Serial
IMB-98100-AJA1E	Q87	1	1	1	1	2	13	6

## Packing List

Description	Qty
I/O shield	1
Startup manual	1 (per 20 units)
Driver CD	1 (per 20 units)
USB 3.0 cable, 30cm	1

## Optional Accessories

Part Number	Description
1700020939-01	SATA 3.0 cable, 46cm, 90degree
1700020946-01	SATA 3.0 cable, 46cm, 180degree
1700020942-01	Serial cable, 26cm