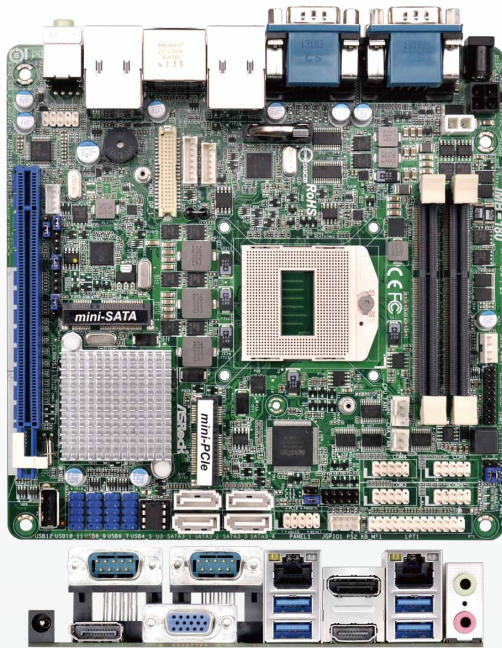


# IMB-180

## Mini-ITX Motherboard



### Spotlight Features

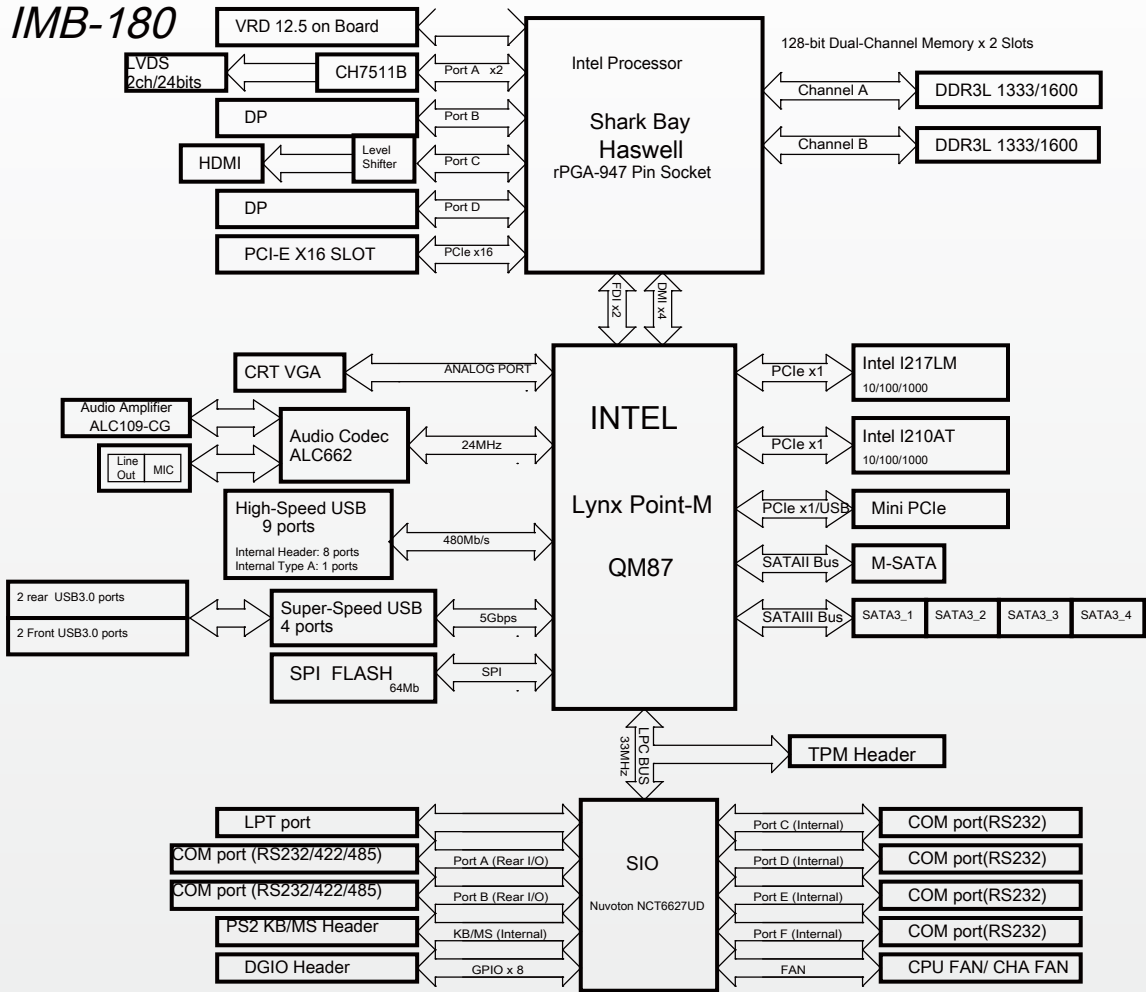
- Socket rPGA 947 Intel Core i7/i5/i3/mobile processor (Haswell)
- Intel® QM87 Chipset
- Integrated Intel® HD Graphics Built-in Visuals
- Supports DDR3 1600MHz, 2 x SO-DIMM, up to 16GB system memory
- 2 x COM (RS-232/422/485), 4 x COM (RS-232)
- 1 x VGA, 1 x HDMI, 2 x DisplayPort, 24 bit Dual Channel LVDS
- 4 x USB 3.0, 8 x USB 2.0, 4 x SATA3
- 1 x mini-PCIe, 1 x mSATA, 1 x PCIe (x16)
- Gigabit LAN : 1 x Intel I217LM (with v-Pro support), 1 x Intel I210
- 1 x TPM Header

### Specifications

Processor System	
Dimension	Mini-ITX (6.7-in x 6.7-in)
CPU	Socket rPGA947 for Intel Core i7/i5/i3/mobile processor (Haswell)
Core Number	(By CPU, Max 4)
Max Speed	(By CPU)
L3 Cache	(By CPU)
Chipset	QM87
BIOS	UEFI
Expansion Slot	
PCI	0
Mini-PCIe	1 (Full size)
mSATA	1 (Full size)
PCIe	1 (x16) with Riser card extend to x8+x8 or x8+x4+x4
CFast Card Socket	0
Memory	
Technology	Dual Channel DDR3 1066/1333/1600 MHz SDRAM
Max.	16GB
Socket	2 x SO-DIMM
Graphics	
Controller	Intel HD Graphics (By CPU)
VRAM	Shared Memory
VGA	Supports max resolution 2048 x 1536
LVDS	1
HDMI	Supports HDMI 1.4a, max resolution 1920 x 1200
DVI	No
Display Port	Supports max resolution 2560 x 1600
Multi Display	Yes (Three Display)
Ethernet	
Interface	10/100/1000 Mbps
Controller	GbE LAN1: Intel I210, LAN2: Intel I217LM (with v-Pro support)
Connector	2 x RJ-45
SATA	
Max Data Transfer Rate	SATA2 (3.0Gb/S), SATA3 (6.0Gb/S), Supports RAID 0/1/5/10

Rear I/O	
VGA	1
HDMI	1
DVI-I/D	0
Display Port	2
Ethernet	2
USB	4 x USB 3.0 compliant
Audio	2 (Mic-In, Line-Out)
Serial	2 (RS-232/422/485)
PS/2	0
Internal Connector	
USB	8 (4 x USB Header 2.54mm pitch,) 1 Vertical Type A USB Connector
LVDS/Inverter	24 bit dual channel LVDS
VGA	0
Serial	4 (RS-232)
SATA	4 x SATA3 (6.0Gb/s), Support RAID 0/1/5/10
m-SATA	1
Mini-PCIe	1
Parallel	1
IrDA	0
GPIO	4 x GPI + 4 x GPO
SATA PWR Output Con	1
Speaker Header	0
Watchdog Timer	
Output	Output from super I/O to drag RESETCON#
Interval	256 Segments, 0,1,2...255 Sec/Min
Power Requirements	
Input PWR	DC-in 12V~19V
Power On	AT/ATX Supported AT : Directly PWR on as Power input ready ATX: Press Button to PWR on after Power input ready
Environment	
Operating Temperature	0°C – 60°C

## Board Diagram



## IPC Motherboards Focused Markets

ASRock IMB solutions can be widely used for industrial applications, such as process control, data acquisition, and so on. IMB-PCs are typically panel mounted and often incorporate touch screens for user interaction.

