



IMB-186

Ultra Thin Mini-ITX Motherboard

Spotlight Features

- BGA Haswell MCP for Intel® Core i7/i5/i3 (Haswell ULT)
- Integrated Intel® HD Graphics Built-in Visuals
- Supports DDR3L 1333/1600MHz, 2 x SO-DIMM, up to 16GB system memory
- 1 x DP++, 1 x HDMI, 1 x 24 bit Dual Channel LVDS
- 4 x USB 3.0, 6 x USB 2.0, 2 x SATA3
- 1 x mini-PCIe, 1x mSATA,
- Gigabit LAN : 1 x RTL8111G x 1, 1 x Intel I218LM (Intel® Core i7/i5)
- Gigabit LAN : 1 x RTL8111G x 1, 1 x Intel I218V (Intel® Core i3)
- 1 x TPM Header

Specifications

Processor System	
Dimension	Mini-ITX (6.7-in x 6.7-in)
CPU	BGA type for Intel® Core i7/i5/i3 (Haswell ULT MCP)
Core Number	(By CPU Max 4)
Max Speed	(By CPU)
L2 Cache	(By CPU)
Chipset	(By CPU)
BIOS	UEFI
Expansion Slot	
PCI	0
Mini-PCIe	1 (Half Size + USB2.0) + 1 (Full Size) shared with mSATA
mSATA	1 (Full Size) shared with SATA2
PCIe	0
Memory	
Technology	Dual Channel DDR3L 1333/1600 MHz SDRAM
Max.	16GB
Socket	2 x SO-DIMM
Graphics	
Controller	Intel HD Graphics (By CPU)
VRAM	Shared Memory
VGA	1 (pin header share with HDMI)
LVDS	1
HDMI	Supports with Level Shifter, max resolution up to 4096 x 2304 (1x HDMI)
DVI	0
Display Port	1
Multi Display	Yes (Three Display)
Ethernet	
Interface	10/100/1000 Mbps
Controller	GbE LAN1: Intel 218LM, LAN2: RTL8111G (Intel® Core i7/i5) GbE LAN1: Intel 218V, LAN2: RTL8111G (Intel® Core i3)
Connector	2 x RJ 45
SATA	
Max Data Transfer Rate	SATA3 (6.0Gb/s)

Rear I/O	
VGA	0
HDMI	1
DVI-I/D	0
Display Port	1
Ethernet	2
USB	4 x USB 3.0
Audio	Mic-in Line- out
Serial	0
e-SATA	0
PS/2	0

Internal Connector	
USB	6 (2 x USB Header 2.00mm pitch)
LVDS/Inverter	24 bit dual channel LVDS
VGA	1
Serial	6 (2 RS-232/422/485, 4 RS-232)
SATA	2 x SATA3 (6.0Gb/s)
m-SATA	1 (shared)
Mini-PCIe	1
Parallel	1 (Co-lay with DIO)
IrDA	0
GPIO	8 x GPI + 8 x GPO (Co-lay with LPT)
SATA PWR Output Con	2
Speaker Header	1

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 9-19 input
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