



# IMB-186

Ultra Thin Mini-ITX Motherboard

## Spotlight Features

- BGA Haswell MCP for Intel Core i5-4300U / Celeron 2980U (Default) (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(4300U SKU)
- Gigabit LAN : 1 x RTL8111G x 1, 1 x Intel I218V(2980U SKU)
- 1 x TPM Header

## Specifications

Processor System	
Dimension	Mini-ITX (6.7-in x 6.7-in)
CPU	BGA type for Intel Core i5-4300U / Celeron 2980U mobile processor (Haswell ULT MCP) Default 2980U Dual core 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
CFast Card Socket	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 HDMI 1.4a, supported with Level Shifter, resolution up to 4096x2304 (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 (4300U SKU) GbE LAN1: Intel 218V, LAN2: RTL8111G (2980U SKU)
Connector	2 x RJ 45
SATA	
Max Data Transfer Rate	SATA3 (6.0Gb/s)

Rear I/O	
VGA	1 (Co-lay with HDMI)
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