



# IMB-186

Ultra Thin Mini-ITX Motherboard

## Spotlight Features

- Intel® 4<sup>th</sup> Gen (Haswell-U) Core™ MCP Processors
  - IMB-186P (i7-4650U, QC, 1.70 GHz, 15 W)
  - IMB-186M (i5-4300U, DC, 1.90 GHz, 15 W)
  - IMB-186V (i3-4010U, DC, 1.70 GHz, 15 W)
- Supports Dual Channel DDR3L SO-DIMM 1333/1600, up to 16GB
- 1 x HDMI, 1 x DisplayPort, 1 x LVDS
- 4 x USB 3.0, 6 x USB 2.0, 2 x SATA3, 6 x COM
- 1 x Mini-PCIe, 1 x mSATA
- 1 x RTL8111G/RTL8111H-CG x1, 1 x Intel® I218LM (Intel® Core i7 / i5)
- 1 x RTL8111G/RTL8111H-CG x1, 1 x Intel® I218V (Intel® Core i3)
- 1 x TPM Header
- DC 9-19 input

## Specifications

### Processor System

Dimensions	Mini-ITX (6.7-in x 6.7-in)
CPU	Intel® 4 <sup>th</sup> Gen (Haswell-U) Core™ MCP Processors -IMB-186P (i7-4650U, QC, 1.70 GHz, 15 W) -IMB-186M (i5-4300U, DC, 1.90 GHz, 15 W) -IMB-186V (i3-4010U, DC, 1.70 GHz, 15 W)
Chipset	SOC

### Expansion Slot

PCIe	N/A
Mini-PCIe	1 x half size with PCIe x1 and USB 2.0
M.2	N/A
mSATA	1x full size with SATA3

### Memory

Technology	Dual Channel DDR3L 1333/1600MHz
Max	16GB
Socket	2 x SO-DIMM

### Graphics

Controller	Intel HD Graphics (By CPU)
VGA	1
LVDS	1
eDP	N/A
HDMI	Supports max resolution up to 4096 x 2304
DVI	N/A
DisplayPort	1
Multi Display	Triple Display

### Ethernet

Controller/ Speed	LAN1: Intel® I218V with 10/100/1000 Mbps LAN2: Intel® I218LM with 10/100/1000Mbps
Connector	2 x RJ-45

### Rear I/O

VGA	N/A
DVI	N/A
HDMI	1
DisplayPort	1
Ethernet	2
USB	4 x USB 3.0
Audio Jack	2 (Mic-in, Line-out)
Serial	N/A
PS/2	N/A

### Internal Connector

USB	6 x USB 2.0
LVDS	1
eDP	N/A
VGA	1
Serial	4 x COM (RS-232), 2 x COM (RS-232/422/485)
SATA	2 x SATA3
Parallel	1 (Co-lay with 8in/8out DIO)
GPIO	8 x GPI + 8 x GPO (shared with LPT header)
SATA PWR Output Con	2
Speaker Header	1
TPM	1 x Header

### 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
Storage Temperature	-40°C – 85°C