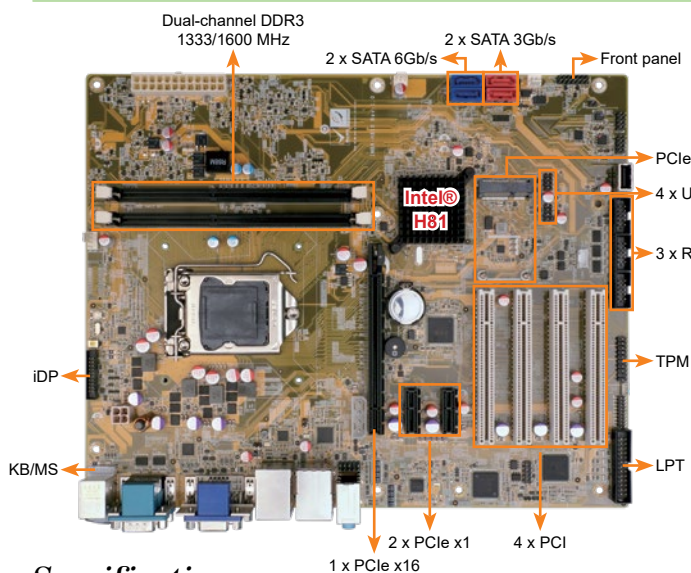


# IMBA-H810

ATX motherboard supports 22nm LGA 1150 4th generation Intel® Core™ i7/i5/i3, Pentium® and Celeron® CPU with Intel® H81, DDR3, VGA/DVI-D/iDP, dual Intel® PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, HD Audio and RoHS



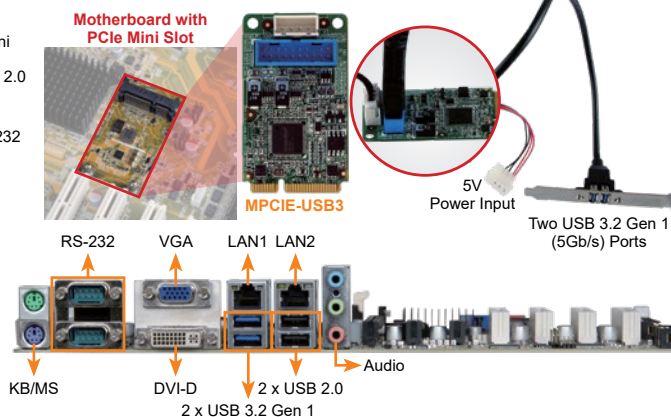
## Specifications

- ◆ CPU  
LGA1150 Intel® Core™ i7/i5/i3, Pentium® and Celeron® processor supported
- ◆ Chipset  
Intel® H81
- ◆ Memory  
Two 240-pin 1600/1333 MHz dual-channel DDR3 SDRAM ECC and non-ECC unbuffered DIMMs support up to 16GB
- ◆ BIOS  
UEFI BIOS
- ◆ Graphics Engine  
Intel® HD Graphics Gen 7.5 supports DX11.1 and OpenCL 1.2, OpenGL 3.2 Full MPEG2, VC1, AVC Decode
- ◆ Display Output  
Dual independent display  
1 x VGA (up to 1920x1200@60 Hz)  
1 x DVI-D (up to 2560x1600@60 Hz)  
1 x iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 3840x2160@60 Hz)
- ◆ Ethernet  
LAN1: Intel® I217-LM with Intel® AMT9.0 support  
LAN2: Intel® I211-AT PCIe Controller
- ◆ External I/O Interface  
1 x KB/MS  
2 x RS-232  
2 x USB 2.0  
2 x USB 3.2 Gen 1 (5Gb/s)
- ◆ Internal I/O Interface  
1 x KB/MS (1x6 pin)  
1 x LPT (2x13 pin)  
1 x mSATA (share with SATA4)  
1 x RS-422/485 (1x4 pin, P=2.0)  
2 x SATA 6Gb/s (SATA1, SATA2) (AHCI supported, no RAID) (Blue)  
1 x USB 2.0 (180° Type-A)  
2 x SATA 3Gb/s (SATA3, SATA4) (Red)  
3 x RS-232 (2x5 pin, P=2.54)  
4 x USB 2.0 (2x4 pin, P=2.54)
- ◆ Audio  
Realtek ALC888S HD Audio codec supports 7.1-channel  
3 x Audio jacks (line-out, line-in, mic-in) on rear IO  
1 x Front audio (2x5 pin)
- ◆ Front Panel  
1 x Front panel (2x7 pin, power LED, HDD LED, speaker, power button, reset button)
- ◆ LAN LED  
2 x LAN LED (1x2 pin)
- ◆ TPM  
1 x TPM (2x10 pin)
- ◆ SMBus  
1 x SMBus (1x4 pin)
- ◆ I<sup>2</sup>C  
1 x I<sup>2</sup>C (1x4 pin)
- ◆ Infrared Interface  
1 x Infrared Interface (1x5 pin)
- ◆ Expansion  
1 x Full-size PCIe Mini card slot (support mSATA) 2 x PCIe x1  
1 x PCIe x16 4 x PCI
- ◆ Watchdog Timer  
Software programmable supports 1~255 sec. system reset
- ◆ Digital I/O: 8-bit digital I/O (2x5 pin)
- ◆ Fan Connector  
1 x CPU smart fan (1x 4 pin)  
1 x System fan (1x 3 pin)
- ◆ Chassis Intrusion Detection: 1 x Chassis intrusion connector (1x2 pin)
- ◆ Power Supply: ATX power supply, ATX/AT mode support
- ◆ Power Consumption  
3.3V@0.83A, 5V@2.2A, 12V@3.88A, 5VSB@0.3A  
(Intel® Core™ i7-4770K 3.90GHz CPU with 8 GB (two 4 GB) 1333 MHz DDR3 memory)
- ◆ Operating Temperature: -20°C ~ 60°C
- ◆ Storage Temperature: -30°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 244 mm x 305 mm
- ◆ Weight: GW: 1200g / NW: 700g
- ◆ CE/FCC compliant

## PCIe Mini Add-on Value

### IEI USB 3.2 Gen 1 (5Gb/s) Expanded Solution

The MPCIE-USB3 board can be installed to add two additional SuperSpeed USB 3.2 Gen 1 (5Gb/s) ports for the motherboard via the PCIe Mini slot.



## Features

- 4th generation LGA1150 Intel® Core™ i7/i5/i3, Pentium® or Celeron® processor supported
- Dual-channel DDR3 1333/1600 MHz support up to 16 GB
- Intel® HD Graphics technology integrates high-performance graphics and media processing
- USB 3.2 Gen 1 (5Gb/s), and SATA supported
- TPM V1.2 hardware security function supported by TPM module

## Packing List

1 x IMBA-H810 single board computer	2 x SATA cable
1 x I/O shielding	1 x QIG

## Ordering Information

Part No.	Description
IMBA-H810-R10	ATX motherboard supports 22nm LGA 1150 4th generation Intel® Core™ i7/i5/i3, Pentium® and Celeron® CPU with Intel® H81, DDR3, VGA/DVI-D/iDP, dual Intel® PCIe GbE, SATA 6Gb/s, USB 3.2 Gen 1 (5Gb/s), HD Audio and RoHS
IMBA-H810-ECO-R10	ATX motherboard supports 22nm LGA 1150 4th generation Intel® Core™ i7/i5/i3, Pentium® and Celeron® CPU with Intel® H81, DDR3, VGA/DVI-D/iDP, dual Intel® PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, HD Audio, ECO packing, RoHS (10 pce/pack)
19800-000049-RS	LPT flat cable, 240mm, P=2.54
19800-000075-RS	PS/2 KB/MS cable with bracket, 220mm, P=2.0
19800-010500-200-RS	USB 3.2 Gen 1 (5Gb/s) cable with bracket, 450mm
19800-020100-100-RS	RS-232 cable with bracket, Dual 10-pin to dual DB-9, 230mm, P=2.54
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
32205-001203-100-RS	RS-232 cable with bracket, Dual 10-pin to dual DB-9, 230mm, P=2.54
32205-003800-200-RS	RS-422/485 cable, 200mm, P=2.0
CF-115XA-R10	High performance LGA1155/LGA1156 cooler kit, 1U chassis compatible, 73W
CF-115XE-R10	High performance LGA1155/LGA1156 cooler kit, 95W
DP-DP-R10	DisplayPort to DisplayPort converter board (for IEI iDP connector)
DP-DVI-R10	DisplayPort to DVI-D converter board (for IEI iDP connector)
DP-HDMI-R10	DisplayPort to HDMI converter board (for IEI iDP connector)
DP-LVDS-R10	DisplayPort to 24-bit dual-channel LVDS converter board (for IEI iDP connector)
DP-VGA-R10	DisplayPort to VGA converter board (for IEI iDP connector)
TPM-IN01-R20	20-pin Infineon TPM module, software management tool, firmware v3.17