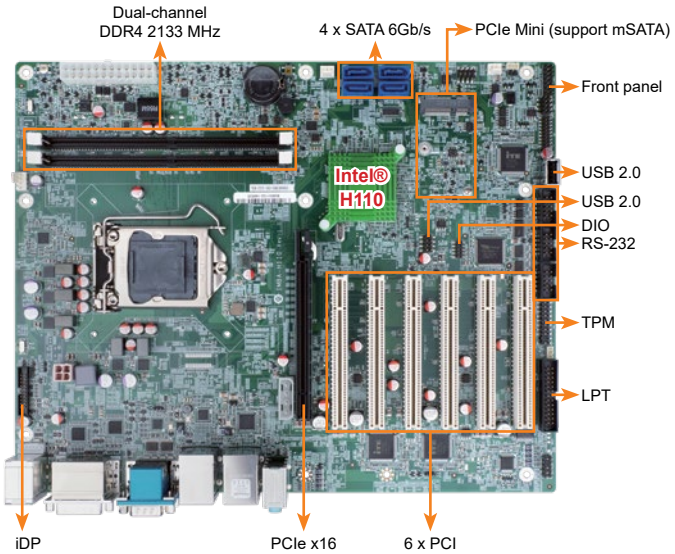
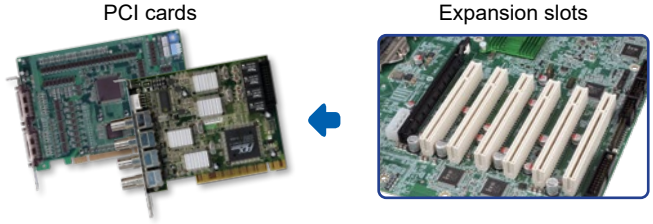
IMBA-H110

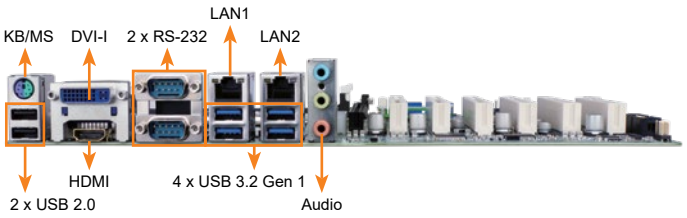
ATX motherboard supports 14nm LGA1151 6th Generation Intel® Core™ i7/i5/i3, Celeron® and Pemtium® processor, DDR4, dual independent displays DVI-I/HDMI/ iDP, dual Intel® GbE LAN, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, HD Audio and RoHS



Multiple PCI Expansion Support



XYZ Machine | Production Line | Automation Test Machine



DDR4 2133 | mSATA | USB 3.2 | SATA 6Gb/s | PCIe GbE

Specifications

- CPU
  LGA 1151 socket supports Intel® 6th/7th generation Core™ i7/i5/i3, Pentium® or Celeron® processor
- Chipset
  Intel® H110
- Memory
  Two 288-pin 2133 MHz dual-channel DDR4 SDRAM unbuffered DIMMs support up to 64 GB
- BIOS
  UEFI BIOS
- Graphics Engine
  Intel® HD Graphics Gen 9 engine with 16 low-power execution units supports DX2015, OpenGL 5.X and OpenCL2.x, ES 2.0
- Display Output
  Dual independent display
  1 x DVI-I (up to 1920x1200@60Hz)
  1 x HDMI 1.4 (up to 4096x2160@24Hz)
  1 x iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 3840x2160@60Hz)
- Ethernet
  LAN1: Intel® I219LM PCIe controller
  LAN2: Intel® I211 PCIe controller
- External I/O Interface
  4 x USB 3.2 Gen 1 (5Gb/s)
  2 x USB 2.0
  2 x RS-232
- Internal I/O Interface
  1 x KB/MS (1x6 pin)
  1 x LPT (2x13 pin, P=2.54)
  1 x RS-232/422/485 (2x5 pin, P=2.54)
  1 x USB 2.0 (180° Type-A)
  2 x RS-232 (2x5 pin, P=2.54)
  2 x USB 2.0 (2x4 pin, P=2.54)
  4 x SATA 6Gb/s
- SMBus
  1 x SMBus (1x4 pin)
- I²C
  1 x I²C (1x4 pin)
- TPM
  1 x TPM (2x10 pin)
- Audio
  Realtek ALC662 HD codec supports 5.1-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)
- Expansion
  1 x Full-size PCIe Mini card slot (support mSATA)
  1 x PCIe x16 slot (Gen3)
  6 x PCI slot
- 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 (1x4 pin)
  2 x System fan (1x3 pin)
- Power Supply: ATX/AT power supply
- Power Consumption
  3.3V@1.53A, 5V@2.95A, 12V@8.38A, 5VSB@3.2A
  (Intel® Core™ i7 6700K 4.0GHz CPU with 16GB (two 8GB) 2133 MHz DDR4 memory)
- Operating Temperature: -20°C ~ 60°C
- Storage Temperature: -30°C ~ 70°C
- Operating Humidity: 5% ~ 95%, non-condensing
- Dimensions: 244mm x 305mm
- Weight: GW: 1200g / NW: 700g
- CE/FCC compliant

Features

- LGA 1151 Intel® 6th/7th generation Core™ i7/i5/i3, Pentium® or Celeron® processor supported
- Dual-channel DDR4 2133 MHz
- Support dual displays with DVI-I/HDMI/iDP
- Support USB 3.2 Gen 1 (5Gb/s) and SATA 6Gb/s

Packing List

1 x IMBA-H110 single board computer	2 x SATA cable
1 x I/O shielding	1 x QIG

Ordering Information

Part No.	Description
IMBA-H110-R10	ATX motherboard supports 14nm LGA1151 6th Generation Intel® Core™ i7/i5/i3, Celeron® and Pemtium® processor, DDR4, dual independent displays DVI-I/HDMI/iDP, dual Intel® GbE LAN, SATA 6Gb/s, USB 3.2 Gen 1 (5Gb/s), HD Audio and RoHS
19800-000049-RS	LPT flat cable, 240mm, P=2.54
19800-000075-RS	PS/2 KB/MS cable with bracket, 220mm, P=2.0
19800-020100-100-RS	RS-232 cable, 230mm, P=2.54
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
CF-115XC-R10	LGA1155/LGA1156 cooler kit, 1U chassis compatible, 45W
CF-115XD-R10	LGA1155/LGA1156 cooler kit, 1U chassis compatible, 65W
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-IN02-R20	20-pin Infineon TPM 2.0 module, software management tool, firmware v5.5