

# IMB-M43H

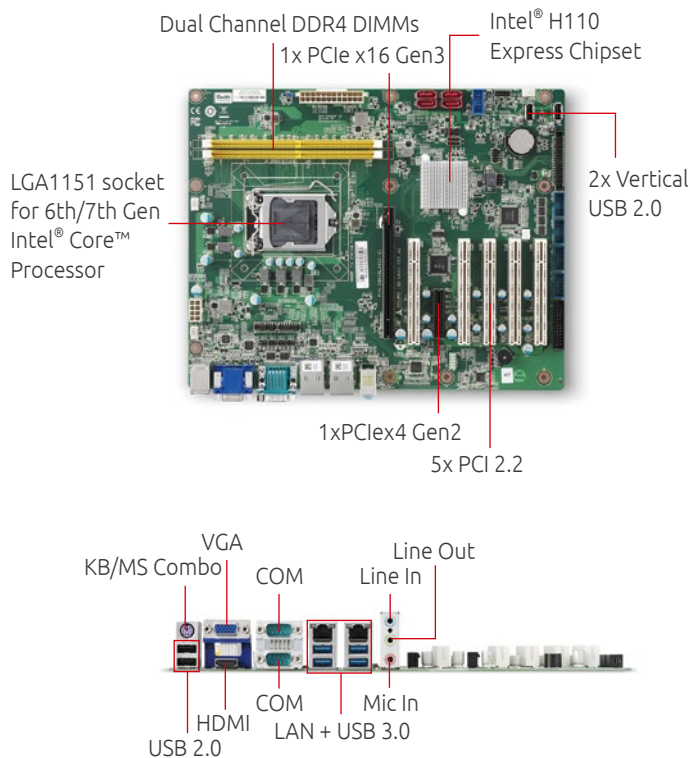
*Industrial ATX Motherboard with 6th/7th Gen Intel® Core™ i7/i5/i3 Processor*

## Features

- 6th Gen Intel® Core™ i7/i5/i3 processors support, compatible with Windows 7
- 7th Gen Intel® Core™ i7/i5/i3 processors support
- Up to 32 GB Dual-channel DDR4 2133 MHz
- Unique power design to ensure stable USB power of 5V ±5%
- IEC 61000-4-2~6 (Performance Criterion A), CE/FCC class B certified



## Product Illustration



## Ordering Information

- **IMB-M43H**  
 ATX Intel® Core™ i7/i5/i3 industrial motherboard  
 Note: CPU, Memory module and Cooler kit are not included

## Packing Lists

- IMB-M43H
- IMB-M43H I/O shield

## Optional Accessories

- **USB 2.0 Cable**  
 2-port USB 2.0 port cable with bracket
- **LPT Cable**  
 1-port LPT port cable with bracket
- **COM Cable**  
 2-port COM port cable with bracket
- **2U CPU Cooler**  
 LGA1156 2U Thermal Module

# Specifications

Processor System	
CPU	Intel® Core™ i7-6700, 3.4 GHz, 8M Cache, 14nm, 65W TDP, LGA1151 (4C/8T)
	Intel® Core™ i7-6700TE, 2.4 GHz 8M Cache, 14nm, 35W TDP, LGA1151 (4C/8T)
	Intel® Core™ i5-6500, 3.2 GHz, 6M Cache, 14nm, 65W TDP, LGA1151 (4C/4T)
	Intel® Core™ i5-6500TE, 2.3 GHz, 6M Cache, 14nm, 35W TDP, LGA1151 (4C/4T)
	Intel® Core™ i3-6100, 3.7 GHz, 3M Cache, 14nm, 51W TDP, LGA1151 (2C/4T)
	Intel® Core™ i3-6100TE, 2.7 GHz, 4M Cache, 14nm, 35W TDP, LGA1151 (2C/4T)
	Intel® Pentium® G4400, 3.3GHz, 3M Cache, 14nm, 54W TDP, LGA1151 (2C/2T)
	Intel® Pentium® G4400TE, 2.4GHz, 3M Cache, 14nm, 35W TDP, LGA1151 (2C/2T)
	Intel® Celeron® G3900, 2.8GHz, 2M Cache, 14nm, 51W TDP, LGA1151 (2C/2T)
	Intel® Celeron® G3900TE, 2.3GHz, 2M Cache, 14nm, 35W TDP, LGA1151 (2C/2T)
	Intel® Core™ i7-7700, 3.6GHz, 8M Cache, 14nm, 65W TDP, LGA1151 (4C/8T)
	Intel® Core™ i7-7700T, 2.9GHz 8M Cache, 14nm, 35W TDP, LGA1151 (4C/8T)
	Intel® Core™ i5-7500, 3.4GHz, 6M Cache, 14nm, 65W TDP, LGA1151 (4C/4T)
	Intel® Core™ i5-7500T, 2.7GHz, 6M Cache, 14nm, 35W TDP, LGA1151 (4C/4T)
	Intel® Core™ i3-7101E, 3.9GHz, 3M Cache, 14nm, 54W TDP, LGA1151 (2C/4T)
	Intel® Core™ i3-7101TE, 3.4GHz, 3M Cache, 14nm, 35W TDP, LGA1151 (2C/4T)
Chipset	Intel® H110 Express Chipset
Memory	Two 288 PIN DDR4 Sockets (vertical type) Dual channel DDR4 2133 MHz, up to 32 GB
BIOS	AMI® UEFI BIOS, 128 Mb SPI Flash Memory
Watchdog Timer	software programmable and can be generate system reset
Hardware Monitor	CPU voltage
	+3.3 V voltage
	+5 V voltage
	+12 V voltage
	CPU temperature
	System temperature
	CPU fan speed
	System fan speed
Operating Systems	Microsoft® Windows® 7 32/64-bit (only for 6th Gen Intel® Core™ processors) Microsoft® Windows® 8.1 64-bit Microsoft® Windows® 10 64-bit OpenSUSE Leap 42.1 64-bit Fedora 25 64-bit Ubuntu 16.04 LTS 64 bit
I/O Interfaces	
Serial ATA	4x SATA 6.0 Gb/s connectors
USB	4x USB 3.0 connectors (rear)
	2x USB 2.0 connectors (rear)
	2x USB 2.0 pin headers 2x USB 2.0 (vertical type A connector)
Serial Ports	2x RS-232/422/485 with auto flow control connector (rear)
	4x RS-232 pin headers
Expansion slots	1xPCIe x16 Gen3 1xPCIe x4 Gen2 5x PCI 2.2
	Parallel Port
PS2 Combo Port	1x PS/2 keyboard & Mouse connector (rear)
DIO	2x 20-pin/2.0mm GPIO pin header: 16 in and 16 out, one ground pin and one power pin (5V/12V/no power, jumper selected)
Audio	
Audio Codec	Realtek® ALC892-CG
Interface	1x Mic-in, 1x Line-out and 1x Line-in connector (rear)
Graphics	
Graphics Engine	Integrated Intel® HD Graphics series (based on CPU)
VGA	1x VGA connector (rear), resolution up to 1920 x 1200 @ 60 Hz
HDMI 1.4	1x HDMI connector (rear) resolution up to 4096 x 2160 @ 24 Hz
Ethernet	
Controller	LAN1: Intel® I219-LM via RJ45 connector (rear)
	LAN2: Intel® I211-AT via RJ45 connector (rear)
Wake On LAN	LAN1 and LAN2 support
Mechanical and Environmental	
Form Factor	ATX
Dimension	305 mm x 244 mm (W x L)
Operating Temperature	0 °C to 60 °C
Storage Temperature	-40 °C to 85 °C
Relative Humidity	40° C @ 95% RH Non-condensing
Certification (EMC)	CE & FCC Class B

\*Extending operating temperature is optional and requires use of an industrial solid-state drive storage device or CFast card..

\*\*Other Linux Distribution support by request