

# IMB-M43

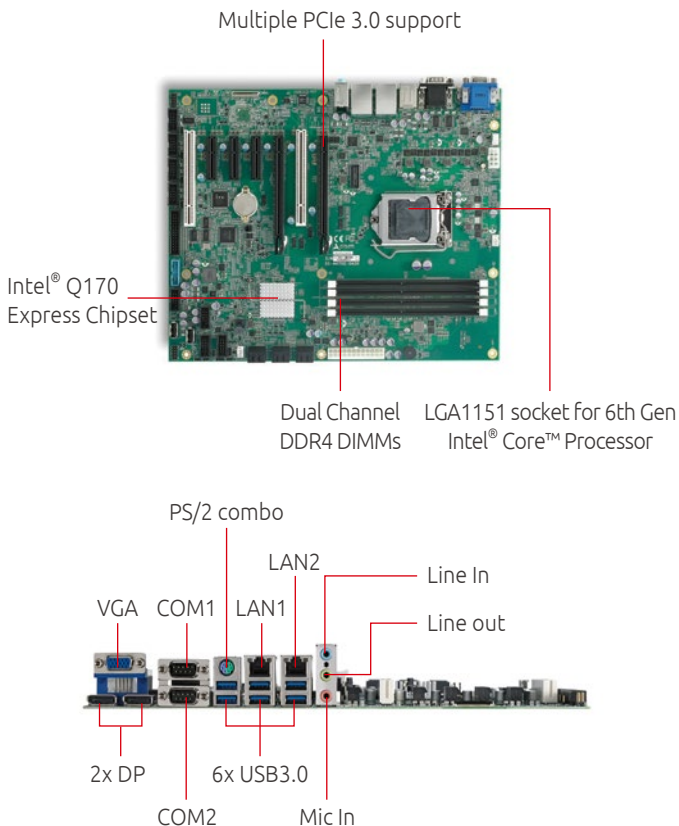
## Industrial ATX Motherboard with 6th Gen Intel® Core™ i7/i5/i3 Processor

### Features

- 6th Gen Intel® Core™ i7/i5/i3 processors and Q170 chipset
- Dual-channel DDR4 2133 MHz memory up to 64 GB
- Intel® PCIe 3.0 slot bifurcation supports up to 5x PCIe 3.0 expansion slots
- Rugged I/O design to enhance I/O port compatibility and reliability
- 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-M43**  
ATX Intel® Core™ i7/i5/i3 industrial motherboard  
Note: CPU, Memory module and Cooler kit are not included

### Packing Lists

- IMB-M43
- IMB-M43 I/O shield

### Optional Accessories

- **USB 3.0 Cable**  
2-port USB 3.0 port cable with bracket
- **USB 2.0 Cable**  
4-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

<b>Processor System</b>		
<b>CPU</b>	Intel® Core™ i7-6700, 3.4 GHz, 8M Cache, 14nm, 65W TDP, LGA1151 (4C/8T)	<b>Expansion slots</b>
	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)	
<b>Chipset</b>	Intel® Q170 Express Chipset	
<b>Memory</b>	Four 288 PIN DDR4 Sockets (vertical type) Dual channel DDR4 2133 MHz, up to 64 GB	
<b>BIOS</b>	AMI® UEFI BIOS, 128 Mb SPI Flash Memory	
<b>Watchdog Timer</b>	software programmable and can be generate system reset	
<b>Hardware Monitor</b>	CPU voltage	<b>Parallel Port</b>
	+3.3 V voltage	
	+5 V voltage	
	+12 V voltage	
	CPU temperature	
	System temperature	
<b>Operating Systems</b>	Microsoft® Windows® 7 32/64-bit	<b>PS2 Combo Port</b>
	Microsoft® Windows® 8.1 64-bit	1x PS/2 keyboard & Mouse connector (rear)
	Microsoft® Windows® 10 64-bit	
	Ubuntu 15.10 32/64-bit	
<b>I/O Interfaces</b>		<b>DIO</b>
		1x 10-pin/2.54mm GPIO pin header: 4 in and 4 out, one ground pin and one power pin (5V/12V/no power, jumper selected)
<b>Serial ATA</b>	6x SATA 6.0 Gb/s connectors Software RAID support 0/1/5/10	<b>Audio</b>
<b>USB</b>	6x USB 3.0 connectors (rear)	<b>Audio Codec</b>
	2x USB 3.0 pin headers	Realtek® ALC262-VC2-GR
	4x USB 2.0 pin headers	<b>Interface</b>
	2x USB 2.0 (vertical type A connector)	1x Mic-in, 1x Line-out and 1x Line-in connector (rear)
<b>Serial Ports</b>	2x RS-232/422/485 with auto flow control connector (rear)	<b>Graphics</b>
	4x RS-232 pin headers	<b>Graphics Engine</b>
		Integrated Intel® HD Graphics series (based on CPU)
		<b>VGA</b>
		1x VGA connector (rear), resolution up to 1920 x 1200 @ 60 Hz
		<b>DisplayPort 1.2</b>
		2x DP connector (rear), resolution up to 4096 x 2304 @ 60 Hz
		<b>Ethernet</b>
		<b>Controller</b>
		LAN1: Intel® I219-LM via RJ45 connector (rear) LAN2: Intel® I211-AT via RJ45 connector (rear)
		<b>Intel® AMT</b>
		LAN1 Support
		<b>Wake On LAN</b>
		LAN1 and LAN2 support
		<b>Mechanical and Environmental</b>
		<b>Form Factor</b>
		ATX
		<b>Dimension</b>
		305 mm x 244 mm (W x L)
		<b>Operating Temperature</b>
		0 °C to 60 °C
		<b>Storage Temperature</b>
		-20 °C to 80 °C
		<b>Relative Humidity</b>
		0 % to 90 %, non-condensing
		<b>Certification</b>
		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