

IMB-M43-C236

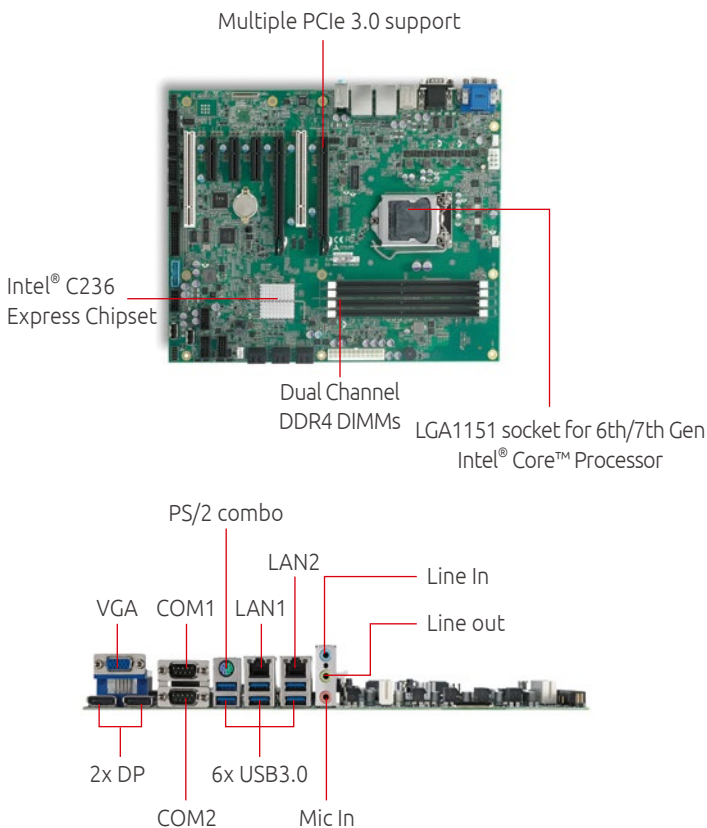
Industrial ATX Motherboard with 6th/7th Gen Intel® Core™ i7/i5/i3 and Xeon® E3-1200 v5/v6 Processors

Features

- 6th/7th Gen Intel® Core™ i7/i5/i3 or Xeon® E3 processors and C236 chipset
- Dual-channel DDR4 2133/2400 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-C236**
ATX 6th/7th 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

Processor System	
CPU	Intel® Xeon® Processor E3-1275 v6, 3.8 GHz, 8M Cache, 14nm, 73W TDP, LGA1151 (4C/8T)
	Intel® Xeon® Processor E3-1275 v5, 3.6 GHz, 8M Cache, 14nm, 80W TDP, LGA1151 (4C/8T)
	Intel® Xeon® Processor E3-1225 v5, 3.3 GHz, 8M Cache, 14nm, 80W TDP, LGA1151 (4C/4T)
	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® C236 Express Chipset
Memory	Four 288 PIN DDR4 ECC or NON ECC Sockets Dual channel DDR4 2133/2400 MHz, up to 64 GB (based on CPU)
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
Operating Systems	CPU temperature
	System temperature
	CPU fan speed
	System fan speed
I/O Interfaces	Microsoft® Windows® 7 32/64-bit (only for 6th Gen Intel® Core™ and E3-1200 v5 processors)
	Microsoft® Windows® 8.1 64-bit
	Microsoft® Windows® 10 64-bit
	Microsoft® Windows® Server 2016 64-bit
Serial ATA	Ubuntu 15.10 32/64-bit
	6x SATA 6.0 Gb/s connectors Software RAID support 0/1/5/10
USB	6x USB 3.0 connectors (rear)
	2x USB 3.0 pin headers
	4x 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	<Signal> If PEG3 is occupied, PEG1 is PCIe8 Gen3, PEG2 is PCIe4 Gen3, and PEG3 is PCIe4 Gen3 If PEG3 is not occupied and PEG2 is occupied, PEG1 is PCIe8 Gen3, PEG2 is PCIe8 Gen3, and PEG3 is no signal If PEG3 is not occupied and PEG2 is not occupied, PEG1 is PCIe16 Gen3, PEG2 and PEG3 is no signal PCIe1: PCIe x4 Gen3, PCIe2: PCIe x4 Gen3, PCI1: PCI 2.2, PCI2: PCI 2.2
	<Physical Slot> PEG1: PCIe16 slot, PCI1: PCI slot, PEG2: PCIe16 slot, PEG3: PCIe4 slot, PCIe1: PCIe4 slot, PCIe2: PCIe4 slot, PCI2: PCI slot
	1x LPT pin header
Parallel Port	1x PS/2 keyboard & Mouse connector (rear)
PS2 Combo Port	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)
DIO	

*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

Specifications

Audio	
Audio Codec	Realtek® ALC262-VC2-GR
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
DisplayPort 1.2	2x DP connector (rear), resolution up to 4096 x 2304 @ 60 Hz
Ethernet	
Controller	LAN1: Intel® I219-LM via RJ45 connector (rear) LAN2: Intel® I210-AT via RJ45 connector (rear)
Intel® AMT	LAN1 Support
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	CE & FCC Class B

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

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