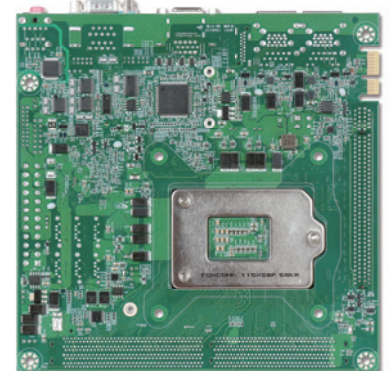
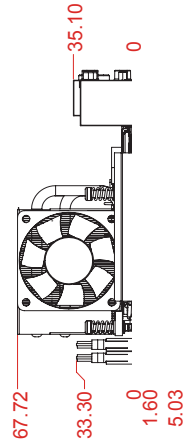
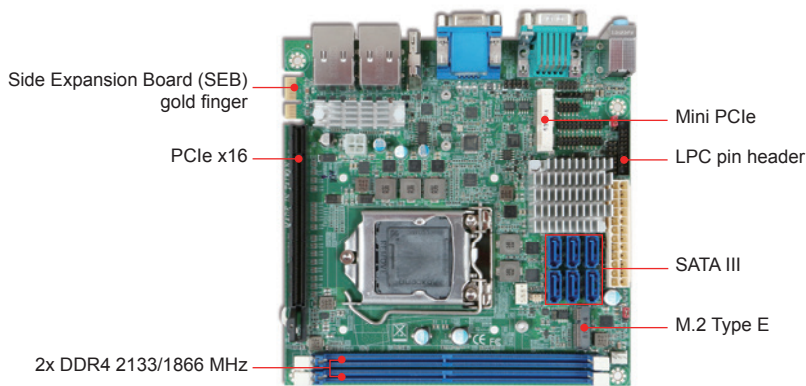




WADE-8017-KBL

7th Gen Intel® Core™ i7, i5, and i3 Processors
Based Mini-ITX Board with DDR4 DIMM, Triple
Displays, Dual GbE LAN, Six COM Ports

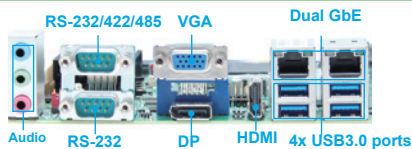


WADE-8017-KBL is based on the 7th Gen Intel® Core™ i7/i5/i3 processors and Intel® C236/Q170/H110 chipsets. With enhanced CPU and graphic performance, high speed I/Os, and expansion features; WADE-8017-KBL enables your IoT designs from the edge to the cloud.

FEATURES

- 7th generation Intel® Core™ processor series
- DDR4 2133/1866 MHz memory, 2x 288-pin DIMM sockets, up to 32 GB
- 1x PCIe x16, 1x M.2, 1x full-size Mini PCIe
- Dual Gigabit Ethernet, USB 3.0/2.0, SATA III, and COM port

REAR I/O



ORDERING GUIDE

WADE-8017-KBL-C236	WADE-8017-KBL with Intel® C236 chipset (ECC DDR4 SDRAM, 6 SATA III)
WADE-8017-KBL-Q170	WADE-8017-KBL with Intel® Q170 chipset (non-ECC DDR4 SDRAM, 6 SATA III)
WADE-8017-KBL-H110	WADE-8017-KBL with Intel® H110 chipset (non-ECC DDR4 SDRAM, 4 SATA III)

OPTIONAL ITEMS

B786P610	COM port DB9 male to 10pin header cable, 250 mm (no mounting bracket)
B6901970	2 ports USB 2.0 cable, 200 mm
PA-T1-U	Winbond WPCT200AA0WG TPM 1.2 module
PEP-802X4	2x PCIe x4 slots SEB riser card
PEP-803AX4	1x PCIe x4 & 2x PCI slots SEB riser card

PACKING LIST

1x WADE-8017-KBL motherboard
1x I/O shield
1x SATA cable
1x driver CD



All product specifications are subject to change without notice.

www.portwell.com

General

Processor	7 th Gen Intel® Core™ i7, i5, and i3 processors in LGA1151 package
Chipset	Intel® C236/Q170/H110
BIOS	AMI UEFI BIOS (SPI ROM)
Memory	Dual-channel DDR4 2133/1866 MHz memory (C236: ECC; Q170/H110: non-ECC) 2x 288-pin DIMM sockets, up to 32 GB
Storage Devices	C236/Q170: 6x SATAIII ports H110: 4x SATAIII ports
Watchdog Timer	Programmable 1 to 255 minutes/seconds interval
Hardware Monitoring	CPU & system temperature Onboard voltages (CPU Vcore, 12V, 5V, 3.3V, RAM)
Expansion Interface	1x PCIe x16 (Gen3) 1x M.2 socket (Type E; support 1630, 2230 module type) 1x full-size Mini PCIe/mSATA socket (selectable by jumper setting) 1x Side Expansion Board (SEB) gold finger (up to 2x PCIe x1 signal)

I/O Interface

Audio	Realtek® ALC892 High Definition Audio 3x audio jack on rear I/O (Line-in/ Line-out/ Mic-in)
Ethernet	2x Gigabit Ethernet (Intel® I219-LM and Intel® I211-AT) 2x RJ45 connectors on rear I/O
Serial Port	2x RS-232/422/485 on rear I/O (selectable by BIOS) 4x RS-232 on pin header (2.00 mm pitch)
USB	4x USB 3.0 on rear I/O 2x USB 2.0 on pin header (2.00 mm pitch)
GPIO	8-bit
Other	TPM 1.2 module (optional) on LPC pin header

Display

Graphic Controller	Integrated Intel® Generation 9 Graphics Supports DirectX 11/12, OpenGL 4.3/4.4, ES 2.0, OpenCL 2.x
Display Interface	1x DisplayPort on rear I/O, resolution up to 4096 x 2304 @ 60Hz 1x HDMI on rear I/O, resolution up to 4096 x 2160 @ 24Hz 1x VGA on rear I/O, resolution up to 1920 x 1200 @ 60Hz

Mechanical & Environmental

Dimension	170.0 x 170.0 x 35.1 mm (6.7" x 6.7" x 1.4")
Power Supply	ATX
Environmental	Operating temperature: 0°C to 60°C Storage temperature: -20°C to 80°C Relative humidity: 5~95%, non-condensing
MTBF	Over 120,000 hours at 40°C

Last updated: Aug 29, 2017

WADE-8017-KBL