



The WADE-A8212 is based on Intel® W480E chipset and Desktop processors including Intel® 10th Gen Core™ i3/i5/i7/i9 SKU. This board supports DDR4, PCIe Gen 3, and SATA III. Those features help you to build high performance and stable systems.

Features

- Intel® 10th Gen (Comet Lake-S) Core™ Processors with W480E Chipset
- 4x 288-pin Long-DIMM, Support Dual Channel DDR4 up to 128GB
- 1 x PCIe x16 Gen3, 1 x PCIe x8 Gen3, 3 x PCIe x4 Gen3
- 4 x USB 3.2 Gen2, 4 x USB 3.2 Gen1, 4 x USB 2.0,
- 1 x M.2 Key E, 1 x M.2 Key M, 1 x M.2 Key B
- 6 x COM, 6 x SATA3
- 1 x Intel 1 Gigabit LAN, 1 x Intel 2.5 Gigabit LAN
- Support Triple display, 1 x DP1.2, 1 x VGA, 1 x HDMI 2.0a
- TPM 2.0 onboard
- ATX-PWR (24+8-pin)

Technical Data

General	
Processor	Intel 10 th Gen (Comet Lake-S) Core Processors on LGA1200 Socket, up to 125W
Chipset	W480E
Memory	Max. 64GB DDR4 Dual Channel (32GB per module) - Intel Xeon W-1200 series & Core i9 / i7 CPUs support DDR4 up to 2933 MHz - Intel Core i5 / i3 CPUs support DDR4 up to 2666 MHz - Intel Pentium / Celeron CPU support DDR4 up to 2400 MHz
BIOS	AMI® 256Mbit SPI
Watchdog Timer	1-255 sec. setup by software
Expansion Interface	3 x PCIe Gen3 Slots (PCIe1 / PCIe2 / PCIe3: Single at x16 (PCIe1); Dual at x8 (PCIe1) / x8 (PCIe3); Triple at x8 (PCIe1) / x4 (PCIe2) / x4 (PCIe3)) 2 x PCIe x4 (Gen3) 2 x PCI 1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0 and CNVi for Wireless 1 x M.2 (Key B, 3042 / 3052) with PCIe x1 / USB 3.0 / USB 2.0 1 x SIM socket connected to M.2 key B

I/O Interface

Super I/O	Fintek F81966A (BGA type, eSPI interface)
Audio	Realtek ALC887 HD Audio Jack, Line-In / Line-Out /
Ethernet	Intel® I225LM 1x RJ-45 with 10/100/1000/2500 Mbps Intel® I219LM 1x RJ-45 with 10/100/1000Mbps, supports AMT / vPro
Serial Port	4x COM (RS-232)
USB	4x USB 3.2 Gen2 2x USB 2.0
PS2	1x PS2
GPIO	8x GPI, 8 x GPO (shared with LPT header)

Graphics

Controller	Integrated Intel® HD Graphics
HDMI	HDMI 2.0a Max resolution up to 4096x2160@60Hz
DisplayPort	DisplayPort 1.2, DP++ Max resolution up to 4096x2160@60Hz
VGA	Max resolution up to 1920x1200@60Hz
MultiDisplay	Triple Display

Audio

Interface	Realtek ALC887 HD , High Definition Audio. Line-In/ Line-Out/ Mic-In
-----------	--

Ethernet

Chipset	1x Intel® I225LM, 1x Intel I219LM
Interface	2x RJ45

Storage

M.2	1x M.2 (Key M, 2242/2260/2280) with SATA3 and PCIe x4 for SSD * Shared with SATA3_5/ SATA3_6 Ports • When using M.2 PCIe x4 SSD, both SATA3_5 and SATA_6 Ports are disabled • When using M.2 SATA SSD, only SATA3_5 Port is disabled, and SATA3_6 Port is available
SATA port	6x SATA3 (6Gb/s)
RAID	Intel® SATA RAID 0/1/5/10

Mechanical and Environment

Form Factor	ATX (12-in x 9.6-in)
Power Type	ATX PWR (24+8-pin)
Dimension	304,8mm (L) x 243,8mm (W)
Operating Temp.	0°C ~ +60°C
Storage Temp.	-40°C ~ +85°C
Relative humidity	5% ~ 90% (operating, non-condensing) 5% ~ 90% (non-operating, non-condensing)

Order Information

Article	Part-No.	Description
RUBY-D812-W480E	tbd	tbd

