

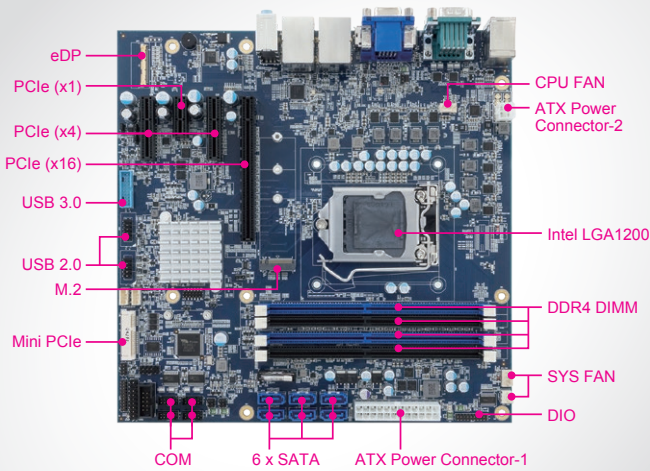
# BU-B015

Micro-ATX Intel® 10th Gen. Core™ i9 / i7 / i5 / i3 / Pentium® / Celeron® / Xeon® W-1200 CPU

## Features



- Intel® 10th Gen. Core™ i9 / i7 / i5 / i3 / Xeon® W-1200 CPU
- 6 x COM, 2 x LAN, 12 x USB, 1 x PS/2
- 1 x VGA, 2 x DP, 1 x eDP (internal)
- 6 x SATA, supporting RAID 0/1/5/10
- 1 x Mini PCIe slot, 1 x M.2
- 1 x PCIe (x16), 2 x PCIe (x4), 1 x PCIe (x1)



## Specifications

### System

CPU Support	LGA1200 socket for Intel® 10th Gen. Core™ i9 / i7 / i5 / i3 / Pentium® / Celeron® desktop CPU / Xeon® W-1200 server CPU
CPU List	Xeon®: W-1290E(TE), W-1270E(TE), W-1250E(TE) 9th Gen. Core™: i9-10900E(TE), i7-10700E(TE), i5-10500E(TE), i3-10100E(TE) Pentium®: G6400E, G6400TE Celeron®: G5900E, G5900TE
Chipset	Intel® W480E (support Xeon® / Core™ / Pentium® / Celeron® CPU) Intel® Q470E/H420E (support Core™ / Pentium® / Celeron® CPU)
Memory Support	W480E/Q470E: 4 x DIMM sockets, support 2933MHz DDR4 up to 64GB support 2666MHz DDR4 up to 128GB H420E: 2 x DIMM sockets, support 2666MHz DDR4 up to 64GB Support ECC (W480E) / non-ECC (all SKU)
BIOS	AMI UEFI BIOS
Watchdog	1~255 seconds watchdog timer selectable
Power Supply	Supports ATX power (24+4 pin)
Power Consumption	TBD
Dimensions	244 x 244 mm (9.6" x 9.6")
Certifications	CE / FCC
O.S. Support	Windows 10 IoT Enterprise, Linux

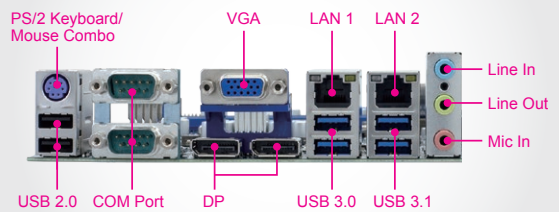
### Graphics

Flexible Display	W480E/Q470E: 1 x VGA, 2 x DP, 1 x eDP, support triple independent display H420E: 1 x VGA, 2 x DP, 1 x eDP, support dual independent display
VGA	1 x VGA (rear I/O) up to 1920 x 1200 @60Hz (default)
DisplayPort	2 x DP (rear I/O) up to 4096 x 2304 @60Hz (default)
eDP	1 x eDP (internal) up to 4096 x 2304 @60Hz (default)

### Environment

Operating Temp.	0°C~60°C (32°F~140°F) @humidity 20%~90%
Storage Temp.	-40°C~85°C (-40°F~185°F) @humidity 20%~95%

### I/O Panel View



### I/O Ports

SATA Interface	W480E/Q470E: 6 x SATA 3.0, support RAID 0/1/5/10/01 H420E: 4 x SATA 3.0, without RAID
Expansion Bus	W480E/Q470E: 1 x PCIe (x16), 2 x PCIe (x4), 1 x PCIe (x1), 1 x Mini PCIe (colay with LAN 2, select by jumper) 1 x M.2 slot H420E: 1 x PCIe (x16), 1 x PCIe (x4), 1 x PCIe (x1), 1 x Mini PCIe (colay with LAN 2, select by jumper)
M.2 Slot	1 x M.2 slot support NVMe (PCIex4) for storage only, 2242/2260/2280
LPC	1 x LPC (2x10 Pin Header)
Serial Ports	6 x COM ports COM 1&2: RS232/422/485 auto flow control by BIOS (rear I/O) COM 3&4: Support 5V/12V by jumper selection
Keyboard/Mouse FAN	1 x PS/2 Combo connector for keyboard & mouse (rear I/O) 1 x CPU fan, 2 x system fans (internal connector)
LAN	Dual LAN (2 x RJ45 on rear I/O) LAN 1: Intel® PHY 219LM (GbE) LAN 2: Intel® LAN 211AT (GbE) (colay with M_PCIE1, select by jumper) Supports Wake-On-LAN & PXE
Audio	Mic In / Line In / Line Out (rear I/O) Internal 2x5 wafer, Pitch 2.0 (connected to front panel of chassis)
Digital I/O	8 in / 8 out (pin header)
USB	W480E/Q470E: 12 ports 2 x external USB 3.1 stacked with LAN (rear I/O) 2 x external USB 3.0 stacked with LAN (rear I/O) 2 x external USB 2.0 stacked with PS/2 Combo connector (rear I/O) 2 x internal USB 3.0 (box header) 4 x internal USB 2.0 (pin header) H420E: 8 ports 2 x external USB 3.0 stacked with LAN (rear I/O) 2 x external USB 2.0 stacked with LAN (rear I/O) 2 x external USB 2.0 stacked with PS/2 Combo connector (rear I/O) 2 x internal USB 3.0 (box header)

\* All information contained in this document is subject to change without prior notice. Please log on [www.protech.com.tw](http://www.protech.com.tw) to acquire latest information. For detail mechanics drawing, please contact our sales.