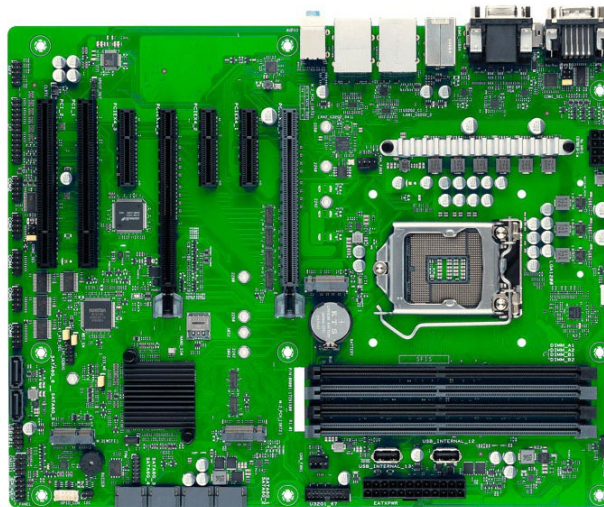


# The4thware Industrial Board (ATX)

10<sup>th</sup> Generation Intel Core Series Platform

## T4WP-Q470E-ATX



## PRODUCT SPECIFICATION

Specification	
Processor	10th Gen Intel® Core Processors in LGA1200 package
Chipset	Intel® Q470E
BIOS	AMI uEFI BIOS (SPI ROM)
Memory	Support up to 128GB DDR4 2400/2666/2933 Non-ECC on four Long-DIMM socket
Storage Devices	6x SATAIII ports (port1 /port2 shared with M.2 Key M)
Hardware Monitoring	System monitor (Voltage, Fan Speed and Temperature)
Expansion Interface	2x PCIe x16 (1x PCIe x8 signal) 3x PCIe x4 slots , 2x PCI slots 1x M2 Key M for SSD, 1x M.2 Key E for Wireless, 1x M.2 Key B for 4G/5G module
Super I/O	NCT6116D
Audio	Audio Jack on rear I/O with Line-out / Mic-in with Realtek ALC897 Audio controller
Ethernet	- Intel® I219LM(1G) and Intel® I225V(2.5G) Ethernet controller - 2x RJ45 connectors on rear I/O
Serial Port	- 2x RS-232/422/485 ports (one on REAR I/O, one on board header) - 4x RS-232 ports on pin header
USB	- 4x USB 3.2 Gen2 on rear I/O (3x Type A, 1x Type C), 2x USB 3.2 Gen1 on pin header - 2x USB 2.0 on pin header, 2x vertical connectors
GPIO	8-bit configurable controlled by embeded controller
Graphic Controller	Intel® graphic UHD 630 supports DirectX 12, OpenGL 4.5
Display Interface	- 2x DP ports on rear I/O, resolution up to 4K (4096x2160@60Hz) - 1x VGA port on rear I/O resolution up to 1920x1200 - 1x HDMI connector on rear I/O, resolution up to 4096x2160@30Hz
Dimension	304.8mm(L) x 243.8mm(W) x 1.6mm(H)
Power Supply	ATX
Environment	- Operation temperature:0~60°C - Storage temperature: - 20~80°C - Relative humidity:5~95%,non-condensing
MTBF	Over 100,000 hours at 40°C