

# Dx510P-UQ2

Provides performance and versatility to address your most demanding applications

Exatron Dx510P-UQ2 desktop featuring an Intel Q870 chipset is designed for is built to provide a stable, secure, and high-performance foundation for demanding business applications, leveraging the latest Intel processor technology and the speed of DDR5 memory. Its offering reliable performance for essential computing needs.

## Exatron Dx510P-UQ2

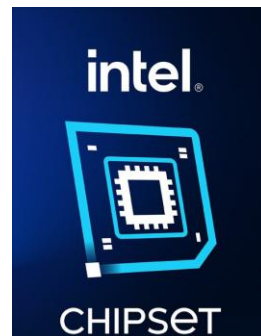
- Modern Intel CPU Support
- Flexible Memory Options
- High-Speed Storage & Graphics
- Excellent Connectivity

### Ideal for

- Corporate Desktops / Business Workstations
- Specialized Industrial PC
- High-Performance or Small Servers

## Intel Q870 chipset

Intel Q870 is a mainstream desktop chipset from Intel's 800-series platform, designed for use with Intel® Core™ Ultra processors (Series2) on LGA1851 socket systems. It provides essential I/O, storage, networking, and system management features for business and general-purpose PCs



## HD Audio

Provides high quality sound with minimal loss of audio fidelity.



## Hi-Fi Ground

EXATRON Hi-Fi Ground (Golden Line) is noise-blocking multi-layer PCB design to isolates analog audio signals from digital sources. Unique PCB layout is ideal for exceptional clarity and high fidelity sound.



## Hi-Fi AMP

The built-in amplifier can drive major high-end headphones with over 100dB loads and offer wide band-width, low noise, high slew rate and low distortion audio source from front panel I/O. Gaming enthusiasts can enjoy a fuller range of dynamic sound with crisper details and less distortion.



## Smart Ear

Smart EAR is a windows-based audio utility which allows you to easily adjust system volume. With its user-friendly GUI, you can also increase or decrease impedance setting (Low/High Gain) to optimize your headphone performance. You can easily enjoy high-quality and awesome sound.



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## HDMI 4K2K

The new 4K2K resolution enables high-definition image display with four times the resolution of full HD, 4K2K display is faithfully express bright, highly detailed content that fills the entire screen with lifelike images. Connectivity with PCs via a single HDMI cable for displaying 4K2K data.



## DX 12

DirectX 12 introduces the next version of Direct3D, the graphics API at the heart of DirectX. Direct3D is one of the most critical pieces of a game or game engine, and we've redesigned it to be faster and more efficient than ever before. Direct3D 12 enables richer scenes, more objects, and full utilization of modern GPU hardware.



## Dual DDR5

The primary advantages of DDR5 over DDR4, include higher module density, lower voltage requirements, coupled with higher data transfer rate.



## S-Hyper PWM

The S-Hyper PWM has DCR current sensing architecture and lossless characteristic, offering excellent precision in delivering stable power with 100% fixed voltage to ensure that critical components of the motherboard are under protected with the maximum performance and reliability.



## Super Durable Solid Caps

The best quality solid state capacitors with ultra low ESR design, the Super Durable Solid Caps doubles the lifespan.



## SATAIII 6Gbps

SATAIII 6Gbps provides a higher bandwidth to retrieve and transfer HD media. With this super speed data transfer, SATAIII allows an incredible data boost which is 2x faster than the SATA II.



## PCIe 4.0 M.2

PCIe 4.0 M.2 delivers the highest bandwidth and lower latency. It is 2 times faster compared with PCIe 3.0 M.2.



## USB 3.2 Gen1 Type-A

USB 3.2 Gen1 delivers a compelling performance boosts and can be used to connect multiple devices without worrying about compatibility. It is capable of data transfer speeds up to 5Gbps and backwards compatible with all existing USB products.



## Super LAN Surge Protection

Super LAN Surge Protection, providing LAN port with more advanced antistatic protection capabilities by adding an integrated chip to strengthen electrical stability and prevent damage from lightning strikes and electrical surges. SLSP (Super LAN Surge Protection) series motherboard upgrades the existing system protection standards with maximum 4X protection comparing to other board makers.



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## ESD Protection

ESD (Electrostatic Discharge) is the major factor to destroy the PC by electrical overstress (EOS) condition. ESD occurred by PC users when touch any devices connect to a PC, which may result in damage to the motherboard or parts. ESD protection is designed to protect the motherboard and equipment from damage by EOS.



## 2.5Guard

2.5GUARD features 2.5G having higher data transfer speeds and can strengthen electrical stability and prevent damage from lightning strikes and electrical surges. It's 2.5X improvement than standard Ethernet connections.



## OC / OV / OH Protection

OC / OV / OH Protection design detects over voltage conditions and prevents voltage surges from spreading in real time. It also actively cuts off the over voltage supply to protect your system.



Feature	Technical Specifications
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Chipset	Intel® Q870 Express Chipset
CPU Support	LGA1851, support Intel® Core Ultra 200 Processor
Memory	4 x 288-pin DDR5-5600Mhz U-DIMM(Non-ECC), up to 192GB
Expansion Slots	2 x M.2 M Key 2242/2280 support PCIe5.0 x4 /PCIe4.0 x4 for NVMe storage
	1 x M.2 E Key 2230 support PCIe4.0 x1 + USB2.0, support WIFI/BT module
	2 x PCIe5.0 x16 (x16+NA or x8+x8)
	3 x PCIe4.0 x4 Slot (1xPCIe4.0 x4 share with M.2 M Key)
	1 x PCIe4.0 x1
Graphics	Intel® Integrated Graphics, support triple display
	- 1 x HDMI® 2.0 connectors (4096x2160@60Hz)
	- 1 x DP++1.4 connector (4096x2160 @60Hz)
	- 1 x VGA connector (1920x1200 @60Hz)
Audio	Audio Codec: ALC897
LAN	Quad Intel® LAN
	3 x 2.5G by I226-V
	1 x 2.5G by I226-LM, support Intel vPro
Rear I/O	1 x COM Port , support RS-232/422/485
	1 x VGA connector
	1 x DP connector
	1 x HDMI® connector
	4 x RJ45 connector, support 2.5G
	8 x USB3.2 Gen2 Type A connector
	3 x Audio jacks, support LINE-in/LINE-out/MIC-in
Internal I/O	Expansion slots: Expansion slots:
	- 4 x 288-pin DDR5 sockets
	- 1 x M.2 key M type, support PCIe5.0 x4 SSD
	- 1 x M.2 key M type, support PCIe4.0 x4 SSD( share w/ PCIe4.0 x4)

- 2 x PCIe5.0 x16 (x16+NA or x8+x8)
- 3 x PCIe4.0 x4 Slot (1xPCIe4.0 x4 share with M.2 M key)
- 1 x PCIe4.0 x1
<b>SATA:</b>
- 4 x SATA3 7pin connector
<b>Audio:</b>
- 1 x 2*5 pin header for MIC-in, LINE-out
<b>USB:</b>
- 2 x USB2.0 by 1 x 2*5 pin header
- 1 x USB2.0 Type A
- 2 x USB3.2 Gen1 by 1x 2*10 pin header
<b>Power:</b>
- 1 x 2*4 pin CPU power connector
- 1 x 2*12 pin ATX power connector
<b>Serial Port:</b>
- 1 x 2*5 pin RS232/422/485 box header
- 4 x 2*5 pin RS232 box header
- 6 x 2*3 pin COM power select header (RI/5V/12V, default is RI)
<b>Others:</b>
- 1 x 2*13 Parallel port pin-header (Multi-function with DIO)
- 1 x 1*3 DIO voltage select header (5V/3.3V, default 3.3V)
- 1 x 2*2 DIO/Printer function select header
- 1 x 1*5pin SMBus header
- 2 x 1*4pin-header for CPU/ SYS Fan (PWM Fan)
- 2 x 1*3pin-header for SYS Fan
- 1 x 2*5 pin front panel header
- 1 x 1*3 pin clear CMOS header
- 1 x 1*3 pin AT/ATX mode select header (default is ATX)
- TPM2.0 onboard

Dimension	ATX 305 x 244 x1.6mm ( W x L )
Environment	0°C ~ 60°C Humidity : 5% ~ 90%
OS Support	Support Windows 11 24H2 Support Ubuntu 24.04

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