

J312-S

High Performance, Low Latency, 5th Gen Intel® Xeon Dual Socket 1U Rackmount Server

Tackle your most demanding fintech needs with a purpose-built server platform offering NVMe, SAS, and SATA hot pluggable storage and customizable high speed, low-latency I/O options. This 1U dual socket server brings you flexibility, scalability, and reliable performance to support time sensitive applications in the financial services industry.

REMARKABLE PERFORMANCE

Featuring low latency, high speed PCIe Gen5, DDR5 memory and CXL 1.1, 5th Gen Intel Xeon processing power, and flexible storage capacity, this server maximizes datacenter performance and efficiency for both general workloads and fintech applications.

- 5th Generation Intel® Xeon® Scalable processor microarchitecture offers superb power efficiency, data integrity protection, and proven reliability for evolving customer expectations. This means better response time for more applications running simultaneously with increased total performance.
- Supports the latest high performance smartNICs, and FPGA accelerators at PCIe Gen5 speed without retimers or expanders in the I/O path for the lowest latency possible.
- NVMe PCIe Gen5 and SAS 4 (24G) SSD options offering high-speed, reduced latency and increased IOPs to unlock the full performance capabilities of today's processors.
- Intel® VROC NVMe RAID and Hardware RAID options available

VERSATILE EXPANDABILITY

The J312-S is a highly configurable server providing many different configurations of network adapters, accelerators, NVMe, SAS, or SATA SSD drive slots to expand with your needs, and offers:

- Up to 12x small form factor (SFF) front SSD drives
- 2x internal M.2 NVMe slots
- 2x PCIe Gen5 add-in card slots and an OCP 3.0 PCIe Gen5 slot allows for a wide array of network, accelerator, and storage controller connectivity into the server to fit a wide array of fintech workload needs.
- Configured to order with Xilinx® XtremeScale™ ethernet adapters and Alveo™ data center accelerators.



FEATURES

- Scalable for high-performance, low-latency workloads, or cost savings
- Increased memory capacity and speed
- Power redundancy for failure free operation
- Security options safeguarding platform integrity
- Customizable BIOS & application optimization tuning
- Toolless chassis
- Hot pluggable NVMe/SAS/SATA SSD drives
- Improved performance with Gen5 PCIe/ NVMe and CLX 1.1
- Redfish API support
- Network adapter and accelerator options

Contact your [Jabil Sales Representative](#) for configuration options and technical details

SPECIFICATIONS

CHASSIS

Form Factor	1U Rackmount
Model	J312-S

DIMENSIONS

W x H x L	<ul style="list-style-type: none"> • 482.9mm x 43.5mm x 795.7mm • 19" x 1.71" x 31.3"
Weight	<ul style="list-style-type: none"> • L6: Approx. 12.43kg (27.4lbs) • L10: Approx. 22kg (48.5lbs)

PROCESSOR

CPU	<ul style="list-style-type: none"> • 2x 5th Generation Intel® Xeon® Scalable processors • Supports CPU TDP up to 225W • Up to 3 UPI
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SYSTEM MEMORY

Memory Capacity	Up to 32x DDR5 slots: 8 channels/16 slots per socket
Memory Type	Up to DDR5-5600 ECC RDIMM, up to 8TB max memory

ON-BOARD DEVICES

Chipset	Intel® C741 Chipset
BMC	<ul style="list-style-type: none"> • ASPEED AST2600 • IPMI 2.0 with virtual media over LAN, and KVM-over-LAN support • Redfish supported
Network Controllers	<ul style="list-style-type: none"> • 1x host 1GbE RJ45 • 1x dedicated BMC 1GbE RJ45
RAID	<ul style="list-style-type: none"> • VROC 8.0 NVMe RAID support • PCIe add-in card NVMe/SAS/SATA support
Security	<ul style="list-style-type: none"> • Trusted Platform Module (TPM) 2.0 • Intel® PFR 3.0 • Intrusion Detection kit (optional)

REAR I/O

USB	<ul style="list-style-type: none"> • 2x USB 3.0 • 1x USB-C (BMC-UART)
Rear Additional	<ul style="list-style-type: none"> • UID Button/LED • 1x Mini DisplayPort

Warranties and Limitation of Liability

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FRONT I/O

Buttons	<ul style="list-style-type: none"> • Power Off/On • UID
LEDs	<ul style="list-style-type: none"> • UID • Power Status • System Health • Network Activity • Power Fault
USB	<ul style="list-style-type: none"> • 1x USB 3.0 • 1x USB 2.0

EXPANSION SLOTS

Network Adapter options	<ul style="list-style-type: none"> • Xilinx® Alveo™ U55C Data Center Accelerator • Xilinx® XtremeScale™ X2522 dual port SFP28 10/25GbE • Xilinx® XtremeScale™ X2541 single port SFP28 10/25/40/50/100GbE • Napatech NT100A01 quad port SFP28 1/10/25GbE • Napatech NT200A02 dual port QSFP28 10/25/100GbE
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DRIVE OPTIONS

Toolless hot swap drives	Up to 12x 2.5" SFF 24G SAS/6G SATA/PCIe Gen5 NVMe hybrid SSDs
Boot drives	2x M.2 NVMe

SYSTEM COOLING

Fans	N+1 fan redundancy, 8x toolless, dual rotor
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POWER SUPPLY

1300W Titanium and Platinum level CRPS 1+1 Redundant, hot swappable, toolless PSUs

Input	• 1300W: 220~240Vac/8A/50/60Hz
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OPERATING ENVIRONMENT/COMPLIANCE

<ul style="list-style-type: none"> • Operating Temperature • Non-Operating Temperature • Operating Relative Humidity • Non-Operating Relative Humidity 	<ul style="list-style-type: none"> • 10°C - 30°C (50°F to 95°F) • -40°C to 60°C (-40°F to 140°F) • 5%~ 90% • 5% ~ 95%
Compliance/Regulatory	RoHS, FCC, UL, CE

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