

S-1600 R5

High-Reliability, Medium-Density Enterprise Computing Systems



UNICOM Engineering's S-1600 R5 enterprise computing system offers high-reliability, medium density in a single Central Processing Unit (CPU) package. Combining the performance of a single Intel Xeon D-2100 series Skylake Microarchitecture processor, high speed Error-Correcting Code (ECC) Dual In-Line Memory Modules (DIMM), up to ten hot swap drives with integrated Redundant Array of Independent Disks (RAID) controller, up to three available expansion slots, and redundant power supply units, the S-1600 R5 is designed to meet various expansion demands while maintaining a 1U form factor. This platform offers the maximum reliability and uptime required for business critical applications.

Features and Benefits

Built for Performance

- Supports a single multi-core Intel® Xeon® D-2100 Series Skylake Microarchitecture processor series for maximum performance and density
- Supports up to four DDR4-2400 MT/s ECC DIMMs for faster application execution and greater overall stability
- Supports up to 10 hot swap Hard Disk Drives (HDD) / Solid State Drives (SSD) allow ideal customization to meet the storage needs of various applications

Built for High Reliability Applications

- Enterprise class SAS / SATA / Non-Volatile Memory Express (NVMe) drives for greater reliability
- Integrated RAID controller to ensure maximum data protection
- Hot swap drives and power supplies ensure low Mean-Time-To-Repair (MTTR)
- Redundant power supplies ensure high reliability in case of a failure

AT A GLANCE

- Single 8-to-16 Core Intel Xeon D-2100 series Skylake System-on-Chip (SoC)
- Up to four DIMMs Double Data Rate 4 (DDR4) – 2400 MT/s
- Up to ten 2.5" or up to four 3.5" HDD/SSD drives
- Two M.2 Connectors: 1 B-Key, 1 M-Key
- Embedded RAID technology for SATA RAID levels 0/1/5/10
- Three PCIe Gen3 slots
- Quad GbE, Dual 10GbE, Dual 10GbE SFP+ LAN ports
- Dedicated IPMI 2.0 LAN Port
- Two USB 3.0 ports
- Redundant 750W / 500W AC power supply units

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technical specifications

<p>Form Factor 1U rack mount</p> <p>Rack Dimensions (HxWxD)</p> <ul style="list-style-type: none"> ■ .5" Drive Chassis: 1.70" (43mm) x 17.2" (437mm) x 23.5" (597mm) ■ .3.5" Drive Chassis: 1.70" (43mm) x 17.2" (437mm) x 25.6" (650mm) <p>Processor</p> <ul style="list-style-type: none"> ■ Support for one Intel Xeon D-2100 Series Skylake SoC ■ FCBGA2518 socket ■ Maximum supported Thermal Design Power (TDP) of up to 100W <p>Memory</p> <ul style="list-style-type: none"> ■ 4x DIMMs slots ■ Up to 256 GB DDR4-2400MT/s ECC Registered ■ DIMM Sizes: 8 GB, 16 GB, 32 GB <p>Storage Support</p> <ul style="list-style-type: none"> ■ 3.5" Drive Chassis: 4x 3.5" SAS3/SATA3 hot swap drive bays ■ 2.5" Drive Chassis: 8x 2.5" SAS3/SATA3 + 2 x 2.5" SAS3/SATA3/NVMe hot-swap drive bays (total 10) ■ 1x M.2 B-Key SATA/PCIe 3.0 x2 (2242) ■ 1x M.2 M-Key PCIe 3.0 x4 (2280) <p>Storage Device Options</p> <ul style="list-style-type: none"> ■ 2.5"/3.5" SAS/SATA HDD/SSD up to 12 Gb/s ■ 2.5" NVMe SSD ■ M.2 SATA/NVMe SSD 	<p>Riser Cards</p> <ul style="list-style-type: none"> ■ Support for two riser card slots, 1x PCIe 3.0 x8, 1x PCIe 3.0 x16, 2x PCIe x8 ■ Max 3 PCIe add-in cards <p>Add-in PCIe Card Options</p> <ul style="list-style-type: none"> ■ 1 GbE, 10 GbE, Copper, Fiber, Bypass, NICs ■ Entry, Enterprise, SAS/SATA, Tri-Mode RAID Controllers, battery backup ■ SAS Host Bus Adapter (HBA), Internal, External <p>Integrated RAID</p> <ul style="list-style-type: none"> ■ 4x SATA 6Gb/s Intel Embedded RAID support with RAID levels 0/1/5/10 via SoC Controller <p>External I/O</p> <ul style="list-style-type: none"> ■ 1x DB-15 VGA port – rear ■ 4x RJ45 1 GbE LAN ports – rear ■ 2x RJ45 10 GbE Base-T ports – rear ■ 2x 10 GbE SFP+ ports – rear ■ 1x RJ45 1 GbE Dedicated IPMI LAN port – rear ■ 2x USB 3.0 ports – rear <p>Server Management</p> <ul style="list-style-type: none"> ■ Support for Intelligent Platform Management Interface v.2.0 ■ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support ■ ASPEED AST2500 Baseboard Management Controller (BMC) <p>System Fans</p> <ul style="list-style-type: none"> ■ 6x 40x56mm counter-rotation pulse width modulation (PWM) cooling fans 	<p>Power Supply</p> <ul style="list-style-type: none"> ■ 2x hot swap power supply ■ 2.5" Drive Chassis: 750W AC Platinum ■ 3.5" Drive Chassis: 500W AC Platinum <p>Operating System (OS) Support</p> <ul style="list-style-type: none"> ■ 64 bit Windows OS ■ 64 bit Linux OS <p>Regulatory Approval</p> <ul style="list-style-type: none"> ■ National Recognized Testing Laboratory (NRTL), Conforming European (CE) Mark / Safety, Certification Body (CB) ■ Federal Communications Commission (FCC) Parts 15 Class A, Voluntary Control Council for Interference (VCCI), Australia & New Zealand Regulatory Compliance Mark (RCM) ■ Restriction of the use of certain Hazardous Substances (RoHS) Compliant <p>Environment</p> <ul style="list-style-type: none"> ■ Operating temperature: 5°C to 35°C (41 to 95°F) ■ Non-operating temperature: -40°C to 70°C (-40 to 158°F) ■ Operating relative humidity: 8%-90% (non-condensing) ■ Non-operating relative humidity: 5%-95% (non-condensing) <p>Warranty</p> <ul style="list-style-type: none"> ■ Standard two-year limited warranty, return to factory ■ Optional extended warranty and advance replacement service
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NOTE: specifications subject to change without notice.

Support and Maintenance Services

UNICOM Engineering offers a variety of support and maintenance service programs to ensure high availability, rapid response, effective troubleshooting, fast parts replacement and 24-hour support.

Please visit www.unicomengineering.com/supportservices for more information.

 sales@unicomengineering.com

 unicomengineering.com

 twitter.com/UNICOMEng

 facebook.com/UNICOMEng

 +1 800.977.1010

 linkedin.com/company/unicomengineering