

SERVERS... AND MORE

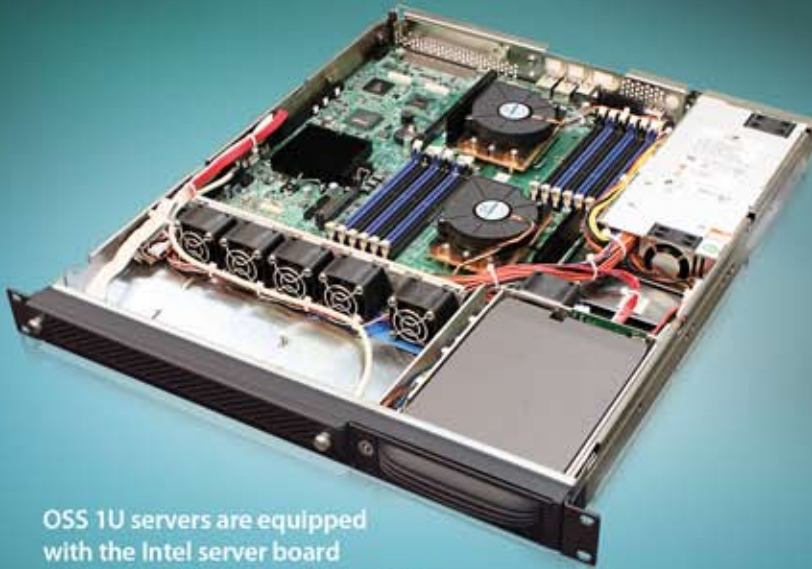
BUILDING BLOCKS FOR SUPER COMPUTING



Optimized for PCIe over Cable Expansion
Simple, Reliable, Cost Effective!

ONE STOP
SYSTEMS

SLIM LINE 1U SERVERS



OSS 1U servers are equipped with the Intel server board 5520 and dual 5500 or 5600 series processors, one to five drives, and single and dual AC or DC power supplies



TECHNICAL SPECIFICATIONS

Enclosure

Dimensions: 17" wide x 1.75" high x 21" deep
 Cooling: Front-to-rear air flow
 Six 23 CFM fans, two power supply fans and two CPU blowers
 Air Filter: Removable air filter bracket with thumbscrews
 USB connector on front panel
 Storage: One fixed 160GB drive for operating system
 Drive Options: Four SSD drives
 OR
 One 1TB SATA/SAS drive
 Weight: 22 lbs.
 MTBF: 100,000 hours
 Rack ears and rack slides included

Power Supply Options

550W AC or DC power supply
 AC version: Single input on rear panel
 -48VDC version: Dual inputs on rear panel
 OR
 Dual 750W redundant power supply
 AC version: Dual inputs on rear panel
 -48VDC version: Dual inputs on rear panel

Processor Options

Dual Intel® Xeon® 5500 series processors (Nehalem)
 Quad-core 2.0Ghz, 4M cache OR 2.53Ghz, 8M cache
 OR
 Dual Intel® Xeon® 5600 series processors (Westmere)
 Six-core 2.0Ghz, 4M cache OR 2.53Ghz, 8M cache

Memory: 12GB DDR3 DIMM included (Expandable to 96GB)
 Rear inputs: PCIe x16 Gen2 (via riser)
 Video connector
 Four USB ports
 Two 1Gb Ethernet ports
 One Serial port
 Advanced audio inputs

Operating Systems: Windows, Linux, Solaris and others

Operating Environment

Temperature Range: 0°C to 50°C (32° to 122°F)
 Relative Humidity: 10% to 90% non-condensing
 Vibration: 5-17 Hz 0.5" double amplitude; displacement;
 7-2000Hz, 1.5g acceleration

Agency

FCC Class A
 Safety UL/CSA-60950-1, EN60950-1, IEC60950-1, CB Scheme
 Regulatory markings CE, FCC, ICES-003, VCCI, UL/cUL
 Certified to NEBS level 3

ORDERING INFORMATION

OSS-MB-1U-SYS-5520-N2.0-550-AC or DC

OSS-MB-1U-SYS-5520-N2.53-550-AC or DC

1U server with Intel® server board 5520UR with two Intel® Xeon® 2.0Ghz or 2.53Ghz quad-core (Nehalem) processors, 550W AC or DC output power supply and one 3 1/2" 2TB hot swappable SATA/SAS hard drive

OSS-MB-1U-SYS-5520-W2.0-550-AC or DC

OSS-MB-1U-SYS-5520-W2.53-550-AC or DC

1U server with Intel® server board 5520UR with two Intel® Xeon® 2.0Ghz or 2.53Ghz six-core (Westmere) processors, 550W AC or DC output power supply and one 3 1/2" 2TB hot swappable SATA/SAS hard drive

OSS-MB-1U-SYS-5520-N2.0-5HD-550-AC or DC

OSS-MB-1U-SYS-5520-N2.53-5HD-550-AC or DC

1U server with Intel® server board 5520UR with two Intel® Xeon® 2.0Ghz or 2.53Ghz quad-core (Nehalem) processors, 550W AC or DC output power supply and four 1TB 2 1/2" hot swappable SATA/SAS drives

OSS-MB-1U-SYS-5520-W2.0-5HD-550-AC or DC

OSS-MB-1U-SYS-5520-W2.53-5HD-550-AC or DC

1U server with Intel® server board 5520UR with two Intel® Xeon® 2.0Ghz or 2.53Ghz quad-core (Westmere) processors, 550W AC or DC output power supply and four 1TB 2 1/2" hot swappable SATA/SAS drives

OSS-MB-1U-SYS-5520-W2.0-1HD-1500-AC or DC

OSS-MB-1U-SYS-5520-W2.53-1HD-1500-AC or DC

1U server with Intel® server board 5520UR with two Intel® Xeon® 2.0Ghz or 2.53Ghz six-core (Westmere) processors, dual hot swappable 750W AC or DC output power supplies, one 1TB 2 1/2" hot swappable SATA/SAS drive

ENTERPRISE 3U SERVERS



OSS 3U servers are equipped with the Intel server board 5520 and dual 5500 or 5600 series processors, one to five drives, and dual 500W AC or DC power supplies



TECHNICAL SPECIFICATIONS

Enclosure

Dimensions: 17" wide x 5.25" high x 21" deep
Cooling: Front-to-rear air flow
Two 46CFM fans, two power supply fans and two CPU fans
Air Filter: Removable air filter brackets with thumbscrews
USB connector on front panel
Storage: One fixed 160GB drive for operating system
Drive Options: One 3½" SATA/SAS 2TB drive
Weight: 55 lbs.
MTBF: 100,000 hours
Rack ears and rack slides included

Power Supply Options

500W AC or DC dual redundant power supplies
AC version: Dual inputs on rear panel
-48VDC version: Dual inputs on rear panel

Processor Options

Dual Intel® Xeon® 5500 series processors (Nehalem)
Quad-core 2.13Ghz, 4M cache OR 2.93Ghz, 8M cache
OR

Dual Intel® Xeon® 5600 series processors (Westmere)
Six-core 2.26Ghz, 12M cache OR 3.33Ghz, 12M cache

Memory: 12GB DDR3 DIMM included (Expandable to 96GB)
Rear inputs: Two PCIe x16 Gen2 slots
One PCIe x4 Gen1 slot
One PCIe x1 Gen1 slot
One PCI 32/33 slot
Four USB ports
Two 1Gb Ethernet ports
One Firewire port
One Serial A port
Advanced audio inputs

Operating Systems: Windows, Linux, Solaris and others

Operating Environment

Temperature Range: 0°C to 50°C (32° to 122°F)
Relative Humidity: 10% to 90% non-condensing
Vibration: 5-17 Hz 0.5" double amplitude; displacement:
7-2000Hz, 1.5g acceleration

Agency

FCC Class A
Safety UL/CSA-60950-1, EN60950-1, IEC60950-1, CB Scheme
Regulatory markings CE, FCC, ICES-003, VCCI, UL/cUL
Certified to NEBS level 3

ORDERING INFORMATION

OSS-MB-3U-SYS-5520-N2.13-AC or DC

OSS-MB-3U-SYS-5520-N2.93-AC or DC

3U server with Intel® server board 55520SC with two Intel® Xeon® 2.13Ghz or 2.93Ghz quad-core (Nehalem) processors, dual 500W AC or DC redundant power supplies and one 3½" 2TB hot swappable SATA/SAS hard drive

OSS-MB-3U-SYS-5520-W2.26-AC or DC

OSS-MB-3U-SYS-5520-W3.33-AC or DC

3U server with Intel® server board 55520SC with two Intel® Xeon® 2.26Ghz or 3.33Ghz six-core (Westmere) processors, dual 500W AC or DC redundant power supplies and one 3½" 2TB hot swappable SATA/SAS hard drive

SLIM LINE

1U GPU/SSD Appliances



Supports two double-wide
or four single-wide GPUs
80 Gb/s bandwidth to each slot
PCIe x16 cable adapter
and cable included

TECHNICAL SPECIFICATIONS

Enclosure

Dimensions: 19" w x 1.75" h x 21" d
Removable front bezel with air filter
Front panel LEDs: Power, Fail, Link status
One rear panel PCIe x16 cable connector
Rack ears and rack slides included

PCIe Expansion Slots

PCIe 2.0-compliant
Two or Four PCIe x16 slots (electrical and mechanical)

Power

850W power supply
Each slot provides 3.3V & 12V plus a PCIe 6-pin 12V connector

System Monitor

Monitors 8 temp sensors
Monitors 8 fan tachometers
Monitors 3 voltages +12V, +5V, +3.3V

Host cable adapter

One PCIe x16 Gen 2 cable adapter
PCIe half-card
Standard and low profile brackets provided

ENTERPRISE

2U GPU/SSD Appliances



Supports four double-wide
or eight single-wide GPUs
80 Gb/s bandwidth to each slot
One or two PCIe x16 cable adapters
and cables included

Enclosure

Dimensions: 19" w x 3.5" h x 21" d
Removable front bezel with air filter
Front panel LEDs: Power, Fail, Link status
One or two rear panel PCIe x16 cable connectors
Rack ears and rack slides included

PCIe Expansion Slots

PCIe 2.0 compliant
Four or Eight PCIe x16 slots (electrical and mechanical)

Power

Dual 850W power supplies
Each slot provides 3.3V & 12V plus a PCIe 6-pin 12V connector

System Monitoring

Monitors 8 temp sensors
Monitors 4 fan tachometers
Monitors 3 voltages +12V, +5V, +3.3V

Host cable adapter

One or two PCIe x16 Gen 2 cable adapters
PCIe half-card
Standard and low profile brackets provided

Brackets for I/O cards provided upon request

CALL US TODAY
WITH YOUR SPECIFIC REQUIREMENTS
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SLIM LINE

4-Drive RAID Array



1U 4-drive SATA/SAS RAID system
with PCIe host adapter and cable

TECHNICAL SPECIFICATIONS

Enclosure

Dimensions: 17" w x 1.75" h x 21" d
Cooling: Six 23CFM fans plus power supply fan providing front-to-rear airflow

Air Filter: Removable air filter bracket with filter
Storage: Four 3 1/2" hard drive shuttles
PCIe x4 host cable adapter and PCIe x4-1M cable included
Rack ears and rack slides included
PCIe x4 host cable adapter and PCIe x4 cable included

Power

400W AC or DC power supply
AC version: Single input on rear panel
-48VDC version: Single input on rear panel

RAID Controller

4-Port PCIe to SATA/SAS RAID controller
Drive Support: 4 x SATA/SAS Hard Disk Drives
RAID Level: 0, 1, 10, 3, 5, 6, Single Disk or JBOD 0, 1, 10, 3, 5, 6, 30, 50, 60, Single Disk or JBOD

System Monitor

Monitors 6 temperatures, 6 fan tachs, and 4 voltages, 3.3V, 5V, 12V, -12V
Communicates with host via Ethernet (TCP/IP, TelNet, and UDP)
Configuration parameters stored in nonvolatile FLASH

Agency

Meets or exceeds the following requirements:
Certified to NEBS level 3
FCC Class A
Safety UL/CSA-60950-1, EN60950-1, IEC60950-1, CB Scheme
Regulatory markings CE, FCC, ICES-003, VCCI, UL/cUL

ENTERPRISE

16-Drive RAID Array



3U 16-drive SATA/SAS RAID system
with PCIe host adapter and cable

TECHNICAL SPECIFICATIONS

Enclosure

Dimensions: 17" w x 5.25" h x 18.5" d
Cooling: Three 70mm fans plus power supply fan providing front-to-rear airflow

Storage: 16 3 1/2" hard drive shuttles
Host cable adapter: PCIe x4 host cable adapter OR PCIe x8 cable adapter
Corresponding PCIe x4 or PCIe 8 cable 1M cable included
Rack ears and rack slides included

Power: 900W AC redundant power supply

RAID Controllers

16-Port PCIe to SATA/SAS RAID controller
I/O Process: Intel ICP 348 1200MHz
On-Board Cache: CCR2-533 512MB
Drive Support: 16 x SATA/SAS hard disk drives
RAID Level: 0, 1, 10, 3, 5, 6, 30, 50, 60, Single Disk or JBOD

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EXPANSION KITS

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PCIe x4 host and target adapters
in 2-slot backplane
(OSS-KIT-EXP-3500-2M)



PCIe x8 host and target adapters
in 2-slot backplane
(OSS-KIT-EXP-8000-2M)



PCIe x16 host and target adapters
in 2-slot backplane
(OSS-KIT-EXP-9000-2M)



PCIe x4 host adapter and expansion board
(OSS-KIT-EXP-1500-2M)



PCIe x8 host adapter and expansion board
(OSS-KIT-EXP-7500-2M)

Why Choose One Stop Systems?

One Stop Systems (OSS) designs and manufactures a broad selection of embedded computing systems and components for high performance computing (HPC), data center, and defense/security applications. OSS pioneered PCIe over cable products and has been first to market with many of the PCIe cable adapters, expansion kits, and expansions systems available today. OSS has an extensive engineering resource experienced and trained in PCIe design, manufacture, and test and customizes our products to our customers' specific requirements. Custom and semi-custom products have long been OSS' core capability, with over 500 products designed for OEM customers who continue to

purchase these products over time. OSS has a proven record of producing high quality products through superior engineering, ISO9001-2008 quality-driven production, and responsive pre- and post-sales.

One Stop Systems' servers are equipped with the latest server boards and processors and provide superior power and cooling features. In addition, the 1U and 3U servers and the 1U RAID array are certified to NEBS Level 3 requirements for telecom applications, making them ideal for other demanding applications. Call us today with your requirements and visit us at www.onestopsystems.com



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