

CyberServe Dual Xeon SP Servers

Release Date:
Q1 2019

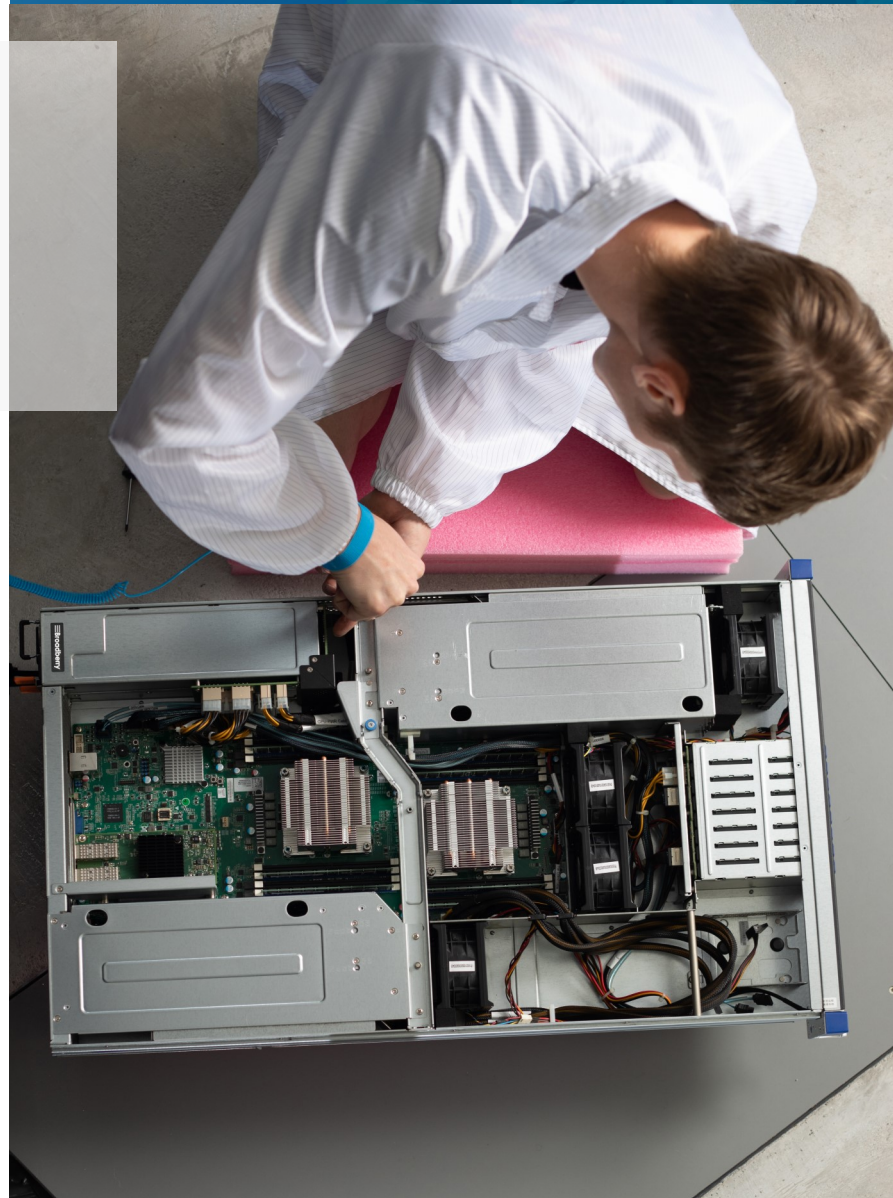
Suitable For:
Cloud Server, Virtualisation, AI

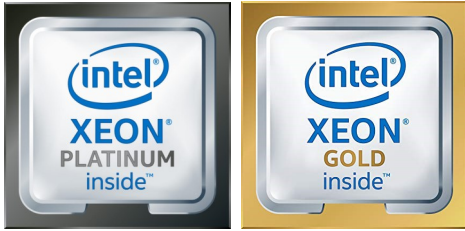
Tags:
CyberServe, Intel, Xeon, Scalable, Dual Socket

Introduction:

Perfect Enterprise-Class servers, the CyberServe SP2 Dual Xeon rack mount range is based on Intel Xeon Scalable Processor family.

Delivering significant benefits in performance, power efficiency, virtualisation, and security. Servers are configurable with up to 3TB DDR4 RAM and 56 processing cores.





Intel Xeon SP

With up to 2 processors per server and boasting up to 56 cores, 112 threads and 96 lanes of PCIe, the Broadberry CyberServe SP2 range of rackmount server solutions is based on single Intel Xeon Scalable Processors. This makes them a superb choice for a huge variety of applications, ranging from business servers to the most demanding processor and RAM intensive applications such as database management and analytics, virtualisation and cloud environments.

Based on the Intel Xeon Processor Scalable family, configurable with up to 3TB DDR4 RAM and capable of supporting up to 12 DIMMS per CPU, the Broadberry CyberServe SP2 range of server solutions are optimised for these applications:

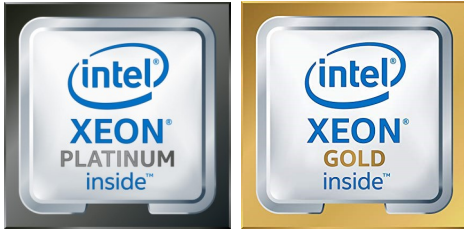
- Artificial Intelligence
- Autonomous Driving
- Virtualised Infrastructure
- Clustering Server



Why Broadberry?

As leading providers of enterprise grade server and storage solutions over the past three decades, we've supplied some of the world's largest organisations including the likes of Sky, Toshiba, the University of Oxford, the University of Cambridge, Disney, the BBC, NASA and many more.

Our powerful online configurator allows you to create your CyberServe server to perfectly fit the needs and requirements of your business. With a wide array of features, hundreds of possible configuration combinations and a meticulous design process that optimises them directly for you, our servers are built to help your business thrive.



Platform Improvements

	Intel Xeon Processor E5-2600 v4	Intel Xeon Scalable Processor
Cores Per Socket	Up to 22	Up to 28
Threads Per Socket	Up to 44 threads	Up to 56 threads
Last-level Cache (LLC)	Up to 55 MB	Up to 38.5 MB (non-inclusive)
QPI/UPI Speed (GT/s)	2x QPI channels @ 9.6 GT/s	Up to 3x UPI @ 10.4 GT/s
PCIe* Lanes /Controllers /Speed (GT/s)	40 / 10 / PCIe 3.0 (2.5, 5.8 (GT/s)	48 / 12 / PCIe 3.0 (2.5, 5.8 GT/s)
Memory Population	4 channels of up to 3 RDIMMs, LRDIMMs, or 3DS LRDIMMs	6 channels of up to 2 RDIMMs, LRDIMMs, or 3DS LRDIMMs
Max Memory Speed	Up to 2400	Up to 2666
TDP (W)	55W-145W	70W-205W

Security

Our Intel Xeon Scalable Processor based servers feature security without compromise, incorporating a number of technologies and features that will aid in safeguarding your system.

Intel Quick Assist Technology delivers a software-enabled base for security and authentication. Intel Key Protection Technology is found within Intel Xeon Scalable processors, enabled via Intel QAT. Intel KPT is on hand to help with secure private key management.

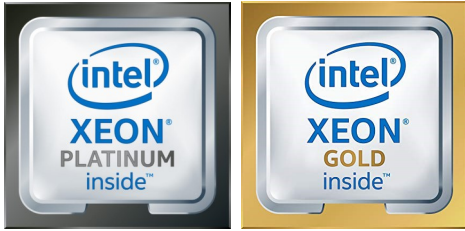
These features provide an immensely vital foundation for secure IT. They are necessary to handle the ever-increasing and evolving threats across both physical and virtual infrastructures.

Performance Optimisation

The Xeon Scalable Processor family features breakthrough performance and possesses the industry leading memory and I/O capacity necessary to substantially eliminate performance bottlenecks. The Xeon Scalable performance is a big contributor to the strong performance of the overall system.

Applications can be accelerated via the addition of Intel QAT (Quick Assist Technology) to a software-defined infrastructure environment. Intel QAT offers noteworthy increases in the performance and efficiency of standard platform solutions.

The Intel Xeon Scalable processors the Broadberry CyberServe SP2 range is based on provide a degree of flexibility and performance that allows you to handle business server and hosting server demands.







Re-Designed From The Ground Up

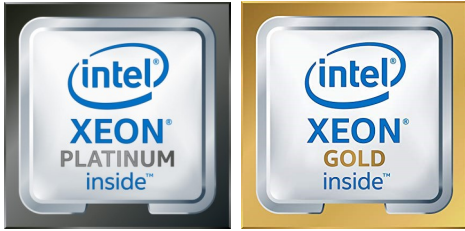
Re-designed from the ground up for huge improvements, the era-defining Intel Xeon SP Processor family goes above and beyond the standards set by previous generations (Intel Xeon E5 and E7 V4). Find more information on the Xeon Scalable range below.

The CyberServe Xeon-SP range of business class servers has been designed and built from the ground up for modern data centre applications.

Driven by the Intel Xeon Scalable processor family, these flexible servers are able to excel across applications. With this range you benefit from gaining insights from advanced real time analytics as well as emerging technologies such as AI, autonomous driving, 5G and many more.

Adding a server from this range to your data centre will allow you to enjoy the ability to take advantage of new opportunities discovered via advanced, data fuelled methods.

			
<p>Entry</p> <p>Ideal for smaller businesses, Intel Xeon Bronze processors are developed to work best with basic storage servers.</p>	<p>Mid</p> <p>The Intel Xeon Silver is optimised for middling IT organisations that are still developing. It delivers the speed and security you need for your data centre.</p>	<p>High</p> <p>Intel Xeon Gold processors provide high performance and high-level reliability. Featuring hardware-enhanced security, this option is ideal for demanding and high intensity workloads.</p>	<p>Enterprise</p> <p>Intel Xeon Platinum processors provide arguably the best performance in the industry for mission critical workloads, machine learning & real time analytics. It delivers huge leaps in I/O, memory, storage & network technologies.</p>
<p>up to 8 Cores</p>	<p>up to 12 Cores</p>	<p>up to 22 Cores</p>	<p>up to 28 Cores</p>
<p>up to 2 Sockets</p>	<p>up to 2 Sockets</p>	<p>up to 4 Sockets</p>	<p>up to 8+ Sockets</p>
<p>up to 1.5TB</p>	<p>up to 1.5TB</p>	<p>up to 6TB</p>	<p>up to 12TB</p>



Compatible With All Leading Operating Systems



And More...

Up to 12 DIMMs per CPU

The CyberServe SP2 range is capable of supporting up to 12 DIMMS per CPU. That's a significant advancement on the previous limit, which was 9 DIMMS per CPU, representing a 50% increase in memory bandwidth.

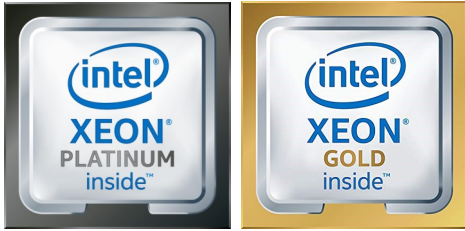
In addition to this it also means a 10% speed boost per channel with the newly supported DDR4-2666 MHz memory.

Replacing Intel QPI

On higher end models the platform is scalable up to 4 and 8 sockets as well as more I/O and memory bandwidth.

With the new standards set by the leap in system capability it became clear that the time had come for Intel to replace the QPI. That replacement comes in the form of Intel Ultra Path Interconnect (Intel UPI).



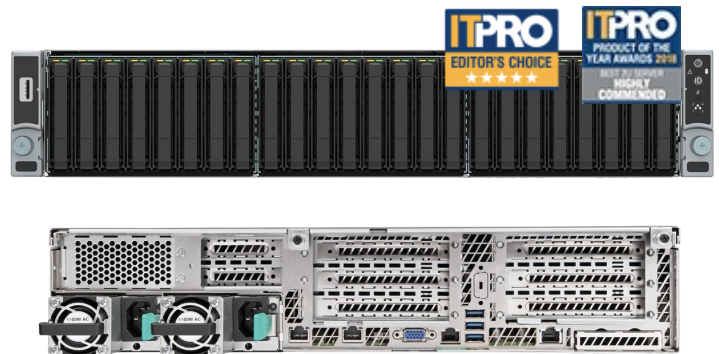


5 Star Solution

The CyberServe Xeon SP2-R2224 has been rated 5 stars by ITPro. Described as possessing impressive power and being “...stunningly affordable, versatile and a great storage option...”, this server is a great option for any small business looking for a cheap but effective option.

..Its versatility makes it well suited to a wide range of data centre duties...its innovative storage features and a low price the blue chips won't come close to matching puts Broadberry's powerhouse firmly on the IT Pro A-List.

- Dave Mitchell, ITPro



New Technologies and Capabilities

Compute:

- Intel AVX-512
- Unified 2S/4S/8S
- Up to 28 cores
- New MLC arch
- Speed Shift Technology
- High Frequency SKUs
- New on-die interconnect
-

Memory:

- 6 Channels
- Up to DDR4 2666MHz
- ADR Improvements
- 4S/8Sw/o Memory Buffers

Security:

- Intel Boot Guard
- SecurityPerf
- PPI-X
- Intel TXT Improvements
- Intel BIOS Guard 2.0
- Intel MPX

IO:

- More PCIe lanes (48)
- Higher PCIe BW
- Intel VMD
- Intel VROC
- Intel UPI @ 10.4GT/s
- 2S 3UPI support
- NTB Improvements
- PCIe Dual-Case
- SRIS

Fabric:

- Integrated Fabric
- Saves 16 PCIe Lanes
- OPA Switches
- OPA Cards

Features:

- Skylake core microarchitecture, with enhancements specific to your data centre
- Intel AVX-512 with 32 DP flops per core
- Data centre optimised cache hierarchy -1MB L2 per core, non-inclusive L3
- New mesh interconnect architecture
- Enhanced memory subsystem
- Modular IO with integrated devices
- Intel Ultra Path Interconnect - (Intel UPI)
- Intel Speed Shift Technology
- Security & Virtualisation enhancements (MBE, PPK, MPX)
- Optional Integrated Intel Omni-Path Fabric (Intel OPA)



Atom Servers

Perfect Appliance Servers the CyberServe range of Intel Atom based rack servers are designed for light processing tasks.



Xeon E Servers

Superb Business Class Servers, an ideal fit for companies looking for an affordable and efficient system.



AMD EPYC Servers

Perfect for data centre servers the revolutionary CyberServe EPYC range of high-performance servers are built for flexibility, performance and security.



Xeon SP Servers

Perfect Enterprise-Class Servers delivering significant benefits in performance, power efficiency, virtualisation, and security. Servers are configurable with up to 3TB DDR4 RAM and 56 processing cores.



Storage Servers

Configure From £1,078

Multi award-winning, enterprise-grade storage solutions used by the world's top organisations.

As-well as thousands of SMBs for everything from backup and replication to high-availability storage.



Rackmount Servers

Configure From £434

Year-after-year voted the best servers available by the most influential IT brand in the UK.

Our CyberServe range of servers are used by all of the UK's top universities and thousands of SMBs.



Workstations

Configure From £234

Ultra high performance workstations built for the most demanding applications.

Our CyberStation range boasts everything from silent workstations to GPU supercomputers.

Trusted by the Worlds Biggest Brands

We have established ourselves as one of the biggest storage providers in the UK, and since 1989 supplied our server and storage solutions to the world's biggest brands. Our customers include:

