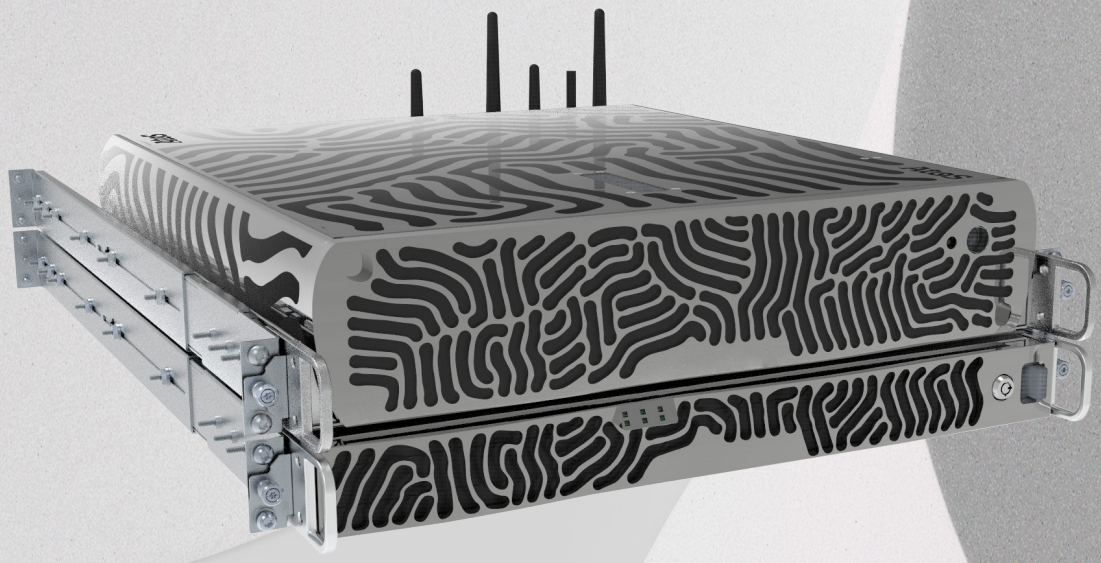
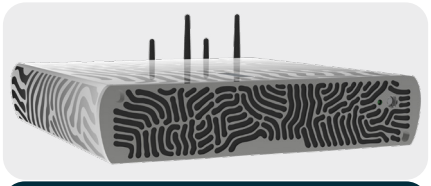
EVIDEN

BullSequana EX

Envision trusted AI from edge to cloud



Eviden has unveiled its next-generation series of Edge servers, the BullSequana EX. It has been designed in two form factors: EXD for far edge and EXR for edge data center workloads. Both servers offer unprecedent flexibility with interchangeable CPUs and GPUs. This new edge computing series empowers business to build and deploy a variety of AI &, latency-sensitive applications such as computer vision, immersive virtual reality (VR), gaming, leveraged by 5G from far edge to edge datacenter. Unlike the rest of the BullSequana E family, BullSequana EXR is at the frontier of business compute, able to run hyperconverged workloads in remote offices & the edge data center. These next-gen edge computing servers offer new fleet management simplicity, energy efficiency & highest trust and reliability. With BullSequana EX, you can leverage edge computing to fuel your innovative business strategy while protecting your data assets.



BullSequana EXD

BullSequana EXR

One server, endless possibilities

Deploying compute infrastructure at the edge comes along with temperature, power, space and configurability constraints. The BullSequana EX range has been designed to meet these challenges:

- Temperature: The BullSequana EX range of servers can operate in challenging extended temperature environments from 0 to 45° C.
- Power budget: BullSequana EX servers feature innovative power optimization modes supported by 4th / 5th Gen Intel Xeon. They can dynamically reduce power consumption with only a minimal performance impact. Eviden has also optimized its computer vision solutions in combination with customized BullSequana EX settings to reduce GPU power consumption.
- Space constraints: BullSequana EXR provides high density packaging for edge data centers through its space saving 1U form factor. The BullSequana EXD is optimized for far edge deployments outside of data centers and offers great flexibility with wall and desktop mount options.
- Flexible compute, acceleration and storage capacity: Both BullSequana EX servers have flexible compute capacity for AI inference. Easily choose between Nvidia GPUs (A2, A16, L4, L40S, CPUs from 8 to 32 cores and storage capacity while maintaining a low carbon footprint! However, if your needs change, you can still leverage your investment by keeping the server chassis and re-configuring it to run the use cases you need. Finally remote manageability & security are at the heart of these servers design allowing you to keep your business use-cases secured and managed even in remote locations.

Performance leap for next-gen AI use cases

Thanks to the extensive options for compute and storage, our servers have the potential to open a range of new use cases: AI inference, VR and AR solutions, smart glasses, generative AI and more. Benefit from low latency and better calibration of the AI models thanks to the flexible CPU/GPU acceleration. In addition, you can reduce the cost and complexity of edge installation and setup through customized factory pre-loads. We offer ready-to-run appliances for Ipsotek VISuite and DataSentics Quality Inspector and Shelf Inspector.

Hyperconverged infrastructure at the edge

Benefit from the performance, security, manageability and cost-efficiency for the compute and storage needs of applications in decentralized architecture (such as Mobile Edge Computing or remote offices and branches). Deploy workloads with high-performance, distributed storage needs such as real-time analytics, right at the edge.

Enhanced security, wherever you go

Computing at the edge requires enhanced security barriers. We designed BullSequana EX servers to integrate Eviden Root of Trust, a unique Eviden solution to harden secured boot sequencing to prevent any alteration of the firmware. It also ensures that only Eviden -signed firmware can be installed on the servers. The BullSequana EX range also provides a physical intrusion detection mechanism, which can alert administrators to unauthorized access while disabling the device and ensuring that all data at rest is encrypted.

Keep your expectations high, but your carbon footprint low

BullSequana EX range is equipped with up to two highly efficient Titanium-grade power supplies. The system offers innovative power capping and energy saving modes. Due to its configurability, it helps avoid oversizing through a flexible choice of system components. All components have been carefully selected in order to meet the latest environmental responsibility standards. The system is assembled at the Eviden factory in Angers, France. Its support for extended temperature ranges allows to minimize importantly cooling requirements even for BullSequana EXR rackable 1U server.

5G optimized and Wi-Fi

Support MEC, 5G core and VRAN workloads, thanks to optional embedded accelerators with 4th / 5th Gen Intel Xeon. BullSequana EX range is ideal to act as a powerful far edge inference server for AI applications due to its 5G and Wi-Fi 6 radio options.

BullSequana Ex hardware specifications

Form factor

	BullSequana EXR	BullSequana EXD
Rack	1U	2U
Standalone	-	Desktop, Wall mount
Depth	593mm	445mm

Processors Intel Xeon 4 and 5

	BullSequana EXR	BullSequana EXD
Intel Xeon 4	8 / 16 / 24 / 32 cores	8 / 16 / 24 / 32 cores
Intel Xeon 5	8 / 12 / 16 / 24 / 28 cores	8 / 12 / 16 / 24 / 28 cores
TDP max	185 Watt	185 Watt

Memory

	BullSequana EXR	BullSequana EXD
Min/max	Up to 8 memory slots	Up to 8 memory slots
Type	DDR5	DDR5

PCI slots

	BullSequana EXR	BullSequana EXD
PCIe 5	2x FHFL	2x FHFL

GPU options

	BullSequana EXR	BullSequana EXD
GPU		
2x	Nvidia A2, L4	Nvidia A2, L4
or 1x	Nvidia A16, L40, L40S	Nvidia A16, L40, L40S

Storage options

	BullSequana EXR	BullSequana EXD
Base	6x SATA or 8x NVMe disks**	8x NVMe disks**
optional extension	2x M.2 NVMe disks*	2xM.2 NVMe disks*
RAID options	Intel VROC, MegaRAID controler (SATA)	Intel VROC

*no M.2 disks if wireless adapter is configured
* if wireless adapters are configured - these slots are not available
** max. 6x NVMe disks if Mezzanine network adapter is configured

Embedded I/O ports

	BullSequana EXR	BullSequana EXD
Network interface controller (NIC)	4x 1Gb RJ45	4x 1Gb RJ45
System management services	1x 1Gb RJ45	1x 1Gb RJ45
USB ports	Front: 2x USB2 type A Rear: 4x USB3 type A and 2x USB3 type C	Rear Up: 2x USB2 type A Rear Down: 4x USB3 type A and 2x USB3 type C
VGA	1	1
COM1 (RS-232)	1	1

Mezzanine I/O expansion

	BullSequana EXR	BullSequana EXD
Network controller	2x 10Gb SFP optional or 2x 25Gb optional*	2x 10Gb SFP optional or 2x 25Gb optional*

*planned for 1Q25

Power supply options

	BullSequana EXR	BullSequana EXD
Max power	1200W	1300W
Optional redundancy	Yes	Yes
Efficiency rating	Titanium	Titanium

Wireless connectivity

	BullSequana EXR	BullSequana EXD
Connectivity	Wi-Fi 6.0, Bluetooth 5.0, LTE/5G	Wi-Fi 6.0, Bluetooth 5.0, LTE/5G

Operational conditions

	BullSequana EXR	BullSequana EXD
Operating temperature	0 to +45° C*	0 to +45° C*
Operating humidity	5% to 95%	5% to 95%

*limited to 40°C with high end GPUs H100, L40, L40S

Ecosystem and certifications

	BullSequana EXR	BullSequana EXD
Software ecosystem certifications	RedHat 9 Windows Server 2022	RedHat 9 Windows Server 2022
Certification	IEC 62368 IEC 61010	IEC 62368

Connect with us

eviden.com