## BullSequana XH3000

Forging your insight







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Forging your insight



## Exascale

The gateway to scientific and industrial breakthroughs



#### Tackle the uncharted

Humanity is facing new challenges like global warning and the COVID-19 pandemic, which creates new business, economic and societal imperatives.

#### The incessant data deluge

New applications, new algorithms and new technologies such as ML and AI require enormous quantities of data that must be stored, transported, and processed during the training phase with an exponential need in terms of computing power.

#### Increased data complexity

Data is coming from diverse sources, like edge, cloud, hyperscalers and SMEs. Data quality, data structure and their origins add additional challenges in the way we analyze and simulate data.



ECMWF and Eviden tackle climat challenges together



## Our Exascale strategy

The future of supercomputing is hybrid

## **BullSequana XH3000 + Eviden HPC Ecosystem**

Higher Performance

Lower Carbon



Sovereignty

footprint









#### Accelerated Hybrid Computing

 Any hardware accelerator (GPU, IPU, QPU...).

 Al and/or Quantum based parameter reduction software to optimize simulation run time.

#### Al Optimized System efficiency & availability

- ML based predictive maintenance for maximum uptime.
- ML based hardware and software resource usage optimization.













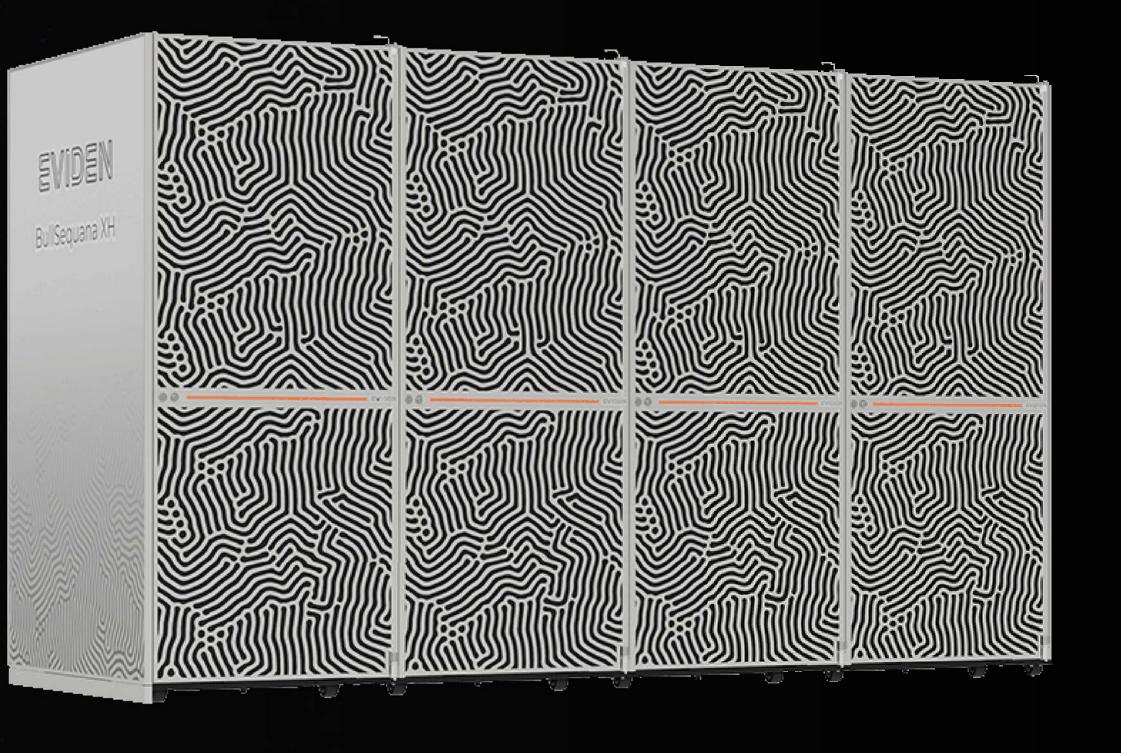
**Eviden Professional** 



## The nextgeneration HPC supercomputer

Harness the power of greener hybrid supercomputing at any scale

#### BullSequana XH3000





## Ready for Accelerated Hybrid computing

- Most powerful computing technologies embedded.
- Ready for GPU and QPU acceleration next.



- 4th generation DLC technology: 97% heat dispersion at 40°C inlet water temperature.
- Smart energy management, monitoring, profiling and capping.
- Lowest TCO.



- Standardized slots to mix and interchange compute and switch blades.
- Large choice of computing and interconnect technologies.
- Industry-leading density.



- "All-In-One" rack design.
- Seamless scalability to ExaScale.



## pen & future

- Standardized and modular design for easy future evolutions.
- Open Sequana Program to seamlessly integrate third-party party innovations.



- Embedded security with hardware-anchored secure boot.
- Vulnerability monitoring and threat anticipation.

## Eviden HPC Ecosystem

The cornerstone of unlimited innovation













#### Open Sequana program

Enables third-party companies
to embed their innovations
into compute blades that
will integrate seamlessly into
BullSequana XH3000 platform.





#### Eviden HPC Software Suites

Robust, scalable and flexible software suites for your supercomputer and your applications:

- Smart Management Center: to operate HPC cluster at scale.
- Smart Software Suites: To understand, control and optimize energy, data and performance.
- Add-on Al capabilities: Al augmented simulation framework.
- JarviceTM: Seamless integration of HPC workloads in hybrid clouds.

Learn more >



#### Eviden HPC, Al and Quantum Centers of Excellence

- Tailored training to acquire new skills.
- Advice from experts to get started with porting, optimization and acceleration of simulations.
- Application and solution benchmarks.



#### Eviden Professional Services

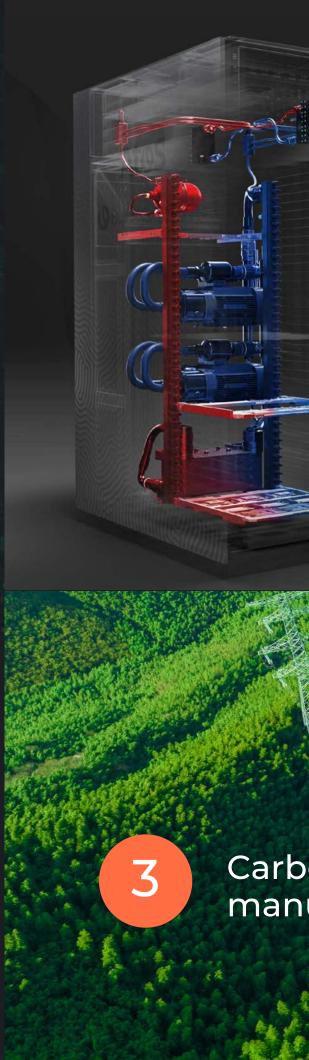
Broad range of onsite and remote services to support & optimize the installation, operation, maintenance, and decomissioning of your HPC System.

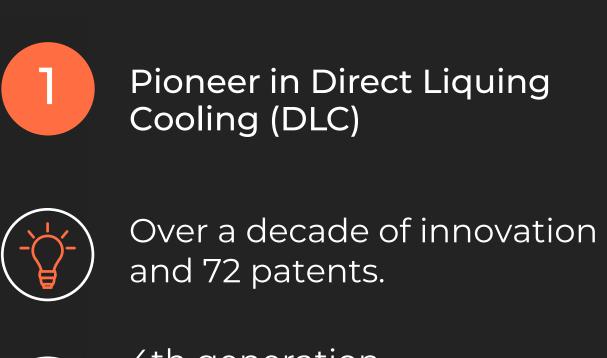


# Greener HPC Part of our DNA

# The GREEN 550 Career of the Contract of the Co

Leader in Green 500 with 40 Eviden HPC systems listed\*.







4th generation
DLC technology:
97% heat dispersion at 40°C inlet water temperature.

Manage and optimize energy efficiency with Eviden HPC Software suites

Smart Energy Management Suite

to monitor, control and optimize energy consumption.

Jarvice™

earn more >

to seamlessly run HPC workloads anywhere in the cloud.

Carbon-neutral manufacturing

Complete end-to-end green hydrogen solution to power data centers developed in collaboration with HDF energy

\* Nov 2021 listing

## 

Empower your digital and economic sovereignty





#1 in Europe#2 Worldwide

for HPC, Al and Quantum as well as Cybersecurity.



#### Eviden is powering

**5 out of 7** supercomputers for EuroHPC JU program.



#### Made in Europe

HPC, AI & Quantum solutions designed and manufactured in France.



#### Eviden contributes

to Europe's HPC projects and initiatives (EPI, EuroHPCJU, GAIA-X, etc...) to ensure long-term sovereignty.

## with a global footprint



## About Eviden<sup>1</sup>

Eviden is a next-gen technology leader in data-driven, trusted and sustainable digital transformation with a strong portfolio of patented technologies. With worldwide leading positions in advanced computing, security, Al, cloud and digital platforms, it provides deep expertise for all industries in more than 47 countries. Bringing together 47,000 world-class talents, Eviden expands the possibilities of data and technology across the digital continuum, now and for generations to come. Eviden is an Atos Group company with an annual revenue of c. € 5 billion.

1. Eviden business is operated through the following brands: AppCentrica, ATHEA, Cloudamize, Cloudreach, Cryptovision, DataSentics, Edifixio, Energy4U, Engage ESM, Evidian, Forensik, IDEAL GRP, In Fidem, Ipsotek, Maven Wave, Profit4SF, SEC Consult, Visual BI, Worldgrid, X-Perion. Eviden is a registered trademark. © Eviden SAS, 2024.

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