

## BullSequana SH series

The right choice for secure, carbon-efficient hybrid computing

**MARKET CHALLENGES** 

## Next step to hybrid computing solutions



#### 63% of organizations

DON'T PLACE MISSIONS-CRITICALS WORKLOADS INTO PUBLICS CLOUD



#### 43% of IT decision makers

FEAR THEIR IT INFRASTRUCTURE
WON'T BE ABLE TO HANDLE
FUTURE DATA DEMANDS



#### **BullSequana SH**

a state-of-the-art generation of x86 servers based on the 4th Gen Intel® Xeon® Scalable processors with innovative capabilities to address these new business needs.

BullSequana SH meets the demands of enterprises, cloud providers and hyperscalers in terms of security, scalability, reliability, performance and energy efficiency.



**GREATER BUSINESS AGILITY** 



PROTECTING YOUR MOST VALUABLE ASSETS



**EFFICIENT ON-DEMAND SCALABILITY** 



MAINTENANCE ON YOUR INVESTMENT



LOWER TOTAL COST OF OWNERSHIP (TCO)



HIGH ENERGY EFFICIENCY



**SECURITY** 





#### Introducing the BullSequana SH

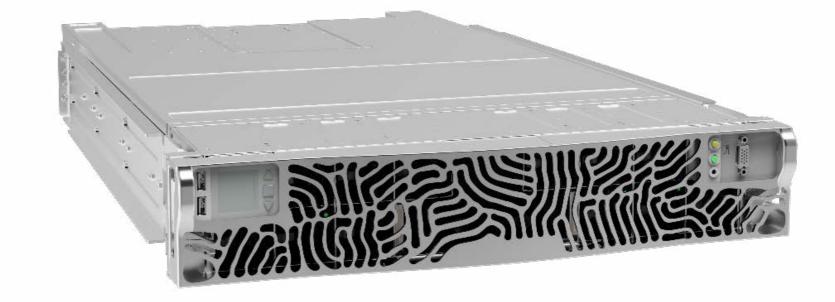
TAILORED FOR YOUR HIGH PERFORMANCE ON-PREMISES & CLOUD WORKLOADS

- Faster response to business demands
- Improved manageability and serviceability
- Helping businesses achieve their sustainability goals with best-of-breed technologies and services
- Data protection from the core to the cloud by creating a chain of trust without compromising performance



# Unprecedent features to meet all markets requirements

TAILORED FOR YOUR HIGH PERFORMANCE ON-PREMISES & CLOUD WORKLOADS



- From 2 to 32 sockets in a single server
- Scale in 2-socket increments
- **4th Gen Intel® Xeon® Scalable processors**
- Up to 128TB DDR5 DRAM
- Up to 112 PCIe Gen5 hot-swappable slots
- Up to 32 GPUs
- Up to 160 NVMe SSDs
- Hotplug redundant 80+ Titanium PSUs



# BullSequana SH offers a full benefits for in-memory applications & beyond.

BENEFIT FROM OUR CERTIFICATIONS WITH OUR PARTNERS:



ORACLE

**m**ware<sup>®</sup>









IN-MEMORY APPLICATIONS
DATABASES AND ANALYTICS



BARE METAL FOR SPECIFIC
WORKLOADS REQUIRING
LARGE COMPUTING CAPACITIES

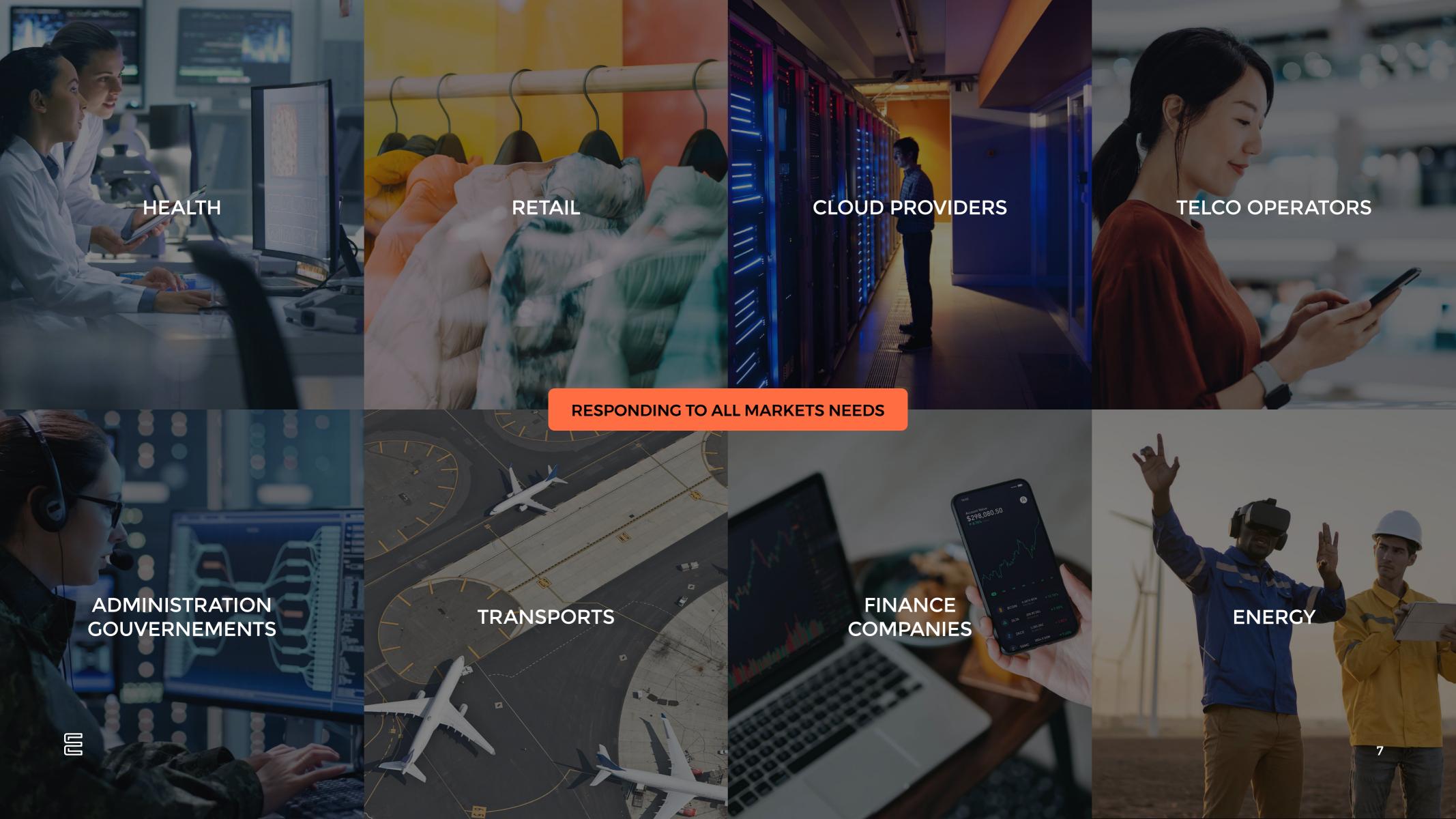


LARGE VIRTUALIZATION POSSIBILITIES



**ARTIFICIAL INTELLIGENCE** 





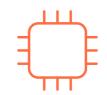
SECURITY

## Security-by-design preserving performance

By 2026, 65% of IT organizations

will only purchase infrastructure that incorporate predictive cyber-resiliency mechanisms proven to reduce post-cyber

intrusion recovery efforts



Leverage new built-in 4th Gen Intel® Xeon processors security features

- Enhanced Intel® Software
   Guard Extensions (Intel® SGX)
   with new integrity feature,
   providing greater resistance
   against physical attacks
- New cryptographic memory integrity



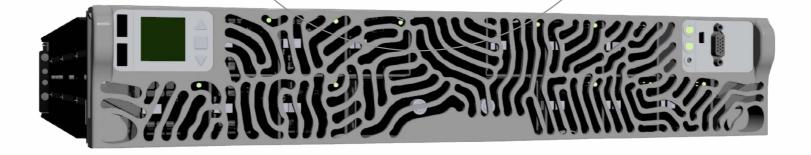
Eviden
Product Security
Incident Response Team
(PSIRT)

From vulnerability to patch



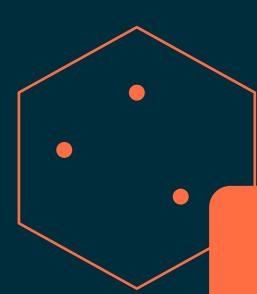
Eviden Trusted Execution
Architecture hosting
improved Security
Functions

- NIST 800-193 Recoverable platform using ARM TrustZone technology
- Chains-of-trust for detection, upgrade, recovery
- Hardware Root-of-Trust with public cryptographic keys anchored in silicon
- Hardened µOS developed from EAL7 certified ProvenCore software





#### Better help to achieve your sustainability goals



Eviden factory, Angers, France R&D, Les Clayes & Grenoble, France

#### EVIDEN DECARBONATION LEVEL AGREEMENT (DLA)

to help clients capture, measure, report on and reduce the overall carbon footprint of the BullSequana SH platform.



#### **USE OF ENERGY EFFICIENT COMPONENTS**

DDR5 achieves 30% greater power efficiency vs DDR4. 80 PLUS Titanium power supplies. Built-in accelerators avoiding to add power hungry resources (CPU, memory, ...)



#### NO OVER-PROVISIONING OF RESOURCES FOR FUTURE DEMAND

Efficient scalability by 2 CPU increments for all types of workloads. On-demand capabilities .



#### INTELLIGENT POWER MANAGEMENT FEATURES AT THE SYSTEM LEVEL

Power capping, Eco-mode, ...
Intel® Optimized Power mode support.



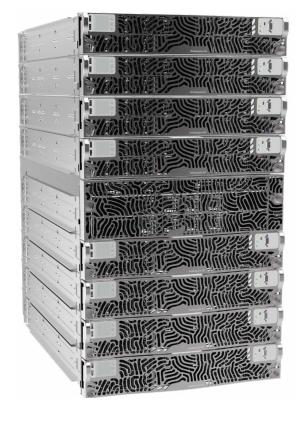
#### **COMPLIANT WITH ENVIRONMENTAL REGULATIONS**

Ecodesign (ErP Lot9), RoHS, REACH, WEE....

## BullSequana SH scalability & use cases







**SH160** 

SH320

10-16 SOCKETS 19U 20-32 SOCKETS 38U

SH160 can be upgraded by 4 CPUs up to SH320





- Mission-critical applications
- Performance optimized
- Outstanding scalability
- Investment protection
- Optimized TCO through consolidation

- SAP HANA, Databases, In-Memory applications
- Advanced virtualization, large VMs, Bare metal
- Data Analytics, Al
- Private and Hybrid clouds

## With our BullSequana SH benefit from exclusive services from EVIDEN

- DESIGN YOUR READY-TO-USE INFRASTRUCTURE
- BENEFIT FROM A TAILORED INDUSTRIALIZATION PROCESS
- FLEX AND SCALE WITH OPEX OR CAPEX
- UNIQUE MANUFACTURER IN EUROPE



### Gain flexibility

Design as you need Add on process

### Go faster

Fastest supply
On site plug &play

### Reduce risks

No unexpected costs

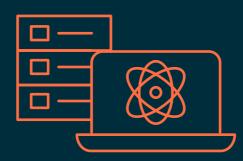
Highest quality and repeatable process



**MARKET RECOGNITION** 

Eviden, recognized industrial leader

- Edge Al Global Leader in 2021 & 2022
- #1 "managed services & security" in Europe and #3 worldwide
- Recognized expert lab in computer vision & Al solutions
- #Global leader in Cybersecurity and data sovereignty



#### Eviden is also a leader for hardware & software products

Leader in Edge Computing technology

Recognized manufacturer of enterprise high-end servers

Pioneer on the quantum computer

