

bullion S4

the most advanced workspace for fast data

By leveraging the Bull technologies in mission-critical applications and supercomputing, Atos brings to the market a complete range of x86 servers, bullion™.

bullion reaches the highest level of quality of service, performance, availability and scalability to meet the 3 big challenges an IT Department is facing: Data Center optimization, IT modernization and Big Data efficient implementation.

bullion S4



Optimize your Data Center

Data Centers have to accompany the rise of Cloud, Big Data and mobility, whilst guaranteeing the relevant levels of service.

Designed for the private cloud and targeting next generation Software Defined Data Centers (SDDC), bullion is the right answer to consolidate, rationalize and virtualize your Data Centers. Efficiency generator, bullion dramatically enhances users' financial equation, providing more performance and agility

Modernize your IT

Ensuring the right evolution of application environment is a key success factor for any IT modernization project. It has to be based on highly reliable, powerful, open and scalable platforms or servers. You have all that with bullion!

New usage trends of the digital world are now at your reach: Cloud, mobility (Bring Your Own Device: BYOD), Big Data. Moreover, Bull proposes its unique approach, combining a proven methodology and Bull products to industrialize migration of legacy applications.

Make sense of your data

Big Data is now in everyone's mind. How shall you properly manage the never ending growth of data volume, velocity, variety, and transform them into an asset for your organization? With its unique memory capacity, bullion provides unrivalled features to analyze data in real-time: you are ready for the In-Memory journey.

A powerful and modular range

The bullion server range consists of 4 complementary models, sharing the same innovative technologies, embarking from 2 to 16 Intel® Xeon® E7 v3 processors, with a maximum memory capacity of 24 TB, unmatched on the market.

Depending on their needs, the users simply add 3U compute modules, connected via the Connecting Box, a patented system inherited from Bull to get rid of cabling. For more agility in configuring, bullion servers propose innovative design with hot plug memory and I/O blades.

bullion S4 in brief

The bullion S4 server, with up to two 3U modules, perfectly fits in with the range dynamics - best in class reliability & availability features, thanks to its capacity of up to 4 processors and 6 TB of memory. It provides up to 72 cores and 144 threads to host Virtual Machines (VM) clusters, critical database or In-Memory applications.

Dedicated Atos services

Coming with the bullion range, Atos proposes a full set of added value services, such as Service Assurance, to optimize operations, and Liber, to modernize the application environment.

Our best experts support our specific offers, including power audits or architecture consulting. Atos technical briefing centers are open to share field experience on real case studies with dedicated workshops and hands-on sessions.



Technical specifications

DESIGN		VIDEO	
Form factor	19" 6U	Video Controller	Via iBMC
PROCESSORS		Memory	8 MB
Numbers	From 2 to 4 sockets, max 72 cores and 144 threads	SECURITY	
Type	Intel® Xeon® Processor E7 v3 Family	2-level password	Yes
	4, 8, 10, 12, 14, 16 or 18 cores	POWER SUPPLY**	
L3 cache	Up to 45MB shared cache	Hot-plug PSU	1+1
ARCHITECTURE		Power supply number	Up to 4, redundant
Chipset	Intel® C602J Chipset		Active/passive power-supply solution with ultra-capacitor (UCM)
Quick Path Interconnect	Max 9.6GT/s	Power type	Label 80+ Platinum, 94% efficient
Scalability	From 2 to 4 sockets, via BCS2 (Bull Coherence Switch 2)	Power consumption	750watt or 1600watt w/PFC (PF=0.95)
Hardware Partitioning	Yes	Auto-sensing	220V 60/50Hz
MEMORY BLADES		COOLING**	
Min / max	Min: 48GB, max configuration: 6TB	Fan specifications	Up to 12 hot plug, n+1 redundant
Type	DDR3, DDR4 (Post RTS) RDIMM, LR-DIMM	PHYSICAL SPECIFICATIONS**	
Memory blades capacity	48GB, 96GB, 192GB, 384GB	Size (HxLxP)	260 (6U) x445mm (19") x820mm (max). Recommended to use Bull racks
Memory blade	Up to 16 blades, 6 slots/blade	Weight	Up to 90kg
Memory availability	Hot plug memory blades	Operating constraints	10°C to 35°C, gradient 20°C/h, 20% to 60%, gradient 5%/h
I/O BLADES		OS & SOFTWARE	
BUS	PCIe Gen3 x8	Management Software	Bull System Manager, Bull iCare, Bull Platform Manager
I/O blades	Up to 14, hot swap	Operating System	Red Hat® Enterprise Linux, VMware® vSphere ESXi™, Microsoft® Windows Server
I/O availability	Hot plug blades	SYSTEM MANAGEMENT	
I/O BLADES TYPES		BMC	IPMI 2.0
NIC I/O blade	1GbE: 2 or 4 ports per I/O blade	Remote Management	Standard via on-board iBMC
	10GbE: 2 ports per I/O blade	AVAILABILITY & RAS FEATURES	
HBA I/O blade	8Gb/s: 2 ports per I/O blade	Memory RAS features	ECC, Enhanced SDDC, Enhanced DDDC, Memory Sparing, MCA recovery, hot-add memory blade
	16Gb/s: 2 ports per I/O blade	Hot plug devices	Memory blades, I/O blades, disk drives, power supplies, fans, UCM.
Flash I/O blade	SSD Flash 1TB	Redundancy	Power supplies, fans, QPI paths, BCS2 connection (XQPI paths)
SAS I/O blade	12Gb/s: 2 ext. ports per I/O blade	Serviceability	Hot add memory blades
STORAGE		WARRANTY & SERVICES	
Chassis drive bays	HDD : up to 4*, hot plug	Standard warranty**	3 years warranty
Internal add-on disks (EBOD)	12 Gb/s SAS connectivity up to OS max. capacity	Warranty extension	Bull Global Care
Hard drives	3.5" NL SAS 2.5" SAS 10Krpm & 15Krpm 2.5" SSD SAS	Other services	<ul style="list-style-type: none"> ▶ IT infrastructures Advisory, energy audits ▶ Service Assurance ▶ HA, capacity & performance management ▶ Installation & integration services
Storage Controller (optional)	1x I/O blade with RAID 0/1/10	REGULATOR & SAFETY	
SAN	EMC, NetApp, Bull Optima	Regulatory compliance	CE, UL/CSA, RoHS
EMBEDDED I/O PORTS			
NIC	1Gb Ethernet ports : 2, up to 4*		
Management port	Up to 2x Ethernet ports for System Management*		
PS/2port (mouse, keyboard)	USB or iBMC		
USB ports	3, up to 6*		

* by using hardware partitioning

** excluding storage module

For more information:
<http://www.bull.com/bullion>

atos.net

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