

## Robust and Powerful servers for all your business needs



### Escala POWER9™ Entry servers

The New Escala entry E2-900, E3-900 and E4-900 entry servers, equipped with the new POWER9™ processors, deliver unprecedented performance and the flexibility that enables business customers to consolidate AIX and Linux workloads in a virtualized environment while achieving lower total cost of ownership (TCO) through reduced footprint, power and software licensing costs.

Escala also reduces TCO through leading performance, highest level reliability, superior security isolation, and virtualization efficiency.

### Escala entry servers, Cloud enabled

Integrated cloud capabilities in these new servers reinforce the Atos cloud strategy. Atos gives you best-in-class on-premises cloud deployment possibilities with this announcement in addition to Atos' AIX-on-Demand off-premises offer already available.

### Reliability and Security

This next generation of Escala Systems servers offers the market-proven POWER™ reliability and security, essential for business critical workloads. Customers rely on POWER™ technology as the robust and secure backbone of their IT infrastructure.

### Maximum performance assured

These Escala POWER9™ servers are designed to run commercial, cognitive, and database workloads. The system provides dynamic optimization of processor frequency at any given time based on workload (CPU utilization and operating environmental conditions) (up to 4GHz depending on processor).

### Data intensive

POWER9™ technology is extremely well-suited to data-intensive workloads such as databases and analytics. With twice the memory footprint of POWER8™ servers, POWER9™ is an ideal platform for in-memory and data-centric applications.

### Ideal migration platform for Escala Oracle SE customers

Thanks to the SCM (Single Chip Module) technology of the POWER9™ processors, it's now possible to upgrade to Oracle Database 12c onto the new Escala POWER9™ servers and migrate licenses from existing Oracle Database Standard Edition (SE) to Standard Edition 2 (SE2) at no additional cost. SE has been replaced by SE2 bringing with it new licensing rules and a requirement to be licensed on servers that have a maximum capacity of 2 sockets. Furthermore, using Real Application Clusters (RAC) with SE2 is limited to a maximum of two one-socket servers.

### Ease of Migration

Migrate from previous Escala servers with Live Partition Mobility capabilities. Every new Escala POWER9™ server comes with a temporary PowerVM® license for your old server to support a seamless move to POWER9™ technology-based servers.

## Technology built for the future, today

No longer a prediction for the far distant future, Artificial Intelligence (AI) is now reality and used by many to simplify our lives.

The new POWER9™ technology is and will continue to be the leading-edge platform for the new AI workloads and future developments, specifically:

### Big Data and Analytic workloads

- massive ingestion capabilities due to accelerated storage, compute and networking

### Market unique CPU to GPU interconnect

- Nvlink 2.0 coherent GPU, CPU and main memory interconnect
- Enables the use of very large Machine Learning models
- Reduces learning times for up to a factor 3 compared to competing solutions

### Leading Machine Learning SW offer

- PowerAI®: easy deployment of the leading frameworks and libraries
- PowerAI Vision®: reduces implementation time & complexity for implementing image and video recognition. Enables semi-automatic data labeling
- Data scientist SW stack: Hyperparameter tuning, advanced ML job scheduler, Notebook collaboration environment...

Our Offers	Escala E3-900	Escala E2-900	Escala E4-900
System package	2U, 19" rack	4U, 19" rack or tower	4U, 19" rack
# of sockets; SCM	1 or 2 sockets; 2 SCM	1 socket; 1 SCM	2 sockets; 2 SCM
POWER9™ processor options	4-core - 2.8 à 3.8 GHz	4-core - 2.3 à 3.8 GHz	8-core - 3.8 à 4.0 GHz
# of cores - GHz range	8-core - 3.4 à 3.9 GHz 10-core - 2.9 à 3.8 GHz 16-core - 3.4 à 3.9 GHz 20-core - 2.9 à 3.8 GHz	6-core - 2.3 à 3.8 GHz 8-core - 2.8 à 3.8 GHz	10-core - 3.5 à 3.9 GHz 16-core - 3.8 à 4.0 GHz 20-core - 3.5 à 3.9 GHz 24-core - 3.4 à 3.9 GHz
Min - Max memory IS RDIMMs upto 2666 Mhz)	1-socket: 32 - 2048 GB 2-socket: 64 - 4096 GB	4-core: 32 - 64 GB 6/8-core: 32 - 1024 GB	1-socket: 32 - 2048 GB 2-socket: 64 - 4096 GB
PCIe Gen3/Gen4 slots <sup>2</sup>	9 PCIe Gen3/Gen4 slots <ul style="list-style-type: none"> <li>• Five PCIeGen4 slots (4 CAPI enabled)</li> <li>• Four PCIeGen3 slots (1 reserved for Ethernet adapter)</li> </ul>	8 PCIe Gen3/Gen4 slots <ul style="list-style-type: none"> <li>• Two PCIeGen4 slots (2 CAPI enabled)</li> <li>• Six PCIeGen3 slots (1 reserved for Ethernet adapter)</li> </ul>	11 PCIe Gen3/Gen4 slots <ul style="list-style-type: none"> <li>• Five PCIeGen4 slots (4 CAPI enabled)</li> <li>• Six PCIeGen3 slots (1 reserved for Ethernet adapter)</li> </ul>
Max PCIe Gen3 slots with exp drawer(s)	12 additional Gen3 slots	6 additional Gen3 slots	18 additional Gen3 slots
System unit disk/SSD bays with standard or split backplane	8 SFF (2.5") SAS bay option	12 or 18 SFF (2.5") SAS bay options	12 or 18 SFF (2.5") SAS bay options
System unit disk/SSD bays with expanded function backplane	8 SFF-3	2 NVMe, or 12 SFF-3 + 1 NVMe or 18 SFF-3 (4-cœur : 10 SFF-3 max)	2 NVMe, or 12 SFF-3 + 1 NVMe or 18 SFF-3
Max EXP24S storage drawers	28 maximum	4-core: N/A 6/8-core: 28 maximum	28 maximum
Max total system unit + EXP24S disk/SSD	672	4-core: N/A 6/8-core: 672	672
Max total system TB with 1.8TB drives <sup>2</sup>	12096 TB	4-core: 18 TB 6/8-core: 1209,6 TB	1209,6 TB
AIX® rPerf Range	426.4	172	583.1
Power on Demand	N/A: all cores are activated		
AIX version	7.1, 7.2 or later		
Linux support	Red Hat Enterprise Linux 7 for Power LE, version 7.4, or later (Power8-mode) SUSE Linux Enterprise Server 12 Service Pack 3, or later Ubuntu Server 16.04.4, or later (Power8-mode)		
PowerVM™	Enterprise Edition is integrated		

<sup>1</sup> One x8 PCIe slot must contain an Ethernet LAN available for client use

<sup>2</sup> Use of expanded function storage backplane uses one PCIe slot

## Atos and IBM: a perfect fit

For more than 25 years, Atos and IBM have built a unique relationship, based on an OEM partnership and a close, highly productive technological cooperation. This solid R&D collaboration has fundamentally strengthened the AIX® ecosystem, by regularly generating innovative functionality, in areas such as scalability, RAS, virtualization and cloud enablement.

## Why Atos?

Atos is the Number 1 European provider (Number 3 worldwide) of managed infrastructure services. Atos is rated by analysts as the 'Leader in the Data Center outsourcing services' for the 3rd year in a row. We develop and deliver the most cost-effective and suitable solutions leveraging market-leading providers to manage, optimize and data centers and infrastructures. We have early insight on new technologies, enabling us to develop new and innovative technical solutions. Our strong global footprint, and industry heritage gives us the understanding and the flexibility to easily adapt to our clients' culture whatever industry they work in and wherever they are in the world.

For more information please visit [atos.net/escala](https://atos.net/escala)

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