

# Modular and scalable systems for business flexibility and IT efficiency



## Escala M6-700

Designed for virtualized consolidation of business-critical workloads, Escala M6-700 delivers on performance, availability, efficiency and virtualization in a way that is unique in the industry.

### Outstanding Price/Performance

The POWER7 processor-based Escala M6-700 mid-range server delivers outstanding price/performance, mainframe-inspired reliability and availability features, flexible capacity upgrades and innovative virtualisation technologies.

This powerful 19-inch rack-mount system, which can handle up to 64 POWER7 cores, can be used for database and application serving, as well as server consolidation.

### Leading edge virtualization features

PowerVM offers the capability to dynamically adjust system resources based on workload demands so that each partition gets the resources it needs.

Active Memory™ Expansion, a new POWER7 technology, enables the effective maximum memory capacity to be much larger than the true physical memory. Innovative compression /decompression of memory content can enable memory expansion up to 100 percent.

This can enable a partition to significantly more work or enable a server to run more partitions with the same physical amount of memory.

### Superior virtualisation capabilities

The virtualisation capabilities are further enhanced with Partition Mobility, offered as part of the optionally available PowerVM feature.

This function is designed to move running partitions from one POWER7 server to another with no downtime.

### Modularity and Scalability

For complete business system needs, Escala M6-700 provides a compelling combination of performance across multiple workloads and availability features to keep your business running. In addition, PowerVM virtualization helps to maximize your efficiency and nondisruptive growth options are designed to keep your costs in line with your business.

With all this coming together in one integrated energy-saving package, Escala M6-700 is the solution. Available in configurations up to 64 POWER7™ processor cores, this new version of the popular modular design delivers more capacity with more efficiency than ever before. The result is more performance per system, more performance per footprint, and best of all, more performance per watt. This innovative design approach also enables nearlinear scaling and nondisruptive growth while maximizing your investment.

### A full set of related services

Our leading experts have developed specific offerings, such as energy audit, virtualization, business continuity and high availability (HA999) that perfectly match with Escala M6-700.

PRODUCT SPECIFICATIONS



Architect of an Open World™

# Technical specifications – Escala M6-700

<b>ARCHITECTURE</b>	
Building block packaging	19" rack drawer (4U) / 1-4 nodes per CEC
Max building blocks per system / max U's	4 (16U)
Number of cores (processors) per system	12 – 48 (12 cores per processors card) / 16 – 64 (16 cores per processors card)
CPU core clock rate	16, 32, 48, 64 at 3.1GHz / 12, 24, 36, 48 at 3.5 GHz
Processor (Dual chip Module)	64-bit POWER7™
System Memory per building block (min-max)	32 GB – 512 GB (1066 MHz DDR3) / 128 GB – 2 TB (1066 MHz DDR3)
Caches	L2 cache 256 KB / L3 cache 4 MB
<b>VIRTUALISATION CAPABILITIES</b>	
Maximum Logical Partitions	160 (10 per core)
Power on Demand (PoD) support	Yes
Advanced Virtualisation Features	Optional
Live Partition migration	Optional with PowerVM Enterprise
Integrated Virtual Ethernet	Yes
<b>MEDIA BAYS</b>	
	1 Slimline bays per building block / DVD RAM / External Tape drive (VXA or DAT)
<b>EXPANDABILITY</b>	
Slots for hot swap PCI adapters in base drawer	6 x PCI express
Slots for hot-swap SAS disk drive bays per drawer	6
Internal disk capacity	21,6 Tb ( 48 disk x 450GB)
Expansion drawers	16x 10 PCIe/18 disks
Additional expandability through drawers	160 PCIe/ 288 disks
Bull StoreWay disk subsystems	Optional
EMC2 disk subsystems	Optional
Netapp disk subsystem	Optional
<b>RAS FEATURES</b>	
Chipkill™ ECC, bit-steering memory	Standard
Service processor	Standard
Hot-node add	Standard
Cold-node repair	Standard
Dynamic processor disactivation	Standard
Redundant Service processor	Optional
Redundant hot-plug fans	Standard
Redundant hot-plug power supply	Standard
<b>COMMUNICATIONS CONNECTIVITY</b>	
Ports USB / serial* / HMC	3 / 2 / 2 Standard
4-port 1Gb	Optional
4-port 2x1Gb & 2x10Gb optical	Optional
4-port 2x1Gb & 2x10Gb Copper	Optional
<b>CONSOLES</b>	
HMC	Optional
<b>OPERATING SYSTEMS</b>	
	AIX 5.3/6.1 Standard Red Hat AS4, 5 (Optional)
<b>HIGH AVAILABILITY</b>	
	ARF V5, V6, V7 or PowerHA 5.4, 5.5 (Optional)
<b>PERFORMANCE</b>	
Max rPerfs with AIX 5.3	3.1 GHz: 165.30 (16), 306.74 (32), 443.06 (48), 579.39 (64) 3.5 GHz: 140.75 (12), 261.19 (24), 377.28 (36), 493.37 (48)
<b>SPECIFICATIONS</b>	
Operating temperature	5 to 35 degrees C
Relative humidity	8% to 80%
Operating voltage	200 to 240 V, 80+ compliant
<b>WARRANTY AND EXTENSION</b>	
Standard warranty	1 year Customer Replacement Unit (CRU)
Warranty extension	Optional

\* not available if HMC present

Contact us : [info.servers@bull.net](mailto:info.servers@bull.net)