IBM® LinuxONE Emperor 4

IBM LinuxONE Emperor 4 at a glance										
Processor Core Types:										
Feature	Minimum					Maximum				
Type	CP	IFL	IFPs	SAP	Spares	CP	IFL	IFPs	SAP	Spares
Max39	0	1†	2	5	0	1	39	2	5	2
Max82	0	1†	2	10	0	1	82	2	10	2
Max125	0	1†	2	15	0	1	125	2	15	2
Max168	0	1†	2	20	0	1	168	2	20	2
Max200	0	1†	2	24	0	1	200	2	24	2

Channels – Maximum Adapters		
	Adapters	Ports
FICON Express 32S SX/LX	192	384 Ports
OSA Express 7S 1.2 (1000BT/1G)	48	96 Ports
OSA Express 7S 1.2 (10G/25G)	48	48 Ports
IBM® Adapter for NVMe 1.1 SSB	16	1 Slot

Inter-LPAR Communications	
HiperSockets™	Up to 32 high-speed 'virtual' Local Area Networks
SMC-D	Up to 32 ISM virtual CHPIDs

IBM® zHyperLink™	
IBM® zHyperLink Express1.1	16 adapters (32 Ports)- can be shared by multiple LPARs

Coupling Links	
Coupling Express2 LR maximum	32 adapters, 64 Ports
ICA SR1.1 maximum	48 adapters, 96 Ports

Cryptography (60 AP Max)		
Crypto Express8S (2-port adapters)	30 adapters	60 HSMs
Crypto Express8S (1-port adapter)	16 adapters	16 HSMs

Compression Acceleration
Compression capability now on LinuxONE Emperor 4 processor chip

RDMA over Converged Ethernet (RoCE) – SMC-R	
25 GbE RoCE Express3.0, 10 GbE RoCE Express3.0	16 adapters, 32 ports

Processor Memory		
Feature	Minimum	Maximum
Max39	512GB	10TB
Max82	512GB	20TB
Max125	512GB	30TB
Max168	512GB	48TB
Max200	512GB	48TB
IBM® Virtual Flash Memory		
Min:	0	
Max	6TB (ordered 0-12, in increments of 512GB)	
Upgradabily		
Upgradeable within the IBM® LinuxONE Emperor 4 family *		
No upgrade into features Max168 or Max200		

Operating Systems	
Linux®	Canonical, Red Hat® and SUSE with their latest supported releases and versions; for the certified levels please see IBM® tested platforms page: ibm.com/it-infrastructure/z/os/linux-tested-platforms
Supported Hypervisors	
z/VM®	z/VM 7.3 z/VM 7.2
KVM	KVM hypervisor which is offered with the following Linux distributions from Canonical, Red Hat and SUSE, contact your Linux distributor for more information.

†There must be at least one IFL ordered on the server.

* Some restrictions may apply on upgradeability between adapters. No upgrade into the IBM®LinuxONE Emperor 4 from previous generations.