

# IBM® LinuxONE Emperor 5 Model ML1

IBM® LinuxONE Emperor 5 Model ML1 at a glance										
Processor Core Types:										
Feature	Minimum				Maximum					
	Type	CP	IFL	SAPs	Spares	IFP	CP	IFL	IFP	SAP
Max43	0†	1†	5	0	2	1	43	2	5	2
Max90	0†	1†	10	0	2	1	90	2	10	2
Max136	0†	1†	15	0	2	1	136	2	15	2
Max183	0†	1†	20	0	2	1	183	2	20	2
Max208	0†	1†	24	0	2	1	208	2	24	2
Channels – Maximum Adapters										
	FICON Express		Network Express		IBM® Adapter for NVMe 1.1 SSB – FC 0448		IDAA Internal Storage - 15TB – FC 0528***		Spyre AI	
Max - 43 Max 208	96**		48				16/I slot		48	
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 Express 2.0					16 adapters (32 Ports)- can be shared by multiple LPARs					
IBM zHyperLink Express 2.0										
Coupling Express3 LR maximum					64 adapters §§					
ICA SR2.0 maximum					48 adapters §§					
Cryptography (60 AP Max)										

	Crypto Express8S (2-port adapters)	Crypto Express8S (1-port adapter)		
Max	30 adapters	16 adapters		

Compression Acceleration										
Compression capability now on IBM® LinuxONE Emperor 5 processor chip										
Networking Adapters										
Network Express LR 25G, Network Express SR 25G, Network Express LR 10G, Network Express SR 10G, Network Express LR 1G, Network Express SR 1G and									48 adapters §§	
Processor Memory										
Feature	Minimum				Maximum					
Max43	512GB				16TB					
Max90	512GB				32TB					
Max136	512GB				48TB					
Max183	512GB				64TB					
Max208	512GB				64TB					
IBM Virtual Flash Memory										
Min:	0									
Max	6TB (ordered 0-12, in increments of 0.5TB)									

Upgradeability	
	Upgradeable within the IBM® LinuxONE 5 Family ****
	No upgrade into features Max183 or Max208

Operating Systems	
Linux® on IBM Z®	Canonical, Red Hat® and SUSE with their latest supported releases and versions; for the certified levels please see IBM tested platforms page: <a href="https://ibm.com/it-infrastructure/z/os/linux-tested-platforms">ibm.com/it-infrastructure/z/os/linux-tested-platforms</a>

Supported Hypervisors	
z/VM®	z/VM 7.4 z/VM 7.3
KVM	KVM hypervisor for IBM Z which is offered with the following Linux distributions from Canonical, Red Hat and SUSE, contact your Linux distributor for more information.

\*\* On IBM z17™, 96 FICON Express32-4P adapters (4 port) are allowed. Any combination of FICON® Express32 adapters are allowed to a maximum of 384 FICON ports.

\*\*\* NEW On IBM® LinuxONE 5 Model ME1, NVMe carrier and 15TB SSD Drive shipped from IBM Manufacturing and does not require TLS install. Limited to IDAA usage.

The memory options per CPC drawer are 16, 32, 48 and 64 TB.

† There must be at least one IFL

§§ Two ports per adapter

§§§ Provides the minimum physical memory required to hold purchase memory plus 256 GB HSA

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