

# IBM z15 – Designed for security and resiliency in a hybrid multi-cloud



IBM z15™ at a glance															
Processor Core Types: CP / IFL / ICF / zIIP* / Standard SAP(s) / Addition or Optional SAP(s) / Spares															
Feature	Minimum							Maximum							
Max34	0†	0†	0†	0	4	0	2	34	34	34	22	4	8	2	
Max71	0†	0†	0†	0	8	0	2	71	71	71	46	8	8	2	
Max108	0†	0†	0†	0	12	0	2	108	108	108	70	12	8	2	
Max145	0†	0†	0†	0	16	0	2	145	145	145	96	16	8	2	
Max190	0†	0†	0†	0	22	0	2	190	190	190	126	22	8	2	
Channels – Maximum Adapters															
	FICON Express on iPDU §				FICON Express on BPA **				OSA-Express on iPDU or BPA ††						
Max34 – Max190	192				176				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 Express1.1				16 adapters - can be shared by multiple LPARs											
Coupling Links															
Internal Coupling maximum				64											
Coupling Express LR maximum				32 adapters §§ ††											
ICA SR1.1 maximum				48 adapters §§ ††											
Cryptography (60 AP Max)															
	Crypto Express7S (2-port adapters)			Crypto Express7S (1-port adapter)			Crypto Express6S			Crypto Express5S					
Max	30 adapters			16 adapters			16 adapters ***			16 adapters ***					
Compression Acceleration															
zEDC Express adapter not carried forward – Compression capability now on z15 processor chip															
RDMA over Converged Ethernet (RoCE) – SMC-R															
25 GbE RoCE Express2.1, 10 GbE RoCE Express2.1, 10 GbE RoCE Express									16 adapters §§ †††						
Processor Memory															
Feature	Minimum							Maximum							
Max34	512GB							8TB §§§							
Max71	512GB							16TB							
Max108	512GB							24TB							
Max145	512GB							32TB							
Max190	512GB							40TB							
IBM Virtual Flash Memory															
Min:	0														
Max	6TB (ordered 0-12, in increments of 0.5TB)														
Upgradeability															
	Upgradeable within the z15 family ****														
	No upgrade into features Max145 or Max190														
	Upgradeable from the IBM z13 and the IBM z14 M01-M05														

Operating Systems	
z/OS*	z/OS V2.4 z/OS 2.3 z/OS 2.2
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://www.ibm.com/it-infrastructure/z/os/linux-tested-platforms">https://www.ibm.com/it-infrastructure/z/os/linux-tested-platforms</a>
z/VSE*	z/VSE 6.2
z/TPF	z/TPF 1.1
Supported Hypervisors	
z/VM*	z/VM 7.1 z/VM 6.4
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.

\* If ordering a zIIP, one or more general purpose processor (CP) per the specialty engine is required. IBM has modified the ratio of zIIP to CPs to be 2:1. Up to two zIIP processors may be purchased for every general purpose processor purchased on the server.

† There must be at least one CP, IFL or ICF ordered on the server. No IFL is required unless ordering an IFL only server—model capacity identifier 400. No ICF is required unless ordering an ICF only server—model capacity identifier 400. If you order a 400 no CP is orderable.

§ FICON Express with Intelligent Power Distribution (iPDU) allows for a maximum of 12 PCIe+ I/O drawers. Each adapter has 2 ports. FICON Express 16SA can be ordered new. FICON Express16S+, FICON Express16S and FICON Express8S are carry forward only.

\*\* FICON Express with Bulk Power Assembly (BPA) allows for a maximum of 11 PCIe+ I/O drawers. Each adapter has 2 ports. FICON Express 16SA can be ordered new. FICON Express16S+, FICON Express16S and FICON Express8S are carry forward only.

†† OSA-Express adapters: OSA-Express7S 25 GbE SR1.1 has 1 ports per adapter and can be ordered new. OSA-Express7S 25 GbE SR has one port per adapter and can carry forward. The new OSA-Express7S 1000Base-T has 2 ports per adapter, OSA-Express7S 10 GbE has 1 port per adapter and OSA-Express7S GbE has 2 ports per adapter. The OSA-Express6S and OSA-Express5S are carry forward only and have 1/2 port(s) per adapter.

§§ Two ports per adapter

\*\*\* Carry forward only

††† Carry forward or new build

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

\*\*\*\* Some restrictions may apply on upgradeability between adapters

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