## IBM z16 AGZ Configurations

Processor Core Types   Feature   Minimum	IBM z16"	' AGZ a	at a gl	ance											
Type	Processor	Core T	ypes:												
Max5	Feature	Mini	mum				Max	Maximum							
Max16	Туре	CP	IFL	zIIP	ICF	IFP	PU	CP	IFL	zIIP	ICF	IFP	SAP	Spares	
Max32	Max5	0†	0†	0†	0	2	5	5	5	4	5	2	2	2	
Max68	Max16	0†	0†	0†	0	2	16	6	16	15	16	2	2	2	
FICON Express	Max32	0†	0†	0†	0	2	32	6	32	31	32	2	4	2	
Max5 -	Max68	0†	0†	0†	0	2	68	6	68	67	68	2	8	2	
Max5 - Max68         48         48           Inter-LPAR Communications         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         Internal Coupling maximum         64           Coupling Express2 LR maximum         32 adapters §§ ††           ICA SR1.1 maximum         24 adapters §§ ††           Cryptography (60 AP Max)         Crypto Crypto Crypto Express7S (1-Port Adapter)         Crypto Express8S (1-Port Adapter)         Crypto Express8S (1-Port Adapter)         Crypto Express SS	Channels	– Maxiı	mum <i>F</i>	Adapter	S										
Max68 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 Internal Coupling maximum 64 Coupling Express2 LR maximum 32 adapters §§ ††  Cryptography (60 AP Max)  Crypto Crypto Crypto Express7S (1-Port adapter)  Express8S Express8S Adapter)  Crypto (1-port adapters) 16 adapters *** 16 adapters ***  Compression Acceleration  zEDC Express adapter not carried forward – Compression capability now on z16 processor chip  RDMA over Converged Ethernet (RoCE) – SMC-R  25 GbE RoCE Express3.0, 10 GbE RoCE Express3.0 8 adapters \$ \$ ††  Processor Memory  Feature Minimum Maximum  Max6 64GB 4TB  Max16 64GB 8TB  Max32 64GB 8TB  Max68 64GB 8TB  IBM Virtual Flash Memory  Min: 0		FICO	ON Exp	ress		(	OSA-Express								
HiperSockets   Up to 32 high-speed 'virtual' Local Area Networks		48				48									
IBM zHyperLink*  IBM zHyperLink Express1.1	Inter-LPA	R Comi	munica	ations											
IBM zHyperLink*  IBM zHyperLink Express1.1	HiperSocke	HiperSockets <sup>™</sup> Up to 32 high-speed 'virtual' Local Area Networks													
IBM zHyperLink Express1.1 16 adapters (32 Ports)- can be shared by multiple LPARs  Coupling Links  Internal Coupling maximum 64  Coupling Express2 LR maximum 32 adapters §§ ††  ICA SR1.1 maximum 24 adapters §§ ††  Cryptography (60 AP Max)  Crypto Express8S (2-port (1-port adapter) (1-port adapter)  Max 20 adapters 16 adapters 16 adapters *** 16 adapters ***  Compression Acceleration  zEDC Express adapter not carried forward – Compression capability now on z16 processor chip  RDMA over Converged Ethernet (RoCE) – SMC-R  25 GbE RoCE Express 3.0, 10 GbE RoCE Express 3.0 8 adapters §§ ††  Processor Memory  Feature Minimum Maximum  Max6 64GB 4TB  Max16 64GB 4TB  Max32 64GB 8TB  Max68 64GB 16TB  IBM Virtual Flash Memory  Min: 0															
IBM zHyperLink Express1.1 16 adapters (32 Ports)- can be shared by multiple LPARs  Coupling Links  Internal Coupling maximum 64  Coupling Express2 LR maximum 32 adapters §§ ††  ICA SR1.1 maximum 24 adapters §§ ††  Cryptography (60 AP Max)  Crypto Express8S (2-port adapter) C1-port adapter)  Max 20 adapters 16 adapters 16 adapters *** 16 adapters ***  Compression Acceleration	IBM zHyp	erLink™													
Internal Coupling maximum  Coupling Express2 LR maximum  ICA SR1.1 maximum  Crypto graphy (60 AP Max)  Crypto Express8S (2-port adapters)  Max 20 adapters 16 adapters  ZEDC Express adapter not carried forward – Compression capability now on z16 processor chip  RDMA over Converged Ethernet (RoCE) – SMC-R  25 GbE RoCE Express3.0, 10 GbE RoCE Express3.0  Feature Minimum Maximum  Max6 64GB  Max16 64GB  Max32 64GB  Max68 64GB  Max68 64GB  Max68  IBM Virtual Flash Memory  Min: 0				.1		16 ada	pters (32	Ports)	- can be	shared l	oy mult	tiple LPA	ARs		
Coupling Express2 LR maximum  ICA SR1.1 maximum  Cryptography (60 AP Max)  Crypto Crypto Crypto Express7S (1-Port adapter)  Express8S (2-port adapters)  Adapters  Adapters  Max  20 adapters  16 adapters  16 adapters  25 GbE RoCE Express3.0, 10 GbE RoCE Express3.0  Feature  Minimum  Max6  64GB  Max16  Max32  64GB  Max68  IBM Virtual Flash Memory  Minimum  24 adapters §§ ††  Crypto Express7S (1-Port adapter)  Crypto Express7S (1-Port adapter)  Adapter (1-por	Coupling I	₋inks				<u>'</u>									
ICA SR1.1 maximum  Cryptography (60 AP Max)  Crypto Express8S (2-port (1-port adapter) (2-port adapters)  Max  20 adapters  16 adapters  ZEDC Express adapter not carried forward – Compression capability now on z16 processor chip  RDMA over Converged Ethernet (RoCE) – SMC-R  25 GbE RoCE Express3.0, 10 GbE RoCE Express3.0  Feature  Minimum  Max6  64GB  Max16  Max32  64GB  Max68  Max68  Max68  Max68  Max68  Max68  Max68  Max68  Minimum  Max6  Max68	Internal Co	upling r	naximu	ım		64									
Cryptography (60 AP Max)  Crypto Crypto Crypto Express7S (1-Port adapter)  Express8S Express8S (2-port adapter)  Max 20 adapters 16 adapters 16 adapters***  Compression Acceleration  zEDC Express adapter not carried forward – Compression capability now on z16 processor chip  RDMA over Converged Ethernet (RoCE) – SMC-R  25 GbE RoCE Express3.0, 10 GbE RoCE Express3.0  8 adapters §§ †††  Processor Memory  Feature Minimum Maximum  Max6 64GB 4TB  Max16 64GB 4TB  Max32 64GB 8TB  Max68 64GB 16TB  IBM Virtual Flash Memory  Min: 0	Coupling Ex	xpress2	LR ma	ximum		32 ada	pters §§	††							
Crypto Crypto Express7S (1-Port adapter)  Express8S (2-port (1-port adapter))  Max 20 adapters 16 adapters 16 adapters *** 16 adapters ***  Compression Acceleration  zEDC Express adapter not carried forward – Compression capability now on z16 processor chip  RDMA over Converged Ethernet (RoCE) – SMC-R  25 GbE RoCE Express3.0, 10 GbE RoCE Express3.0 8 adapters §§ †††  Processor Memory  Feature Minimum Maximum  Max6 64GB 4TB  Max16 64GB 4TB  Max32 64GB 8TB  Max68 64GB 16TB  IBM Virtual Flash Memory  Min: 0						24 ada	4 adapters §§ ††								
Express8S (2-port adapter) (1-port adapt	Cryptogra	phy (60	) AP M	ax)											
Max 20 adapters 16 adapters 16 adapters *** 16 adapters ***   Compression Acceleration   zEDC Express adapter not carried forward – Compression capability now on z16 processor chip   RDMA over Converged Ethernet (RoCE) – SMC-R   25 GbE RoCE Express 3.0, 10 GbE RoCE Express 3.0 8 adapters §§ †††   Processor Memory   Feature Minimum Maximum   Max 6 64GB 4TB   Max 16 64GB 4TB   Max 32 64GB 8TB   Max 68 64GB 16TB   IBM Virtual Flash Memory   Min: 0		Cr	ypto		Cry	pto pto	(	Crypto E	xpress7	'S (1-Poi	t	Cry	pto Expre	ess6S (1-	
Max20 adapters16 adapters16 adapters ***Compression AccelerationzEDC Express adapter not carried forward – Compression capability now on z16 processor chipRDMA over Converged Ethernet (RoCE) – SMC-R25 GbE RoCE Express3.0, 10 GbE RoCE Express3.08 adapters §§ †††Processor MemoryFeatureMinimumMaximumMax664GB4TBMax1664GB4TBMax3264GB8TBMax6864GB16TBIBM Virtual Flash MemoryMin:0						а	adapter)				Port adapter)				
Max 20 adapters 16 adapters 16 adapters *** 16 adapters ***  Compression Acceleration  zEDC Express adapter not carried forward – Compression capability now on z16 processor chip  RDMA over Converged Ethernet (RoCE) – SMC-R  25 GbE RoCE Express3.0, 10 GbE RoCE Express3.0  8 adapters §§ †††  Processor Memory  Feature Minimum Max6  Max6 64GB 4TB  Max16 64GB 4TB  Max32 64GB 8TB  Max68 16TB  IBM Virtual Flash Memory  Min: 0		(2-port (1-port													
Compression Acceleration  zEDC Express adapter not carried forward – Compression capability now on z16 processor chip  RDMA over Converged Ethernet (RoCE) – SMC-R  25 GbE RoCE Express3.0, 10 GbE RoCE Express3.0  8 adapters §§ †††  Processor Memory  Feature Minimum Maximum  Max6 64GB 4TB  Max16 64GB 4TB  Max32 64GB 8TB  Max68 64GB 8TB  Max68 16TB  IBM Virtual Flash Memory  Min: 0	Max	ac						1 ( a d a	m+0 u0 **	*		1.0		- ***	
zEDC Express adapter not carried forward – Compression capability now on z16 processor chip  RDMA over Converged Ethernet (RoCE) – SMC-R  25 GbE RoCE Express3.0, 10 GbE RoCE Express3.0  8 adapters §§ †††  Processor Memory  Feature Minimum Maximum  Max6 64GB 4TB  Max16 64GB 4TB  Max32 64GB 8TB  Max68 16TB  IBM Virtual Flash Memory  Min: 0		ion Acc		•		16 адарт	ers	16 ada	pters ***	•		16	adapter	5 ^^^	
RDMA over Converged Ethernet (RoCE) – SMC-R         25 GbE RoCE Express3.0, 10 GbE RoCE Express3.0       8 adapters §§ †††         Processor Memory         Feature       Minimum       Maximum         Max6       64GB       4TB         Max16       64GB       4TB         Max32       64GB       8TB         Max68       16TB         IBM Virtual Flash Memory         Min:       0					f	d C	•	I- :1:		-16					
25 GbE RoCE Express3.0, 10 GbE RoCE Express3.0       8 adapters §§ †††         Processor Memory         Feature       Minimum       Maximum         Max6       4TB         Max16       64GB       4TB         Max32       64GB       8TB         Max68       16TB         IBM Virtual Flash Memory         Min:       0								сарарііі	ty now c	on 216 pr	ocesso	or cnip			
Processor Memory           Feature         Minimum         Maximum           Max6         64GB         4TB           Max16         64GB         4TB           Max32         64GB         8TB           Max68         8TB         16TB           IBM Virtual Flash Memory           Min:         0															
Feature         Minimum         Maximum           Max6         64GB         4TB           Max16         64GB         4TB           Max32         64GB         8TB           Max68         64GB         16TB           IBM Virtual Flash Memory           Min:         0				53.U, IU	GDE RO	UCE EXPR	2SS3.U					8 ada	apters 33		
Max6       64GB       4TB         Max16       64GB       4TB         Max32       64GB       8TB         Max68       64GB       16TB         IBM Virtual Flash Memory         Min:       0		Memo	гу		Minin	211122				NA-	vimura				
Max16       64GB       4TB         Max32       64GB       8TB         Max68       64GB       16TB         IBM Virtual Flash Memory         Min:       0															
Max32         64GB         8TB           Max68         64GB         16TB           IBM Virtual Flash Memory         0															
Max68 64GB 16TB  IBM Virtual Flash Memory  Min: 0															
IBM Virtual Flash Memory Min: 0															
Min: 0		al Flach	Mem	orv —	0+UL	, 				1 10	עי				
				<del>or y</del>											
max 1710 undered U-4 III III LEMENIS OLU 31 DI	Max	v	(order	ed 0-4	in incre	ments of	0.5TR)								

Upgradeability						
Upgradeable within the IBM z16-A02 family ****						
No upgrade into Model A01						
Upgradeable from the IBM z15 Model T02 <sup>™</sup> and the IBM z14 Model ZR1						

Operating S	ating Systems						
IBM z/OS*	z/OS z/OS 2.5 z/OS 2.4 z/TPF 1.1 with PTFs						
IBM z/TPF							
VSE	21st Century VSEn V6.3 For the latest supported releases and versions please see 21st Century product page https://www.21stcenturysoftware.com/						
Linux <sup>®</sup> on IBM Z <sup>®</sup>	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 H	Hypervisors						
IBM z/VM®	z/VM 7.3 z/VM 7.2						
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.						

<sup>\*</sup> If ordering a zIIP, at least one general purpose processor (CP) is required. Once a general purpose processor is on the IBM z16, there are no ratios or restrictions on the number of zIIP engines running on the IBM z16.

†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 3 PCIe+ I/O drawers. Each adapter has 2 ports. FICON Express32S can be ordered new. When the Fibre Channel connection endpoints use the FICON Express 32S adapters to the IBM DS8900F storage, authentication of the endpoints is enabled. FICON Express16S+ is carry forward only.

†† OSA-Express adapters: OSA-Express7S 1.2 25 GbE SR has 1 port per adapter and can be ordered new. The OSA-Express7S 1.2 1000Base-T has 2 ports per adapter, OSA-Express7S 1.2 10 GbE has 1 port per adapter and OSA-Express7S 1.2 GbE has 2 ports per adapter. The OSA-Express6S 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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