



International Technical Support Organization

## IBM System z9 - Closing

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# Redbooks Workshop

IBM ITSO - International Technical Support Organization

IBM System z9 Workshop


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## z9-109 New Functions and Features

Five new hardware models		Hot pluggable/ maintainable MBA/STI fanout cards	
Faster Uni Processor		Up to 16 2.7 GB STIs per book	
Up to 54 customer PUs		MIDAW facility	
Up to 512 GB memory		Multiple Subchannel Sets per LCSS	
Up to 60 LPARs		63.75K Subchannels for Set-0	
CBU for IFL, ICF and zAAP		Increased Number of FICON Express2 Features	
Separate PU pool management		N_Port ID Virtualization	
Redundant I/O interconnect		IPv6 Support for HiperSockets	
Enhanced Driver maintenance		OSA-Express2 1000BASE-T	
Enhanced Book availability		OSA-Express2 OSN (OSA for NCP)	
Dynamic oscillator switchover		Enhanced CPACF with AES, PRNG and SHA-256	
54 additional hardware instructions		Configurable Crypto Express2	
		<b>Preview*</b>	
		<b>Server Time Protocol</b>	

\*This statement represents IBM's current intentions. IBM development plans are subject to change or withdrawal without further notice.



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# IBM System z9 and eServer zSeries

**IBM eServer zSeries 900 – z900 (2064)**



- Announced 10/00 – first 64-bit zSeries
- 42 models – Up to 16-way
- Specialty Engines
  - CP, IFL, ICF
- On Demand Capabilities
  - CUoD, CIU, CBU
- Memory – up to 64 GB
- Channels
  - Up to 256 ESCON channels
  - FICON Express, Parallel
  - Token-Ring, FDDI, Ethernet, ATM
  - Coupling Links
- Crypto coprocessors, accelerators
- Parallel Sysplex clustering
- HiperSockets – up to 4
- Up to 15 logical partitions
- Operating Systems
  - z/OS, z/VM, VSE/ESA, z/VSE, TPF, z/TPF, Linux on zSeries

**IBM eServer zSeries 800 – z800 (2066)**



- Announced 2/02 – first 64-bit zSeries for mid market
- 10 models – Up to 4-way
- Specialty Engines
  - CP, IFL, ICF
- On Demand Capabilities
  - CUoD, CIU, CBU
- Memory – up to 32GB
- Channel
  - Up to 240 ESCON Channels
  - FICON Express
  - Networking Adapters(OSA)
  - Coupling Links
- Cryptographic Coprocessors
- Parallel Sysplex clustering
- HiperSockets – up to 4
- Up to 15 partitions
- Operating Systems
  - z/OS, z/VM, VSE/ESA, z/VSE, TPF, z/TPF, Linux on zSeries

**IBM eServer zSeries 990 – z990 (2084)**



- Announced 5/03 – first zSeries Superscalar Server
- 4 models – Up to 32-way
- Specialty Engines
  - CP, IFL, ICF, zAAP
- On Demand Capabilities
  - CUoD, CIU, CBU, On/Off CoD
- Memory – up to 256 GB
- Channels
  - Four LCSSs
  - Up to 1024 ESCON channels
  - Up to 240 FICON Express2 channels
  - Token-Ring, GbE, 1000BASE-T Ethernet
  - Coupling Links
- Crypto Express2
- Parallel Sysplex clustering
- HiperSockets – up to 16
- Up to 30 logical partitions
- Operating Systems
  - z/OS, z/VM, VSE/ESA, z/VSE, TPF, z/TPF, Linux on zSeries

**IBM eServer zSeries 890 – z890 (2086)**



- Announced 4/04 – zSeries Superscalar Server for mid market
- 1 model – Up to 4-way
- 28 capacity settings
- Specialty Engines
  - CP, IFL, ICF, zAAP
- On Demand Capabilities
  - CUoD, CIU, CBU, On/Off CoD
- Memory – up to 32 GB
- Channel
  - Two LCSSs
  - Up to 420 ESCON channels
  - Up to 80 FICON Express2 channels
  - Networking Adapters(OSA)
  - Coupling Links
- Cryptographic Coprocessors
- Parallel Sysplex clustering
- HiperSockets – up to 16
- Up to 30 partitions
- Operating Systems
  - z/OS, z/VM, VSE/ESA, z/VSE, TPF, z/TPF, Linux on zSeries

**IBM zSystem z9 (z9-109) (2094)**



- Announced 6/05
- Superscalar Server
- 5 models – Up to 54-way
- Specialty Engines
  - CP, IFL, ICF, zAAP
- On Demand Capabilities
  - CUoD, CIU, CBU, On/Off CoD
- Memory – up to 512 GB
- Channels
  - Four LCSSs
  - Multiple Subchannel Sets
  - MIDAW facility
  - 63.75 subchannels
  - Up to 420 ESCON channels
  - Up to 336 FICON channels
  - 10 GbE, GbE, 1000BASE-T
  - Coupling Links
- Configurable Crypto Express2
- Parallel Sysplex clustering
- HiperSockets – up to 16
- Up to 60 partitions
- Enhanced Availability
- Operating Systems
  - z/OS, z/VM, VSE/ESA, z/VSE, TPF, z/TPF, Linux on zSystem