AMDAHL

Millennium™
Global Servers
500E Models

▸ **More productive MIPS for exceptional system utilization**

▸ **Topflight performance for mission-critical applications**

▸ **Availability that keeps up with outstanding performance**

▸ **Flexibility that puts the customer in charge**

▸ **S/390 compatibility with innovation**

▸ **Easy upgrade in place to 700 Series**

Specifications

Advanced technology and design

System on a board	CPUs, memory, I/O processors
QuickAvailability™	Dynamic: QuickSwitch™, QuickChannels™ QuickMemory™, QuickCapacity™
ConServ™ (concurrent service)	Firmware, channels, and fans
Multiple Domain Feature™	10 domains
Coupling Domain™	Parallel Sysplex coupling facility functionality
IC technology	.35-micron complementary metal oxide semiconductor (CMOS)
Level 1 cache (high-speed buffer)	256 KB per CPU, split equally between instructions and data
Level 2 cache	8 MB per CPU, up to 56 MB shared

Physical characteristics

	Minimum Configuration (GS535E: 512 MB, 32 ESCON channels)	Maximum Configuration (GS585E: 8 GB, 256 ESCON channels)
Floor space without service clearance	16.1 ft² 1.5 m²	16.1 ft² 1.5 m²
Floor space with service clearance	43.0 ft² 4.0 m²	43.0 ft² 4.0 m²
Approximate weight	2,200 lb 1,000 kg	2,200 lb 1,000 kg
Approximate power requirements (50/60 Hz; 208 V 3 phase)	2.5 kVA	4.5 kVA
Approximate heat dissipation	8.8 kBTU/hr	15.1 kBTU/hr
Temperature requirements* raised floor	50° F - 90° F 10° C - 32° C	
non-raised floor	50° F - 85° F 10° C - 29° C	
Humidity requirements	20% - 80%	

Capacity (relative to the Amdahl Millennium 715 = 1) and upgrade paths

Model	Capacity Range	Upgrade to
GS535E	1.44 - 1.55	GS545E, 555E, 565E, 575E, 585E
GS545E	1.88 - 2.07	GS555E, 565E, 575E, 585E
GS555E	2.30 - 2.55	GS565E, 575E, 585E
GS565E	2.73 - 3.02	GS575E, 585E
GS575E	3.15 - 3.48	GS585E
GS585E	3.56 - 3.94	–

Supported operating system releases**

OS/390 1.1.0, 1.2.0, 1.3.0, and 2.4.0
MVS/ESA 4.2.0, 4.2.2, 4.3.0, 5.1.0, 5.2.0, and 5.2.2
VSE/ESA 2.1.0, and 2.2.0
TPF 4.1 and TPF HPO 4.1
UTS 2.1.x and 4.x

Memory***

Minimum	Maximum	Configurations
512 MB	8,192 MB	512 MB, 1 GB, 1.5 GB, 2 GB, 2.5 GB, 3 GB, 4 GB, 6 GB, and 8 GB

Channels****

	Minimum Configuration	Maximum Standard Configuration	Maximum Extended Configuration	Increments
Total	32	256	256	–
ESCON	0	256	256	8
Parallel	0	48	96	4
Coupling Links	0	32	32	1
OSA	0	16	16	1

* At altitudes above 5,000 ft (1,525 m), lower the maximum underfloor and room temperature 3.6° F for every 1,000 ft (2° C for every 305 m), up to 7,000 ft (2,135 m). For higher altitudes, consult an Amdahl representative.

** Support for new releases of these operating systems will be added as they become available.

*** Memory is customer definable into main and expanded storage.

**** Each increment of 4 parallel channels reduces the maximum number of ESCON channels by 8.
Each increment of 2 coupling links reduces the maximum number of ESCON channels by 8.
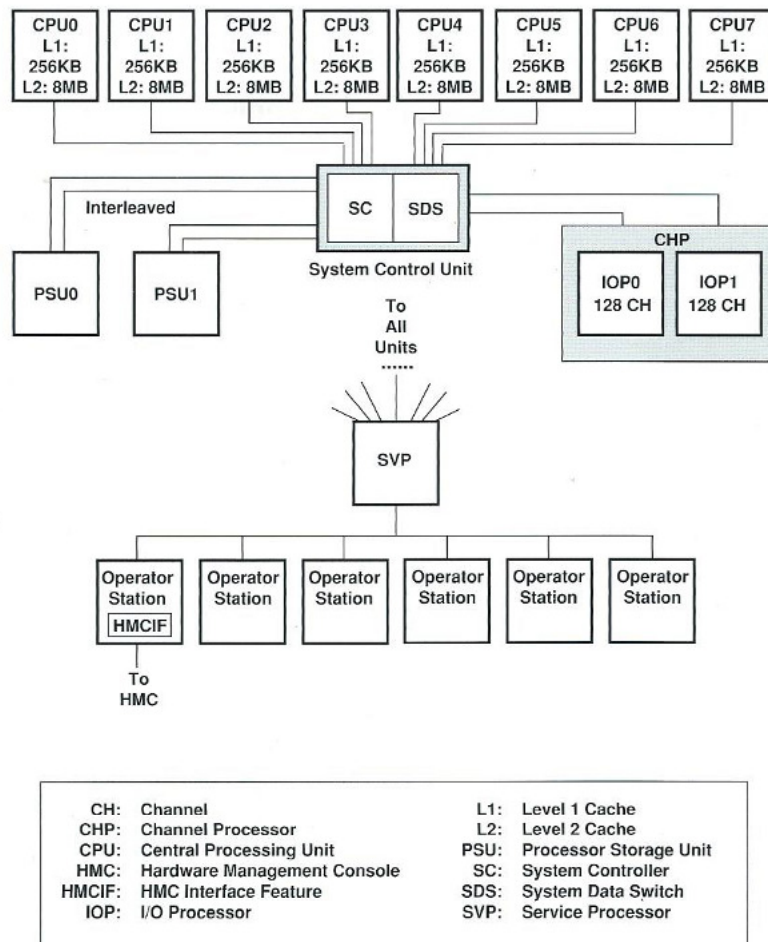Each increment of 2 OSA channels reduces the maximum number of ESCON channels by 8.

Specifications

Conversion paths to Millennium Coupling Servers

From	To
GS535E	GS545E, 555E, 565E, 575E, 585E
GS545E	GS555E, 565E, 575E, 585E
GS555E	GS565E, 575E, 585E
GS565E	GS575E, 585E
GS575E	GS585E

System organization*

CH:	Channel	L1:	Level 1 Cache
CHP:	Channel Processor	L2:	Level 2 Cache
CPU:	Central Processing Unit	PSU:	Processor Storage Unit
HMC:	Hardware Management Console	SC:	System Controller
HMCIF:	HMC Interface Feature	SDS:	System Data Switch
IOP:	I/O Processor	SVP:	Service Processor

*The number of CPUs installed is model dependent. Models GS535E and GS545E may come with CPU0-CPU4 installed only.

Capacity relationships shown in this document are based on measurements and projections made in a controlled single-image environment. Measured workloads are approximations of customer production workloads. Results based on specific customer workloads will vary depending on the applications and operating environments, including Parallel Sysplex. Individual customer results will vary and may not equal the ratios stated here.

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