



Summary of AS/400 CISC models

This chapter provides the capacity charts that indicate the minimum and maximum configurations of the CISC models.

Beginning with the V4R5 edition of the *iSeries and AS/400e System Builder*, detailed information on CISC features and models is no longer published in this document. Refer to the Redpaper *AS/400 CISC System Builder*, REDP0042, for detailed information on the CISC models.

Note: OS/400 V1R2 through V3R2 supports CISC systems.

The following table represents general availability and end-of-marketing dates for AS/400 CISC models.

Model	General availability	Withdrawn from marketing
Bxx	26 August 1988	03 December 1991
Cxx	23 February 1990	03 December 1991
Dxx	24 May 1991	19 August 1992
Exx	06 March 1992	03 May 1994
Fxx	05 March 1993	30 June 1996
2xx/3xx	03 June 1994	04 November 1997

20.1 AS/400 P02, P03, and 10S CISC model capacities

The 9401 P02, P03, and 10S systems minimum and maximum capacities tables are provided in the following sections.

20.1.1 Model P02 capacities

Processor feature	Minimum	Maximum
Relative system performance (RAMP-C)*	2.5	2.5
Main storage (MB)	8	16
Disk storage (GB)	1.03	2.06
Twinaxial devices	1	7
Communication lines	1	1
Optional external tapes	1	1

* The relative system performance ratios are estimated based on AS/400 environment RAMP-C workload. A measurement of 1.0 is set as the base to represent the performance of a 9404 B10 with 16MB of main storage and 945 MB of disk. The ratios shown are estimated at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.

20.1.2 Model P03 and 10S capacities

Model Package	P03								10S
	T01 (#0101)	T02 (#0102)	T03 (#0108)	T11 (#0124)	T12 (#0144)	L01 (#0103)	L02 (#0104)	L03 (#0109)	S01 (#0105)
Relative system performance (CPW) ¹	7.3	9.6	16.8	9.6	7.3	7.3	9.6	16.8	5.5/17.1*
Relative system performance (RAMP-C) ²	2.5	3.3	3.9	3.3	2.5	2.5	3.3	3.9	1.9/5.9*
Main storage (MB)	8-24	8-40	8-56	8-40	8-24	8-24	8-40	8-56	8-56
Disk storage (MB)	1.03-299	1.96-3.93	1.96-3.93	1.03-2.99	1.96-3.93	1.03-2.99	1.96-3.93	1.96-3.93	1.96-3.93
Communication lines	1	2	2	2	1	2 †	2 †	2 †	2 †
LAN adapters	-	-	-	-	-	1	1	1	1
Maximum workstations (one minimum)									
Twinaxial	7	14	14	14	7	-	-	-	-
LAN attached	-	-	-	-	-	16	16	16	16
840 MB 1/4-inch crtrdg tape									
Internal	1	1	1	1	1	1	1	1	1
External	1	1	1	1	1	1	1	1	1
3450 1/4-inch cartridge	1	1	1	1	1	1	1	1	1

Note 1	Commercial Processing Workload (CPW) is used to measure the performance of all AS/400 processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine what performance is achievable.
Note 2	Relative system performance ratios are estimated based on AS/400 environment RAMP-C workload. A measurement of 1.0 is set as the base to represent the performance of a 9404 B10 with 16 MB of main storage and 945 MB of disk storage. The ratios shown are estimated at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.
*	First figure = Interactive Environment; Second figure = Client/Server Environment
†	On LAN and Server Packages, one line must be used to provide system console support.

20.2 AS/400 Y10, 236, 436, C, D, E, F, 200, and 20S package CISC models

The 9402 Y10, Models 236 and 436, Models C, D, E, F, 200, and 20S package model systems minimum and maximum capacities tables are shown in the following sections.

20.2.1 Model Y10 capacities

Processor feature	9402 Y10
Main storage (MB)	1-2
Disk storage (MB)	160-760
Diskette unit	1
Tape (¼-inch cartridge)	0-1
Communication lines	0-3
LAN adapters	0-1

20.2.2 Models 236 and 436 capacities

Processor	236	436 SSP only			436 SSP and OS/400		
	#2100	#2102	#2104	#2106	#2102	#2104	#2106
Relative system performance (RAMP-C) ¹	1.0	1.0	1.3	2.4	4.8	6.1	8.7
Relative system performance (CPW V3R6) ²	†	†	†	†	14.4	18.3	24.5
Relative system performance (CPW V3R7/V4R1/V4R2/V4R3) ²	†	†	†	†	16.3	20.6	27.4
Main storage (MB)	32-96	32-224	32-224	32-256	64-224	64-224	64-256
Disk storage (GB)							
SSP ³	1.03-4.1	1.03-4.12			-		
V3R6	2	-			1.96-236		
V3R7 or higher	-	-			1.96-50.3		
Maximum feature card slots	6	6			6		
Communication lines	1-8	1-8			1-20		
LAN adapters ⁴	0-2	0-2			0-2		
ATM adapters	0	0			0-1		
Maximum workstation controllers	2	4			7		
Twinaxial	2	4			7		
ASCII	0	0			6		
LocalTalk	0	0			0		
Maximum workstations (1 minimum)							
Twinaxial	80	160			280		
ASCII	0	0			108		
LocalTalk	0	0			0		
1/4-inch/8mm cartridge tape (internal)	1	1			1-4		
1/2-inch tape							
9348	0-2	0-2			0-4		
34xx/35xx	0	0			0-2		
8mm cartridge tape (external)	0	0			0-4		
Tape libraries	0	0			0-2		
Optical libraries	0	0			0-4		
Diskette drives (5 1/4-inch or 8-inch)	0-1	0-1			0-2		
Fax adapters	0	0			0-6		
Cryptographic processors	0	0			0-1		
System I/O buses	1	1			1		

Note 1	The relative system performance for SSP is estimated based on running the System/36 version of RAMP-C with a maximum configured Model 236 equaling 1.0. For OS/400, the relative system performance ratios are estimated based on AS/400 environment RAMP-C workload, with a 9404 Model B10 with 16 MB of main storage and 945 MB of disk equaling 1.0. The ratios shown were estimated at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments. The SSP relative performance ratings cannot be compared to the OS/400 relative performance ratings.
Note 2	CPW is the Commercial Processing Workload that is used to measure the performance of AS/400 processors. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine what performance is achievable. From the September 1996 announcement, all new AS/400 processors have CPW performance measurements only.
Note 3	Additional DASD may be configured on the 436 with SSP only to support RAID and mirroring.
Note 4	The Model 436 supports three LAN adapters if running Firewall for AS/400 (5769-FW1).
†	Commercial Processing Workload (CPW) figures are not available for systems running only SSP.

20.2.3 Model 436 packages capacities

Package name ¹	Entry #0114	Growth #0115	Large #0116
Relative system performance (CPW V3R6) ²	14.4-24.5	14.4-24.5	14.4-24.5
Relative system performance (CPW V3R7, V4R1, V4R2, or V4R3) ²	16.3-27.4	16.3-27.4	16.3-27.4
Relative system performance (RAMP-C OS/400) ³	4.8-8.7	4.8-8.7	4.8-8.7
Relative system performance (RAMP-C SSP) ⁴	1.0-2.4	1.0-2.4	1.0-2.4
Main storage (MB)	32-256	32-256	64-256
Disk storage (GB) ⁵	1.03-23.6	1.96-23.6	3.93-23.6
Standard tape	1/4-inch cartridge	1/4-inch cartridge	1/4-inch cartridge
Twinaxial devices	40-280	40-280	80-280
LAN adapters ⁶	0-2	0-2	0-2
Communication lines	1-20	2-20	2-20

Note 1	Some of the hardware on the Model 436 is not supported by SSP and requires OS/400 to support it. See the 9402 Model 436 section for more details. Additional hardware can be configured if supported as required.
Note 2	Commercial Processing Workload (CPW) is used to measure the performance of all AS/400 processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine what performance is achievable.
Note 3	The relative system performance ratios are estimated based on AS/400 environment RAMP-C workload, with a 9494 B10 with 16 MB of main storage and 945 MB of disk equaling 1.0. The ratios shown were estimated at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.
Note 4	The relative system performance is estimated based on running the System/36 version of RAMP-C in SSP with maximum configured Model 236 equaling 1.0. The SSP relative performance ratings cannot be compared to the OS/400 relative performance ratings. Customer results may vary.
Note 5	As of February 1997 with V3R7, the maximum disk capacity is 50.3 GB.
Note 6	The Model 436 supports three LAN adapters if running Firewall for AS/400 (5769-FW1).

20.2.4 C and D model capacities

The 9402 C and D model system minimum and maximum capacities table follows.

	9402 C04	9402 C06	9402 D02	9402 D04	9402 D06
Relative system performance (CPW) ¹	3.1	3.6	3.8	4.4	5.5
Relative system performance (RAMP-C) ²	1.1	1.3	1.3	1.5	1.9
Main storage (MB)	8-12	8-16	8-16	8-16	8-20
Disk storage (MB)	640-1280	640-1280	800-1200	800-1600	800-1600
Maximum feature card slots	3	3	1	3	3
Communication lines	1-5	1-5	0-3	1-8	1-8
LAN adapters	0-1	0-1	0-1	0-1	0-1
Maximum workstation controllers	1	2	1	2	2
Twinaxial	1	2	1	2	2
ASCII	1	2	1	2	2
LocalTalk	0	0	1	1	1
Maximum workstations (one minimum)					
Twinaxial	14	54	14	28	54
ASCII	6	24	12	12	24
LocalTalk	0	0	31	31	31
¼-inch cartridge tape	1	1	1	1	1
½-inch reel tape	0-1	0-1	0	0-1	0-1
½-inch cartridge tape	0	0	0	0	0
8mm cartridge tape	0	0	0	0-2	0-2
Tape libraries	0	0	0	0-1	0-1
Optical libraries	0	0	0	0-1	0-1
Diskette drives (5 ¼-inch or 8-inch)	0-1	0-1	0-1	0-1	0-1
Fax adapters	0	0	0	0-2	0-3
Cryptographic processors	0	0	0	0-1	0-1
System I/O buses	1	1	1	1	1

Note 1	Commercial Processing Workload (CPW) is used to measure the performance of all AS/400 processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine what performance is achievable.
Note 2	The relative system performance ratios are estimated based on AS/400 environment RAMP-C workload, with a 9404 B10 with 16 MB of main storage and 945 MB of disk equalling 1.0. The ratios shown were estimated at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.

20.2.5 E and F model capacities

The 9402 E and F model system minimum and maximum capacities table follows.

Processor feature	E02	E04	E06	F02	F04	F06
Relative system performance (CPW) ¹	4.5	5.5	7.3	5.5	7.3	9.6
Relative system performance (RAMP-C) ²	1.5	1.9	2.6	1.9	2.5	3.3
Main storage (MB)	8-24	8-24	8-40	8-24	8-24	8-40
Disk storage (MB)	988-2019	988-4081	988-4081	1031-2062	1031-4124	1031-8248
Maximum feature card slots	1	3	7	1	3	7
Communication lines	0-3	1-8	1-14	0-8	1-8	1-14
LAN adapters	0-1	0-1	0-2	0-1	0-1	0-2
Maximum workstation controllers	1	3	4	2	4	6
Twinaxial	1	2	2	2	2	3
ASCII	1	3	4	2	4	6
LocalTalk	1	1	2	2	2	3
Maximum workstations (one minimum)						
Twinaxial	14	42	68	28	68	108
ASCII	12	48	66	18	66	102
LocalTalk	31	31	62	31	62	93
1/4-inch cartridge tape	1	1	1-2	1	1	1-2
1/2-inch reel tape	0	0-1	0-2	0-1	0-1	0-2
1/2-inch cartridge tape	0	0	0	0	0	0
8mm cartridge tape	0	0-2	0-4	0-2	0-2	0-4
Tape libraries	0	0-1	0-2	0-1	0-1	0-2
Optical libraries	0	0-1	0-2	0-1	0-1	0-2
Diskette drives (5 1/4-inch or 8-inch)	0-1	0-1	0-1	0-1	0-1	0-1
Fax adapters	0	0-2	0-3	0-1	0-2	0-3
Cryptographic processors	0	0-1	0-1	0-1	0-1	0-1
System I/O buses	1	1	2	1	1	2

Note 1	Commercial Processing Workload (CPW) is used to measure the performance of all AS/400 processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine what performance is achievable.
Note 2	The relative system performance ratios are estimated based on AS/400 environment RAMP-C workload, with a 9404 B10 with 16 MB of main storage and 945 MB of disk equalling 1.0. The ratios shown were estimated at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.

20.2.6 200 model capacities

The 9402 200 model system minimum and maximum capacities table follows.

Processor	200		
	#2030	#2031	#2032
Relative system performance (CPW-CISC) ¹	7.3	11.6	16.8
Relative system performance (RAMP-C) ²	2.5	4.0	6.2
Main storage (MB)	8-24	8-56	16-128
Disk storage (GB)		1.03-23.6	
(V3R1/R6)		1.03-50.3	
(V3R2/R7, V4R1/R2/R3)			
Maximum feature card slots		6	
Communication lines		1-20	
LAN adapters		0-2	
ATM adapters		0	
Maximum workstation controllers		7	
Twinaxial		7	
ASCII		7	
LocalTalk		7	
Maximum workstations			
Twinaxial		280	
ASCII		126	
LocalTalk		217	
1/4-inch/8mm cartridge tape (internal)		0-4	
1/2-inch tape			
9348		0-4	
34xx/35xx		0-2	
8mm cartridge tape (external)		0-4	
Tape libraries		0-2	
Optical libraries		0-4	
Diskette drives (5 1/4-inch or 8-inch)		0-2	
Fax adapters		0-6	
Cryptographic processors		0-1	
System I/O buses		1	

Note 1	Commercial Processing Workload (CPW) is used to measure the performance of all AS/400 processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine what performance is achievable.
Note 2	The relative system performance (RAMP-C) ratios are estimated based on the AS/400 environment RAMP-C workload, with a 9404 B10 with 16 MB of main storage and 945 MB of disk equalling 1.0. The ratios shown were estimated at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.

20.2.7 20S package model capacities

The 9402 Model 20S minimum and maximum capacity table follows.

Package name ¹	Twinaxial server 2FS	LAN server 2FS	Starter server 2SS	Growth server 2SG
Relative system performance (CPW) ²				
Client/server environment	17.1	17.1	17.1	17.1
Interactive environment	5.5	5.5	5.5	5.5
Relative system performance (RAMP-C) ³				
Client/server environment	5.9	5.9	5.9	5.9
Interactive environment	1.9	1.9	1.9	1.9
Main disk storage (MB)	16-128	16-128	16-128	16-128
Disk storage (GB)	1.96-7.84	1.96-7.84	1.96-7.84	1.96-7.84
Standard tape	1/4-inch cartridge	1/4-inch cartridge	1/4-inch cartridge	1/4-inch cartridge
Twinaxial devices	7	0	0	0
LAN adapters	1-2	1-2	1	1
Communication lines ⁴	1-3	1-2	1-2	1-2

Note 1	The 2FS packages are announced only in EMEA. The 2SS and 2SG packages are announced only in AP. None of these packages can be upgraded to any other AS/400 model. There are limited additional features that can be configured in these packages. Use the configurative to validate any additional hardware configuration.
Note 2	Commercial Processing Workload (CPW) is used to measure the performance of all AS/400 processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine what performance is achievable.
Note 3	The relative system performance ratios are estimated based on AS/400 environment RAMP-C workload, with 9404 B10 with 16 MB of main storage and 945 MB of disk equaling 1.0. The ratios shown were estimated at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.
Note 4	When Client Access console is used, one communications line is reserved for this.

20.2.8 1xx, 20S, and 3xS model capacities

The 9402 1xx, 20S, and 3xS system minimum and maximum capacity table follows.

Processor	9402 100	9404 135	9404 140	9402 20S	9406 30S	9406 30S
Feature				#2010	#2411	#2412
Relative system performance (CPW) ¹						
Client/server environment	17.1	32.3	65.6	17.1	32.3	68.5
Interactive environment	5.5	9.6	11.6	5.5	9.6	11.6
Relative system performance (RAMP-C) ²						
Client/server environment	5.9	10.9	22.5	5.9	10.9	23.5
Interactive environment	1.9	3.3	4.0	1.9	3.3	4.0
Number of n-way multiprocessors	1	1	2	1	1	2
Main storage (MB)	16-56	32-384	64-512	16-128	32-384	64-832
Disk storage (GB)	1.03-8.2	1.03-27.5	1.03-86.5	1.03-23.6	1.03-86.5	1.03-86.5
Maximum feature card slot	6	6	21	5	64	114
Communication lines	1-8	1-14	1-20	1-20	1-33	1-33
LAN adapters	1-2	1-4	1-6	1-2	1-8	1-8
Maximum workstation controllers						
Twinaxial	1	1	1	1	1	1
ASCII	1	1	1	1	1	1
LocalTalk	1	2	2	1	2	2
Maximum workstations (one minimum)						
Twinax	7	7	7	7	7	7
ASCII	6	6	6	6	6	6
LocalTalk devices	31	62	62	31	62	62
1/4-inch cartridge tape/8mm cartridge tape (internal)	1-2	1-2	1-3	0-4	0-5	0-5
1/2-inch tape						
9348/2440 (The 2440 is not supported by the Model 100 or 20S)	0-2	0-4	0-4	0-4	0-4	0-4
34xx/35xx	0	0-2	0-2	0-2	0-2	0-2
8mm cartridge tape (external)	0-4	0-4	0-4	0-4	0-4	0-4
Tape libraries	0	0	0	0-2	0-2	0-2
Optical libraries	0-1	0-6	0-10	0-4	0-10	0-10
Diskette drives (5 1/4-inch or 8-inch)	0-1	0-2	0-2	0-2	0-2	0-2
Fax adapters	0-3	0-6	0-10	0-6	0-16	0-16
Cryptographic processors	0-1	0-1	0-1	0-1	0-1	0-1
System I/O buses	1-2	1-2	1-5	1	1-3	1-5

Note 1	Commercial Processing Workload (CPW) is used to measure the performance of all AS/400 processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine the performance that is achievable.
Note 2	The relative system performance ratios are estimated based on AS/400 environment RAMP-C workload, with a 9404 B10 with 16 MB of main storage and 945 MB of disk equalling 1.0. The ratios shown are estimates at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.

20.3 AS/400 9404 B, C, D, E, and F CISC model capacities

This section shows the 9404 B, C, D, E, and F models system minimum and maximum capacities tables.

20.3.1 9404 B and C model capacities

Processor feature	9404 B10	9404 B20	9404 C10	9404 C20	9404 C25
Relative system performance (CPW) ¹	2.9	5.1	3.9	5.3	6.1
Relative system performance (RAMP-C) ²	1.0	1.7	1.3	1.8	2.2
Main storage (MB)	4-16	4-28	8-20	8-32	8-40
Disk storage (MB)	630-2400	630-4800	640-2400	640-4800	640-6400
Maximum feature card slots	4	9	4	9	9
Communication lines	1-8	1-14	1-8	1-14	1-14
LAN adapters	0-1	0-2	0-1	0-2	0-2
Workstation controllers					
Twinaxial	1	2	1	2	2
ASCII	2	4	2	4	4
Maximum workstations (one minimum)					
Twinaxial	40	80	40	80	80
ASCII	36	72	36	72	72
½-inch cartridge tape	1	1-2	1	1-2	1-2
¼-inch reel tape	0-1	0-1	0-1	0-1	0-1
¼-inch cartridge tape	0-1	0-1	0-1	0-1	0-1
8mm cartridge tape	0-2	0-2	0-2	0-4	0-4
Tape libraries	0-1	0-2	0-1	0-2	0-2
Optical libraries	0	0	0	0	0
Diskette drives (5 ¼-inch or 8-inch)	0-1	0-2	0-1	0-2	0-2
Fax adapters	0	0	0	0	0
Cryptographic processors	0	0	0	0	0
System I/O buses	1	1-2	1	1-2	1-2

Note 1	Commercial Processing Workload (CPW) is used to measure the performance of all AS/400 processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine what performance is achievable.
Note 2	The relative system performance ratios are estimated based on AS/400 environment RAMP-C workload, with a 9404 B10 with 16 MB of main storage and 945 MB of disk equalling 1.0. The ratios shown are estimates at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.

20.3.2 9404 D and E model capacities

Processor feature	9404 D10	9404 D20	9404 D25	9404 E10	9404 E20	9404 E25
Relative system performance (CPW) ¹	5.3	6.8	9.7	7.6	9.7	11.8
Relative system performance (RAMP-C) ²	1.9	2.4	3.4	2.6	3.5	4.2
Main storage (MB)	8-32	8-40	16-64	8-40	8-72	16-80
Disk storage (MB)	800-9504	800-9504	800-15808	988-19670	988-19670	988-19670
Maximum feature card slots	9	9	9	9	9	9
Communication lines	1-14	1-14	1-14	1-14	1-20	1-26
LAN adapters	0-2	0-2	0-2	0-2	0-2	0-3
Maximum workstation controllers						
Twinaxial	2	2	4	4	4	6
ASCII	4	4	6	9	9	9
LocalTalk	2	2	4	4	4	6
Maximum workstations (one minimum)						
Twinaxial	80	80	160	160	160	240
ASCII	72	72	108	162	162	162
LocalTalk	62	62	124	124	124	186
½-inch cartridge tape	1-2	1-2	1-2	1-2	1-2	1-2
¼-inch reel tape	0-4	0-4	0-4	0-4	0-4	0-4
¼-inch cartridge tape	0-1	0-1	0-1	0-1	0-1	0-1
8mm cartridge tape	0-4	0-4	0-4	0-4	0-4	0-4
Tape libraries	0-2	0-2	0-2	0-2	0-2	0-2
Optical libraries	0-2	0-2	0-2	0-2	0-2	0-2
Diskette drives (5 ¼-inch or 8-inch)	0-2	0-2	0-2	0-2	0-2	0-2
Fax adapters	0-8	0-8	0-8	0-8	0-8	0-8
Cryptographic processors	0-1	0-1	0-1	0-1	0-1	0-1
System I/O buses	1-2	1-2	1-2	1-2	1-2	1-2

Note 1	Commercial Processing Workload (CPW) is used to measure the performance of all AS/400 processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine what performance is achievable.
Note 2	The relative system performance ratios are estimated based on AS/400 environment RAMP-C workload, with a 9404 B10 with 16 MB of main storage and 945 MB of disk equalling 1.0. The ratios shown are estimates at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.

20.3.3 9404 F model capacities

Processor feature	9404 F10	9404 F20	9404 F25
Relative system performance (CPW) ¹	9.6	11.6	13.7
Relative system performance (RAMP-C) ²	3.4	4.2	4.8
Main storage (MB)	8-72	16-80	16-80
Disk storage (GB)	1.03-20.62	1.03-20.62	1.03-20.62
Maximum feature card slots	9	9	9
Communication lines	1-14	1-20	1-26
LAN adapters	0-2	0-4	0-4
Maximum workstation controllers			
Twinaxial	9	9	9
ASCII	9	9	9
LocalTalk	9	9	9
Maximum workstations (one minimum)			
Twinaxial	360	360	360
ASCII	162	162	162
LocalTalk	279	279	279
½-inch cartridge tape	1-2	1-2	1-2
¼-inch reel tape	0-4	0-4	0-4
¼-inch cartridge tape	0-2	0-2	0-2
8mm cartridge tape	0-4	0-4	0-4
Tape libraries	0-2	0-2	0-2
Optical libraries	0-2	0-4	0-4
Diskette drives (5 ¼-inch or 8-inch)	0-2	0-2	0-2
Fax adapters	0-8	0-8	0-8
Cryptographic processors	0-1	0-1	0-1
System I/O buses	1-2	1-2	1-2

Note 1	Commercial Processing Workload (CPW) is used to measure the performance of all AS/400 processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine what performance is achievable.
Note 2	The relative system performance ratios are estimated based on AS/400 environment RAMP-C workload with a 9404 Model B10 with 16 MB of main storage and 945 MB of disk equalling 1.0. The ratios shown are estimates at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.

20.4 AS/400 9406 B, D, E, F, and 3xx CISC model capacities

This section includes information on the 9406 B, D, E, and F models, and the 3xx family of CISC processors.

20.4.1 9406 B model capacities

Processor feature	9406 B30	9406 B35	9406 B40	9406 B45	9406 B50	9406 B60	9406 B70
Relative system performance (CPW) ¹	3.8	4.6	5.2	6.5	9.3	15.1	20.0
Relative system performance (RAMP-C) ²	1.4	1.6	2.0	2.3	3.2	5.2	7.0
Main storage (MB)	4-36	8-40	8-40	8-40	16-48	32-96	32-192
Disk storage (GB)	0.6-13.7	0.6-13.7	0.6-13.7	0.6-13.7	0.6-27.4	0.6-54.8	0.6-54.8
Minimum feature card slots	5	5	5	5	10	13	13
Maximum feature card slots	14	14	24	24	39	71	71
Main storage feature card slots ³	2	2	2	2	2	4	4/5
Communication lines	2-16	2-16	2-32	2-32	2-32	2-32	2-48
LAN adapters	0-4	0-4	0-4	0-4	0-4	0-4	0-4
Maximum workstation controllers							
Twinaxial/ASCII	4	4	6	6	10	15	20
1/4-inch cartridge tape	0-1	0-1	0-1	0-1	0-1	0-1	0-1
1/2-inch reel tape							
9347	0-2	0-2	0-2	0-2	0-2	0-2	0-2
9348/2440	0-2	0-2	0-2	0-2	0-4	0-4	0-4
3422/3430	0-1	0-1	0-1	0-1	0-2	0-2	0-2
1/2-inch cartridge tape							
3480/3490	0-1	0-1	0-1	0-1	0-2	0-2	0-2
8mm cartridge tape	0-2	0-2	0-2	0-2	0-4	0-4	0-4
Tape libraries (9427 not supported)	0-1	0-1	0-1	0-1	0-2	0-2	0-2
Optical libraries	0	0	0	0	0	0	0
Diskette drives (5 1/4-inch or 8-inch)	0-4	0-4	0-6	0-6	0-10	0-15	0-20
Fax adapters	0	0	0	0	0	0	0
Cryptographic processors	0	0	0	0	0	0	0
System I/O buses	1	1	1	1	2	3	3

20.4.2 9406 D model capacities

Processor feature	9406 D35	9406 D45	9406 D50	9406 D60	9406 D70	9406 D80
Relative system performance (CPW) ¹	7.4	10.8	13.3	23.9	32.3	56.6
Relative system performance (RAMP-C) ²	2.6	3.7	4.8	8.3	11.2	19.8
Number of n-way multiprocessors	1	1	1	1	1	2
Main storage (MB)	8-72	16-80	32-128	64-192	64-256	64-384
Disk storage base (GB)	1.28	1.28	1.28	1.28	1.28	1.28
Maximum internal (GB)	4.1	4.1	4.1	4.1	4.1	4.1
Maximum external (GB)	63.0	63.0	94.3	141.7	141.7	251.8
Minimum feature card slots	11	11	18	18	18	18
Maximum feature card slots	55	55	84	140	140	196
Main storage feature card slots	2	2	5	5	5	5
Communication lines	1-17	1-33	1-33	1-33	1-49	1-64
LAN adapters	0-4	0-4	0-4	0-4	0-4	0-4
Maximum workstation controllers						
Twinaxial/ASCII/LocalTalk	6	10	15	20	30	50
Maximum workstations (one minimum)						
Twinaxial	240	400	600	800	1200	2000
ASCII	108	180	270	360	540	900
LocalTalk	186	310	465	620	930	1550
1/4-inch cartridge tape	0-5	0-5	0-9	0-9	0-9	0-9
1/2-inch reel tape						
9347	0-2	0-2	0-2	0-2	0-2	0-2
2440/9348/3422/3430	0-2	0-2	0-4	0-4	0-4	0-4
1/2-inch cartridge tape						
3480/3490/3490E/3590/3570	0-2	0-2	0-4	0-4	0-4	0-4
8mm cartridge tape	0-4	0-4	0-4	0-4	0-4	0-4
Tape libraries	0-2	0-2	0-4	0-4	0-4	0-4
Optical libraries	0-8	0-8	0-14	0-14	0-14	0-14
Diskette drives (5 1/4-inch or 8-inch)	0-2	0-2	0-2	0-2	0-2	0-2
Fax adapters	0-8	0-16	0-16	0-16	0-24	0-32
Cryptographic processors	0-1	0-1	0-1	0-1	0-1	0-1
System I/O buses	2	2	3	3-5	3-5	3-7

Note 1	Commercial Processing Workload (CPW) is used to measure the performance of all AS/400 processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine what performance is achievable.
Note 2	The relative system performance ratios are estimated based on AS/400 environment RAMP-C workload, with a 9409 B10 with 16 MB of main storage and 945 MB of disk equalling 1.0. The ratios shown were estimated at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.
Note 3	The number of available main storage features card slots for the Model B70 depends on whether 16 MB or 32 MB main storage cards are installed. When only 16 MB main storage cards are installed, the number of main storage feature card slots is four. When only 32 MB main storage cards are installed, the number of main storage feature card slots is five.

20.4.3 9406 E model capacities

Processor feature	9406 E35	9406 E45	9406 E50	9406 E60	9406 E70	9406 E80	9406 E90	9406 E95
Relative system performance (CPW) ¹	9.7	13.8	18.1	28.1	39.2	69.4	96.7	116.6
Relative system performance (RAMP-C) ²	3.4	4.8	6.4	10.2	14.2	25.2	34.4	42.1
Number of n-way multiprocessors	1	1	1	1	1	2	3	4
Main storage (MB)	8-72	16-80	32-128	64-192	64-256	64-512	64-1024	64-1152
Disk storage base (GB)	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06
Maximum internal (GB)	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Maximum external (GB)	63.0	63.0	94.3	141.7	141.7	251.8	251.8	251.8
Minimum feature card slots	11	11	18	18	18	18	18	18
Maximum feature card slots	55	55	84	140	140	196	196	196
Main storage feature card slots	2	2	5	5	5	5	5	5
Communication lines	1-20	1-33	1-33	1-33	1-49	1-64	1-64	1-64
LAN adapters	0-4	0-4	0-4	0-4	0-4	0-6	0-6	0-6
Maximum workstation controllers								
Twinaxial/ASCII/LocalTalk	9	12	18	25	35	60	60	60
Maximum workstations (one minimum)	360	480	720	1000	1400	2400	2400	2400
Twinaxial	162	216	324	450	630	1080	1080	1080
ASCII	279	372	558	775	1085	1860	1860	1860
LocalTalk	0-5	0-5	0-9	0-9	0-9	0-9	0-9	0-9
1/4-inch cartridge tape								
1/2-inch reel tape								
9347	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2
2440/9348/3422/3430	0-2	0-2	0-4	0-4	0-4	0-4	0-4	0-4
1/2-inch cartridge tape								
3480/3490/3490E/3590/3570	0-2	0-2	0-4	0-4	0-4	0-4	0-4	0-4
8mm cartridge tape	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4
Tape libraries	0-2	0-2	0-4	0-4	0-4	0-4	0-4	0-4
Optical libraries	0-8	0-8	0-14	0-14	0-14	0-14	0-14	0-14
Diskette drives (5 1/4-inch or 8-inch)	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2
Fax adapters	0-10	0-16	0-16	0-16	0-24	0-32	0-32	0-32
Cryptographic processors	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
System I/O buses	2	2	3	3-5	3-5	3-7	3-7	3-7

20.4.4 9406 F model capacities

Processor feature	9406 F35	9406 F45	9406 F50	9406 F60	9406 F70	9406 F80	9406 F90	9406 F95	9406 F97
Relative system performance (CPW) ¹	13.7	17.1	27.8	40.0	57.0	97.1	127.7	148.8	177.4
Relative system performance (RAMP-C) ²	4.8	6.0	10.2	14.7	21.0	36.5	50.5	59.0	71.5
Number of n-way multiprocessors	1	1	1	1	1	2	3	4	4
Main storage (MB)	16-80	16-80	64-192	128-384	128-512	128-768	128-1024	128-1280	128-1536
Disk storage base (GB)	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06
Maximum internal (GB)	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Maximum external (GB)	63.0	63.0	110.2	141.7	251.8	251.8	251.8	251.8	251.8
Minimum feature card slots	11	11	18	18	17	17	17	17	17
Maximum feature card slots	55	55	140	140	195	195	195	195	195
Main storage feature card slots	2	2	5	5	5	5	5	5	5
Communication lines	1-20	1-33	1-33	1-33	1-64	1-64	1-64	1-64	1-96
LAN adapters	0-4	0-4	0-4	0-4	0-6	0-6	0-6	0-6	0-8
Maximum workstation controllers									
Twinaxial/ASCII/ LocalTalk	12	18	25	35	60	60	60	60	120
Maximum workstations (one minimum)									
Twinaxial	480	720	1000	1400	2400	2400	2400	2400	4800
ASCII	216	324	450	630	1080	1080	1080	1080	2160
LocalTalk	372	558	775	1085	1860	1860	1860	1860	3270
1/4-inch cartridge tape									
120 MB	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
1.2 GB/2.5 GB	0-5	0-5	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1/2-inch reel tape									
9347	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2
2440/9348/3422/3430	0-2	0-2	0-4	0-4	0-4	0-4	0-4	0-4	0-4
1/2-inch cartridge tape									
3480/3490/3490E/	0-2	0-2	0-4	0-4	0-4	0-4	0-4	0-4	0-4
3590/3570									
8mm cartridge tape	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4
Tape libraries	0-2	0-2	0-4	0-4	0-4	0-4	0-4	0-4	0-4
Optical libraries	0-8	0-8	0-14	0-14	0-14	0-14	0-14	0-14	0-14
Diskette drives (5 1/4-inch or 8-inch)	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2
Fax adapters	0-10	0-16	0-16	0-24	0-32	0-32	0-32	0-32	0-32
Cryptographic processors	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
System I/O buses	2	2	3-5	3-5	3-7	3-7	3-7	3-7	3-7

Note 1	Commercial Processing Workload (CPW) is used to measure the performance of all AS/400 processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine what performance is achievable.
Note 2	The relative system performance ratios are estimated based on AS/400 environment RAMP-C workload, with a 9404 B10 with 16 MB of main storage and 945 MB of disk equalling 1.0. The ratios shown were estimated at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.

20.4.5 9406 300, 310, and 320 model capacities

Model	300			310		320		
Processor feature	#2040	#2041	#2042	#2043	#2044	#2050	#2051	#2052
Relative system performance (CPW) ¹	11.6	16.8	21.1	33.8	56.5	67.5	120.3	177.4
Relative system performance (RAMP-C) ²	4.2	6.0	7.5	12.0	20.2	25.7	45.8	71.5
Number of n-way multiprocessors	1	1	1	1	2	1	2	4
Main storage (MB)	8-72	16-80	32-160	64-832	64-832	128-1536	128-1536	128-1536
Disk storage base (GB)		1.03		1.03		1.03		1.03
Maximum internal (GB)		117.44		159.38		259.52		
Maximum external (GB)		94.42		141.63		251.79		
Maximum combined (GB)		117.44		159.38		259.66		
External disk unit IOPS		0-6		0-16		0-28		
Minimum feature card slots		8		3		1		
Maximum feature card slots		45		115		151		
Feature main storage slots		2		3		5		
Communication lines		1-33		1-64		1-96		
LAN adapters ³		0-4		0-8		0-8		
Maximum workstation controllers		25		60		120		
Twinaxial/ASCII/LocalTalk								
Maximum workstations (1 minimum)		1000		2400		4800		
Twinaxial		450		1080		2160		
ASCII		775		1860		3720		
LocalTalk								
1/4-inch/8mm cartridge tape (internal)		0-5		0-9		0-9		
1/2-inch tape								
9348/2440		0-4		0-4		0-4		
34xx/35xx		0-2		0-4		0-4		
8mm cartridge tape (external)		0-4		0-4		0-4		
Tape libraries		0-2		0-4		0-4		
Optical libraries		0-8		0-14		0-2		
Diskette drives (5 1/4-inch or 8-inch)		0-2		0-2		0-32		
Fax adapters		0-16		0-32		0-1		
Cryptographic processors		0-1		0-1		1-7		
System I/O buses		1-2		1-5				
System expansion								
#5063		0-1						
#5062				0-4		0-6		
#5061				0-4		0-6		
Bus extension								
#5042				0-2		0-3		
#5040/#5060			0-2	0-5		0-6		
Storage expansion								
#5051		0-1		0-1		0		
#5052		0-2		0-5		0-6		

Note 1	Commercial Processing Workload (CPW) is used to measure the performance of all AS/400 processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine what performance is achievable.
Note 2	The relative system performance ratios are estimated based on AS/400 environment RAMP-C workload, with a 9404 Model B10 with 16 MB of main storage and 945 MB of disk equalling 1.0. The ratios shown were estimated at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.
Note 3	On Models 300 and 320, a One-Port or Two-Port Integrated PC Server (formerly known as FSIOP) counts as a single LAN. On Model 310, a Two-Port Integrated PC Server counts as two LANs.