UNIX Workstation Comparison Table

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The following table contains information about the different workstations from the list of architectures supported at CERN. Information includes details of the CPU chip, memory capacities and some performance data. Most of this information comes from manufacturers' published specifications and has been checked by them. The CERN Benchmark figures were supplied by Eric McIntosh/CN-PDP Group. All efforts have been made to ensure accuracy of the data as of the date of publication and any errors should be reported to A.Silverman or Ch.Ball (CN-DCI Group). Updates will be issued from time to time.

HEWLETT-PACKARD

			Cache		Memory								
MACHINES	CPU	SPEED/Mhz	Internal I/D	External I/D	min - max	Oper SYS	MIPS	MFLOPS	SPECint92	SPECfp92	SPECmarks	SPECrate_int	SPECrate_fp	CERN_benchmarks
HP/705	PA	35	32/64KB		8 - 64	HP-UX	40	8.6	22.7	39.3	39.5			
HP/710	PA	50	32/64KB		16-64	HP-UX	57	12.2	32.7	56.4	56.5			9.1
HP/712/60	PA-7100LC	60	64/64KB		16-128	HP-UX	73	12.8	58.1	79				
HP/712/80	PA-7100LC	80	256/256KB		16-128	HP-UX	92	15.6	84.1	122				
HP/715/33	PA7100	33	64/64KB		8-192	HP-UX	41	9.5	24	122	46			
HP/715/50	PA7100	50	64/64KB		16-256	HP-UX	63	14.3	36	72	69			
HP/715/75	PA7100	75	256/256KB		16-256	HP-UX	92	31	61	113	110			
HP/720	PA	50	128/256KB		16-128	HP-UX	57.9	17.9	36.4	58.2	66.5			10,0
HP/725/50	PA7100	50	64/64KB		32-256	HP-UX	63	14.3	36	72	69			
HP/725/75	PA7100	75	256/256KB		32-256	HP-UX	92	31	61	113	110			
HP/730	PA	66	128/256KB		16-128	HP-UX	76	23.7	52	87	87.6			
HP/735/99	PA7100	99	256/256KB		32-400	HP-UX	124.8	45.4	109.1	167.9	146.8			27.2
HP/735/125	PA7100	125	256/256KB		32-400	HP-UX	154	57	137	201				
HP/750	PA	66	256/256KB		64-384	HP-UX	76	23.7	52	87	86.6			13.5
HP/755	PA7100	99	256/256KB		64-768	HP-UX	124.8	45.4	80	150	147			27.8
HP/745i/50	PA7100	50	64/64KB		16-128	HP-UX	62	13	36	72	69			
HP/745i/100	PA7100	100	256/256KB		16-256	HP-UX	115	41.2	81	138	136.3			
HP/747i/50	PA7100	50	64/64KB		16-128	HP-UX	62	13	36	72	69			
HP/747i/100	PA7100	100	256/256KB		16-256	HP-UX	115	41.2	81	138	136.3			
HP/742i	PA7100	50	64/64KB		8 - 64	HP-UX	62	14			69			

SUN MICROSYSTEMS

			Cache		Memory								
MACHINES	CPU	SPEED/Mhz	Internal I/D	External I/D	min - max	Oper SYS	MIPS	MFLOPS	SPECint92	SPECfp92	SPECmarks	SPECrate_int	SPECrate_fp	CERN_benchmarks
SUN/SPARC/ELC	SPARC/V8	33	64KB		8 - 64	SOLARIS 1/2	17.8	1.8	13.8	11.1	13.5			
SUN/SPARC/SS2	SPARC/V8	40	64KB		16-128	SOLARIS 1/2	28.5	4.2	21.5	24.2				
SUN/SPARC/CLASSIC	MICROSPARC		64KB		16-96	SOLARIS 1/2	28.5	4.2	21.8	22.8	25			
SUN/SPARC/CLASSIC/LX	MICROSPARCI	50	6KB		16-96	SOLARIS 1/2	59.1	4.6	26.4	21		0,626	0,498	
SUN/SPARC/10/20	SUPERSPARC	33	36KB		32-512	SOLARIS 1/2	86.1	10.6	44.2	52.9				8.5
SUN/SPARC/10/30	SUPERSPARC	36	36KB		32-512	SOLARIS 1/2	101.6	20.5	45.2	54		1,072	1,282	
SUNSPARC/10/30/30LC	SUPERSPARC	36			512	SOLARIS 1/2			65.2	83		1,847	1,930	
SUN/SPARC/10/40	SUPERSPARC	40	36KB		32-512	SOLARIS 1/2	109.5	22.9	50.2	60.2		1,191	1,427	
SUN/SPARC/10/41	SUPERSPARC	40	36KB	1MB/CPU	32-512	SOLARIS 1/2	109.5	22.4	53.2	67.8		1,263	1,607	
SUN/SPARC/10/51	SUPERSPARC+	50	36KB	1MB/CPU	32-512	SOLARIS 1/2	135.5	27.3	65.2	83		1,547	1,969	
SUN/SPARC/10/512	SUPERSPARC+	2x50	36KB	1MB/CPU	64-512	SOLARIS 2	N/A	N/A	N/A	N/A		2,950	3,744	
SUN/SPARC/10/514	SUPERSPARC+	4x50	36KB	1MB/CPU	64-512	SOLARIS 2	N/A	N/A	N/A	N/A		5,428	6,308	
SUN/SPARC/5/70	MICROSPARCII	70	24KB		16-256	SOLARIS 1/2	100.3	13.1	57	47.3		1,352	1,518	
SUN/SPARC/5/85	MICROSPARCII	85	24KB		32-256	SOLARIS 1/2	11.5	14.9	64	54.6		1,122	1,295	
SUN/SPARC/20/50	SUPERSPARC+	50	36KB		32-512	SOLARIS 1/2	142.3	30.6	69.2	78.3		1,628	1,842	
SUN/SPARC/20/51	SUPERSPARC+	50	36KB	1MB/CPU	32-512	SOLARIS 1/2	135.5	29.6	73.6	84.8		1,731	1,995	
SUN/SPARC/20/61	SUPERSPARC+	60	36KB	1MB/CPU	32-512	SOLARIS 1/2	167.4	35.3	88.9	102.8		2,092	2,418	
SUN/SPARC/20/502MP	SUPERSPARC+	2x50	36KB		32-512	SOLARIS 2	N/A	N/A	N/A	N/A		2,833	2,995	
SUN/SPARC/20/514MP	SUPERSPARC+	4x50		1MB/CPU	64-512	SOLARIS 2	N/A	N/A	N/A	N/A		6,034	6,752	
SUN/SPARC/20/612	SUPERSPARC+	2x60		1MB/CPU	64-512	SOLARIS 2	N/A	N/A	N/A	N/A		3,903	4,645	
SUN/SPARC2	SPARC	40	64KB			SOLARIS	28.5	4.2	21.8	21.5	24.2			
SUN/SPARC5	MICROSPARCII	70			16-256MB	SOLARIS			57	47.3				
SUN/SPARC5	MICROSPARCII	85			32-256MB	SOLARIS			64	54.6				
SUN/SPARC/IPC	SPARC	25	16/20KB			SOLARIS	77.5	9.5	39.8	46.6				
SUN/SPARC/IPX	SPARC	40	64KB			SOLARIS	23.7	3.4	18.2	17.9	20.1			3.5

D I G I T A L

MACHINES	CPU	SPEED/Mhz	Cache Internal I/D	Cache External I/D	Memory min - max	Oper SYS	MIPS	MFLOPS	SPECint92	SPECfp92	SPECmarks	SPECrate_int	SPECrate_fp	CERN_benchmarks
DEC/2000/300	AlphaAXP	150	8+8	512K	12-256	VMS/OSF/WNT	300	88.3	81	110.2		1,930	2,634	20.72
DEC/2000/500	AlphaAXP	150	8+8	512K	12-156	VMS/OSF/WNT	300	88.3	81	110.2		1,930	2,634	20.72
DEC/3000/300L	AlphaAXP	100	8+8	256K	32-256	VM/OSF	200	52.8	45.9	63.6		1,480		
DEC/3000/300LX	AlphaAXP	125	8+8	256K	32-256	VM/OSF	250	62.9	63.5	75.5		1,788		
DEC/3000/300	AlphaAXP	150	8+8	256K	32-246	VM/OSF	300	72.3	66.2	91.5		1,535	2,137	19.2
DEC/3000/300X	AlphaAXP	175	8+8	256K	32-256	VM/OSF	350	80.1	84.4	100.5		1,925	2,374	
DEC/3000/400	AlphaAXP	133	8+8	512MB	32-512	VM/OSF	266	91.7	74.7	112.5		1,763	2,662	21.45
DEC/3000/500	AlphaAXP	150	8+8	512MB	32-1GB	VM/OSF	300	103.5	84.4	84.4		1,997	3,023	23.59
DEC/3000/500X	AlphaAXP	200	8+8	512MB	32-1GB	VM/OSF	400	133.2	110.9	164.1		2,611	3,910	
DEC/3000/600	AlphaAXP	175	8+8	2MB	32-512	VM/OSF	350	129.7	114.1	162.1		2,722	3,857	27.5
DEC/3000/800	AlphaAXP	200	8+8	2MB	32-1GB	VM/OSF	400	147.1	130.2	184		3,137	4,377	31.6
DEC/4000/710	AlphaAXP	1*190	8+8	1*4MB	32-2GB	VM/OSF	380	145.6	122.4	185.4		2,900	4,340	
DEC/4000/720	AlphaAXP	2*190	8+8	2*4MB	32-2GB	VM/OSF	760	235	N/A	N/A		5,144	8,272	
DEC/7000/610	AlphaAXP	1*200	8+8	1*4MB	32-2GB	VM/OSF	400	155.6	132.6	200.1		3,250	4,701	
DEC/7000/620	AlphaAXP	2*200	8+8	2*4MB	32-2GB	VM/OSF	800	279.2	N/A	N/A		6,347	9,329	
DEC/7000/640	AlphaAXP	4*200	8+8	4*4MB	32-2GB	VM/OSF	1600	538.3	N/A	N/A		12,463	18,719	
DEC7/7000/660	AlphaAXP	6*200	8+8	6*4MB	32-2GB	VM/OSF	2400	754.8	N/A	N/A		18,956	28,157	
DEC/2100/A500MP (1CPU)	AlphaAXP	1*90	8+8	1*MB	64-2GB	VMS/OSF/WNT	380	128.5	124	158.9		2,978	3,785	
DEC/2100/A500MP (2CPU)	AlphaAXP	2*90	8+8	2*1MB	64-2GB	VMS/OSF/WNT	760	208.6	N/A	N/A		5,692	7,175	
DEC/2100/A500MP (4CPU)	AlphaAXP	4*90	8+8	4*1MB	64-1GB	VMS/OSF/WNT	1520	358.1	N/A	N/A		11,071	12,874	

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MACHINES	CPU	SPEED/Mhz	Cache Internal I/D	Cache External I/D	Memory min - max	Oper SYS	MIPS	MFLOPS	SPECint92	SPECfp92	SPECmarks	SPECrate_int	SPECrate_fp	CERN_benchmarks
IBM/RISC/6000/M20	POWER	33.3	8 / 32		16-64	AIX		6.6	16.3	26.7	27.7			
IBM/RISC/6000/220	POWER	33.3	8 / 32		16-64	AIX		6.6	16.3	26.7	27.7			
IBM/RISC/6000/320H	POWER	25	8 / 32		16-128	AIX		11.8	21.5	45.3	44.9			
IBM/RISC/6000/340	POWER	33.3	8 / 32		16-256	AIX		15	27.9	58.7	58.5			5.9
IBM/RISC/6000/350	POWER	41.7	8 / 32		16-256	AIX		18.8	35.4	74.2	73.7			
IBM/RISC/6000/355	POWER	41.7	8 / 32		16-128	AIX		18.8	40.5	81.6	80.6			
IBM/RISC/6000/360	POWER	50	8 / 32		16-256	AIX		22.2	48.4	97	95.7			
IBM/RISC/6000/365	POWER	50	8 / 32		16-128	AIX		22.2	48.4	97	95.7			
IBM/RISC/6000/370	POWER	62.5	8 / 32		32-256	AIX		25.9	59.8	118.2	117			15.0
IBM/RISC/6000/375	POWER	62.5	8 / 32		32-128	AIX		25.9	59.8	118.2	117			
IBM/RISC/6000/250	POWER PC	66	32/32		16-256	AIX		12.7	62.6	72.2				12.5
IBM/RISC/6000/550	POWER	41.6	8 / 32		64-1024	AIX		25.8	37	130.6	78.9			9.8
IBM/RISC/6000/590	POWER2	66	32/256		64-2000	AIX		130	117	242.4				27.2
RS/6000 NOTEBOOK/N40	POWERPC	50	32		16-64	AIX			41.7	51				

SILICON GRAPHICS

MACHINES	CPU	SPEED/Mhz	Cache Internal I/D	Cache External I/D	Memory min - max	Oper SYS	MIPS	MFLOPS	SPECint92	SPECfp92	SPECmarks	SPECrate_int	SPECrate_fp	CERN_benchmarks
SGI/INDIGO/R3000	MIPS /3000	33	32/32		16-384	IRIX	30	4.2	22.4	24.2	26			
SGI/INDIGO/R4000	MIPS/4000	100	8I/8D	1MB	32-384	IRIX	89	16.4	58.3	60.5	70			
SGI/INDIGO/R4400	MIPS/4400	150	16I/16D	1MB	32-384	IRIX	>135.5	25.3	94.2	105.2	105			
SGI/INDIGO2/R4000	MIPS/4000	100	8I/8D	1MB	32-384	IRIX	89	16.4	58.3	60.5	70			
SGI/CRIMSON/R4000	MIPS/4000	100	8I/8D	1MB		IRIX	89	16.4	58.3	60.5	70			
SGI/CHALLENGE M/R4000	MIPS/4000	100	8I/8D	1MB		IRIX	89	16.4	58.3	60.5	70			
SGI/INDY/R4000PC	MIPS/4000	100	8I/8D		32-256MB	IRIX	89.5	5.9	36.5	37.4				
SGI/INDY/R4000SC	MIPS/4000	100	8I/8D	1MB	32-256MB	IRIX	89.5	16.4	57.5	63	70			13.2
SGI/INDY/R4400SC	MIPS/4400	150	16I/16D	1MB	32-256MB	IRIX	>135.5	25.4	88.1	96.6	105			
SGI/INDY/R4600PC	MIPS/4600	100	16I/16D		32-256MB	IRIX	119	?	62.8	49.9	?			
SGI/INDIGO2/R4400	MIPS/4400	150	16I/16D	1MB	32-384MB	IRIX	>135	25.4	94	105	105			
SGI/CRIMSON/R4400	MIPS/4400	150	16I/16D	1MB	32-384MB	IRIX	>135	25.4	94	105	105			
SGI/CHALLENGE M/R4400	MIPS/4400	150	16I/16D	1MB	32-384	IRIX	>135	25.4	94	105	105			19,2