Fortran Execution Time Benchmark

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Abstract

This report presents many results from a benchmark about Central Processor Unit Execution Time of a Fortran program. A wide range of machines under various systems configurations and with different compilers are tested, including numerous Ms/Dos and personal computers.

The benchmark's domain

The Fortran application is a nuclear safety analysis code that simulates the time evolution of a thermo-hydraulical modelization (*"hydrocode"*) for a nuclear reactor's component, and the benchmark is created from the computational kernel of the original application.

The benchmark's profile

The benchmark is 5323 fortran-lines long (eg. the computational kernel, without any comment line) while the original application [1] with the comments and the I/O parts – pre- and postprocessing, dump and restart features, etc ... – is approximatively 18000 lines long. The executable size is about 350 kbytes or 100 kwords. The test has to be run in 64-bits-precision mode eg. in single precision mode on 60- or 64-bits machines or in appropriate-precision mode on smaller-word, even 16bits, machines. The program is best described as an heavy computationnal profile (CP bound) with negligible I/O code. Almost all the explicit processings are done with floating point values in 64-bits precision. However the program doesn't carry much array processing that can be vectorized, this later part being estimated at about 2%. Instead it has an iterative structure with much abundance of short branches and small loops that could be best served by features like cache memory ....

It is important to note that, while minor modification can be targeted toward a particular hardware, or even software, this program is run *as is* on every machine, and since 1978. Lastly, it is worth noting that this program, being a simulation code, has an observed behavior much similar to another group of simulation families: Monte-Carlo code.

The benchmark's RAPIDITY

The **RAPIDITY**, object of this benchmark, is defined as the ratio **R** of *central processor execution times* between the reference machine, an IBM 3033-U (OS/MVS), and a target machine. The ratio **R**

is normalized to 100 with an IBM 370/168-3 running under OS/MVS with Fortran 4.H.extended (opt=2) and having the High Speed Multiply Unit; within this scale, the reference machine, an IBM 3033-U, is positionned at 170.

$$\boxed{\begin{array}{l} \text{The reference time being 286.30 seconds,} \\ R_{78} = 169.58 * 286.30 \text{ / target CPU time} \end{array}}$$

The reason for the scaling factor, 170, is purely historical: while the benchmarking process began, by 1978, from comparisons with the original program running on the IBM 370/168-3, the real data-gathering actually started with many results from the IBM 3033-U, whose timings thus are used as reference times.

The input data sets

Essentially the results obtained from this reference machine allowed a set of scaling factors to be devised, which in turn led to 2 (then in 1985 to 3 and in 1995 to 4) input data sets: it was deemed to be important that no measured CPU time should be less than 100 seconds, whatever the machine. The initial and almost-always-used data set, DAT50, targets *usual, normal* machines, eg. mainframes, workstations... and takes 286.30s on the IBM 3033-U, or 2097s on a Vax 11/780, but only around 40s on a Cray X/MP. The DAT100 data set, approximately four times bigger, is more appropriate for the ("class VI") *supercomputers*, while the *personal computers* - all items of the eighties- can only bear the DAT35 data set which is six times smaller than the initial data set.

data set	reference time	typical times
DAT35	50.05	IBM/PC: 11hours
DAT50	**286.30**	Vax 11/780: 1800s
DAT100	1212.12	Cray 1S: 200s
DAT999	16385.1	Alpha 21164: 300s

By 1995, a fourth data set, DAT999, is added to take care of the *micro-killer*, whose typical times fall much too low under 100 seconds : about 20s with the DAT100 set or even 6s with the initial DAT50 set. Yet, a fifth data set, DAT10K, is prepared to handle the microprocessors of the next generations.

The benchmark's correctness criteria

The correctness of the computation, within this benchmark framework, cannot and need not be

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[1] developed in the mid-seventies

proven. The original program being a widely used Energy Sciences code, its correctness although not mathematically proven, is fully established (thru comparison with real physical experiments) and completely *approved* by all concerned control authorities. However, the code has been certified *only* for a limited set of hardwares: the 60-bits CDC machines, the IBM S/370 series and the Cray 1S, eg. the accuracy of the computation, a critical factor, is *only* established for these machines. A contrario and subsequently, this accuracy has been instrumental in discriminating, temporarily or definitely, the use of some compilers, or some compiler's versions or optimization levels ...

The transformation of the original code into the actual benchmark is proceeded when it was established that only a single value, yet very sensitive and significant, needs to be kept that is enough to certify about the exactness and the accuracy of the computation: the number of iterations (aka. time steps) corresponding to a given amount of simulation time.

simulation time	data set	# of iterations
35 seconds	DAT35	954
50 seconds	DAT50	5485
100 seconds	DAT100	20391
999 seconds	DAT999	

It was then decided that the number of iterations should not deviate from the accepted values by more than 2%. Since then it is observed that the number of iterations distribution peaked at these values well within 2%. This becomes the correctness criteria of the benchmark.

The benchmark's source versions

The heavy importance of the compiler in number crunching application is the major cause for migration of the compilers' preprocessor, a critical technological component of the supercomputer microcosm of the eighties, to the mainstream of the RISC chip world, in the first half of the nineties. Thanks to these preprocessors, and to other beautifiers and F90 translators, the original source evolves into many derived versions:

- the SPAG version comes from Polyhedron's fortran source reorganizer (06/1988);

- the STRUCT version structured by FOR_STRUCT, v2.0, (s=v sp=ddegl v) (02/1992);

- the FOREST and FOREST90 versions come from ForeSys' fortran restructurer by ConneXité (08/1993);

- the KAP version comes from KAP/ Alpha_OSF_F 1.5 k171117 931012 o5r3so3 (08/1994);

- the VAST version comes from IBM xlf 3.1 (-Pv! -Wp,-l,-ea789), (Translated by IBM AIX XL FORTRAN Preprocessor/6000, Version 02.01.0000.0000 3.03G17a (1991) or by Pacific-Sierra Research VAST-2, Version 03.01.0000.0000 4.03H24 (1994));

Yet, ATT's **f2c** among other less-able softwares, allows one more version of the original source: this translation, from f77 to C, although crude but very solid and incredibly reliable, starts new comparisons with C compilers in numerical processing and shows that **GNU**'s **g77** [2] might be a real alternative for fortran programming without a commercial fortran compiler.

- the C version comes from a translation by ATT's f2c, (*"version of 27 June 1990 8:41:01"* obtained from netlib@research.att.com) .

The report's organization

The report is divided into three parts, $2 + 2 + 3$ chapters, taking into consideration another historical fact that is the Ms/Dos environment where, within real mode or when emulated, the microprocessor's full power may not be exercized:

Part 1 comprises :

- Chapter 1 - Ms/Dos machines

- Chapter 2 - Non-Ms/Dos machines

with, in Part 2, some notes :

- Chapter 3 - Ms/Dos machines notes

- Chapter 4 - Non-Ms/Dos machines notes

and some summary tables in Part 3 :

- Chapter 5 - Ms/Dos machines tables

- Chapter 6 - Non-Ms/Dos machines table

- Chapter 7 - Top fifty machines table

Caveat and Notes

1. UNIX and Ms/Dos & Windows are trademarks .

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[2]g77 is practically equivalent to f2c + gcc

2. This work, started around 1978, has benefited from much help and encouragement; many sources have contributed, and still are contributing, numbers of results: acknowledgements are due to each of the contributors but special thanks are owed to, chronologically, Dô Ngọc Kỳ, Patrick Lefèvre, Serge Sevastianov, Louis Métayer, Norbert Juffa and Stéphane Tsacas .

3. This report is intended to be dense with only raw values and occasional ratios: no data reduction is done, nor any explanation is given, which implies interpretation and/or judgement of value. However and perhaps because of this, comments and remarks are wellcome at the following address:

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4. Throughout succeeding releases of this report, values for R may have changed: normally, it's no error but a proof of the permanent improvement process of every living system. In particular, a same machine may give significantly different results within this report, or display a not-so-good value (compared with the ones seen or reported elsewhere): different runs at different times with different configurations will most likeky give different results, if simply because many differences may and do occur: new compiler, compiler version, new optimization technique, cache size ...

5. This benchmark now is frequently used by a large segment of concerned parties: you will find it included in many internal or public suites such as the Suite Synthetique des Benchmarks de l'AFUU ("SSBA") or the **SPEC** (89 and 92) Benchmark Suites ...

6. The tables contained in Chapters 5 and 6 are structured in the following way: the left part of each table is a list of machines sorted by decreasing R values, the middle part is the alphabetical sort by name, while the right, and shorter, part is the same list that is sorted by FPA/FPU, significant only for microprocessor-based machines. However, within Chapter 6, any microprocessor at any frequency does appear only once, whatever the number of systems using it.

7. New addings to **version 50** of this report: R4600 and R8000 ("TFP") machines; Intel Pentium, DX4 "clock doubler" chips as well as new floating-point coprocessors.

8. Essential addings to **version 51** of this report come from detailed executions within the Ms/Dos world. Lahey F90 1.0, g77 0.5.10 (03/1995) and gcc 2.6.3 ; different Fortran source versions as processed by SPAG, FOR_STRUCT, KAP, VAST[90] and FOREST[90].

9. New addings to **version 52** of this report: CraySoft cf90 for Unicos and Solaris machines, Sun SC4.0 alpha and Sun_F90; UMC U5S, Amd 80486 DX4, Alpha 21164, PPC603, PPC604, RT625 chips.

10. New addings to **version 53** of this report: Pentium OverDrive ("P24T"), Cyrix 5x86 ("M1sc") chips. Win32 compilers: Visual C/C++ 2.0, Borland C/C++ 4.0, 4.5 and Symantec C/C++ 6.10 .

11. New addings to **version 54** of this report: Lahey F90 2.0b, PowerStation 32 1.0, Visual C/C++ 4.0 and Borland C/C++ 4.52; Pentium Pro ("P6") and Am5x86, R8000 with f77 6.1, Ultra Sparc and RT626 chips .

12. **Version 55** of this report gets a new Chapter 7, a single (*last*) page summarizing the top fifty machines with a *new* ratio : the R_{96} refers to the 1996 reference machine, a Sun SPARCstation 10/40 (no cache, Sun SC3 (f77 O4 fast)) . Within the scope and limits of this benchmark, the R_{78} of this new reference machine was 1908 , with respect to the *old* 1978 reference machine, an IBM 370/168-3 (HSMU, Fortran 4.H.extended) . AlphaStation 600 5/266 with SoftPC, FX!32 as well as native runs .

13. New addings to **version 56** of this report: PowerPC MacIntosh with native compilers, FTN77/NT 2.05; R10000 ("T5") and Cx6x86 ("M1"), Amd K5 machines .

Machine	CPU & MHz	FPU & MHz	R	notes (detailed notes in Chapter 3)
Acorn A310	Arm 4	*no fpu*	.099	software emulation
ADD-X 325SX	Am386SX 25		3.6	
-/-	Am386SX 25	3C87SX 25	14.5	
-/-	Am386SX 25	Cx83S87 25	15.3	
340	Am386 40		6.4	
-/-	Am386 40	3C87 40	27	SC=128K; PowerFortran 1.0
Alaris Cougar	486BL3 25/75		15	16+256K
-/-	486BL3 25/75	Cx83D87 25	45	
-/-	486BL3 25/75	XC87DLX2 25/50	48	
-/-	486BL3 25/75		32	Watcom 9.01
-/-	486BL3 25/75	Cx83D87 25	80	SVS 2.4 &Lahey 3.01 &4.0
-/-	486BL3 25/75	XC87DLX2 25/50	92	PowerFortran 1.0
ALI Vi15G VLB	Amd486 40/80		411	8+256K; PowerFortran 1.0
-/-	Amd486 40/120		31	8+256K
-/-	Amd486 40/120		135	
-/-	Amd486 40/120		751	Watcom 9.01
Amstrad 1512	8086 9.54		.59	
-/-	8086 9.54	8087 9.54	3.8	
Apollo Domain PC	80286 xx		1.2	add-on board
Asus PVI-486SP3	Am5x86 33/133		33	16+256K
-/-	Am5x86 33/133		144	
-/-	Am5x86 33/133		886	Watcom 9.5
-/-	Am5x86 40/160		39	
-/-	Am5x86 40/160		160	
-/-	Am5x86 40/160		979	Watcom 9.5
-/-	Cx5x86 33/100		32	16+256K
-/-	Cx5x86 33/100		147	
-/-	Cx5x86 33/100		707	Watcom 9.5
-/-	Cx5x86 40/120		37	16+256K
-/-	Cx5x86 40/120		164	
-/-	Cx5x86 40/120		785	Watcom 9.5
-/-	OVDP 33/83			16+256K
-/-	OVDP 33/83			
-/-	OVDP 33/83		1458	Watcom 9.5
-/-	OVDP 40/100		39	16+256K
-/-	OVDP 40/100		261	
-/-	OVDP 40/100		1557	Watcom 9.5
-/-P55TP4XE PCI	Pentium 60/180		71	SC=512K
-/-	Pentium 60/180		334	
-/-	Pentium 60/180		2642	Watcom 9.5
-/-	Pentium 66/200		79	SC=512K
-/-	Pentium 66/200		371	
-/-	Pentium 66/200		2924	Watcom 9.5
-/-P55T2P4 P/I	Pentium 100		42	SC=512K
-/-	Pentium 100		261	
-/-	Pentium 100		1849	Watcom 10.5 oX 5 fp5
-/-	Pentium 120		49	SC=512K
-/-	Pentium 120		315	
-/-	Pentium 120		2188	Watcom 10.5 oX 5 fp5
-/-	Pentium 133			SC=512K

System	CPU	FPU	Score	Notes
-/-	Pentium 133			
-/-	Pentium 133			Watcom 10.5 oX 5 fp5
Atari 1040 ST	68000 7.77		.13	PC-Ditto software emulation
Bull Questar 400	80186 10		.68	under CTOS
Chip &	CT38605 25		4.5	
Technologies	CT38605 33		6.6	
Commodore PC	8088 4.77		.21	
-/-PC	8088 7.16		.31	
-/-PC	8088 9.54		.41	
Compaq Deskpro	8086 4.77		.22	
-/-	8086 7.14		.42	
-/-	8086 4.77	8087 4.77	1.4	
-/-	8086 7.14	8087 7.14	2.2	
LTE	8086 9.54		.58	
Deskpro	V30 4.77		.28	
-/-	V30 7.14		.57	
-/-	V30 4.77	8087 4.77	1.5	
-/-	V30 7.14	8087 7.14	2.9	
-/-	1810WM86 4.77		.22	
-/-	1810WM86 7.14			
-/-	1810WM86 4.77	8087 4.77	1.4	
-/-	1810WM86 7.14	8087 7.14	2.7	
Deskpro 286	80286 6		.70	
-/-	80286 8		.95	
-/-	80286 12		1.4	
-/-	80286 6	80287 4	2.	
-/-	80286 8	80287 5.33	2.4	
-/-	80286 12	80287 8	3.7	
-/-	80286 12	80287 8	**5.0**	VisualC 8.00 /G2 /FPi87 /O2
-/-	80286 12	Am287 8	3.7	
-/-	80286 12	287XL 8	4.7	
-/-	80286 12	2C87 8	4.7	
-/-	80286 12	Cx82S87 8	4.9	
SLT/286	80C286 12		1.4	
-/-	80C286 12	80C287 12	4.9	
386-s	80386SX 16		2.	
-/-	80386SX 16	80387SX 16	8.1	
-/-	80386SX 16	Cx83S87 16	8.5	
-/-	80386SX 16	487SLX2 16/33	8.6	
-/-	80386SX 16	487SLX2 16/33	31	Watcom 9.5
-/-	80386SX 20		3.	
-/-	80386SX 20	80387SX 20	11.3	
386/16	80386 16		2.2	
-/-	Am386 16		2.3	
-/-	CT38600 16		2.2	
-/-	80386 16	80287 8	4.5	
-/-	80386 16	287XL 8	6.4	
-/-	80386 16	2C87 8	6.7	
-/-	80386 16	Cx82S87 8	7.6	
-/-	80386 16	80387 16	9	
-/-	80386 16	XC87DLX2 16/33	38	Watcom 9.5
386/20	80386 20		3.2	
-/-	80386 20	80387 20	10	
-/-	80386 20	W1167 20	57	mf77 1.4 -n4
-/-	80386 20	W3167 20	60	mf77 1.4 -n4

386/25	80386 25		3.9	
-/-	CT38600 25		4.7	
-/-	Cx486DLC 25		5.8	PC=1K
-/-	Cx486DR.x^2 25/50		8.6	PC=1K
-/-	80386 25	80287 10	4.5	
-/-	80386 25	80387 25	15	
-/-	80386 25	CT38700 25	16	
-/-	Cx486DLC 25	Cx487DLC 25	17	
-/-	Cx486DR.x^2 25/50	CxEMC87 25	29	
-/-	Cx486DR.x^2 25/50	XC87DLX2 25/50	30	
-/-	80386 25	80387 25	41	SVS 2.4
-/-	80386 25	Cx83D87 25	50	SVS 2.4
-/-	80386 25	CT38700 25	49	F77/LEM-32 1.00
-/-	Cx486DR.x^2 25/50	XC87DLX2 25/50	92	PowerFortran
-/-	80386 25	W3167 25	73	mf77 1.4 -n4
-/-	Cx486DR.x^2 25/50	W3167 25	80	mf77 1.4 -n4
386/33L	80386 33		5.3	SC=64K
-/-	Cx486DR.x^2 33/66		9.2	
-/-	i386DX 33		12	WatCom 9.01
-/-	CT38600 33		15	WatCom 9.01
-/-	Ti486DLC 33		19	PC=1K; WatCom 9.01
-/-	Cx486DR.x^2 33/66		21	PC=1K; WatCom 9.01
-/-	80386 33	80387 33	21	
-/-	80386 33	W3167 33	108	mf77 1.4 -n4
-/-	Cx486DR.x^2 33/66	4C87DLC 33	91	PowerFortran 1.0
-/-	Cx486DR.x^2 33/66	Cx387+ 33	109	Watcom 9.01
-/-	Cx486DR.x^2 33/66	W3167 33	120	mf77 1.4 -n4
486s/16m	i486SX 16		4.2	
-/-	*none*	i487SX 16	4.2	i486SX *replaced*
-/-	*none*	i487SX 16	20	i486SX *replaced*
486s/25m	i486SX 25		6.0	
-/-	*none*	i487SX 25	31	
486/25	i486 25		6.6	
-/-	i486 25		31.4	
486/33	i486 33		8.7	
-/-	i486 33		41	
-/-	i486 33		**144**	VisualC 8.00 /G3 /FPi87 /O2
-/-	i486 33		191	SVS 2.4
-/-	i486 33	W4167 33	168	mf77 1.4 -n4
Deskpro 486/50	i486 50		13.1	
-/-	i486 50		62.5	
Prolinea 450	i486 25/50		12	P23T, **no SC**
-/-	i486 25/50		62	
-/-	i486 25/50		**260**	Watcom 10.0a
-/-	i486 33/66		16	P23T
-/-	i486 33/66		83	
-/-	i486 33/66		**348**	Watcom 10.0a
-/-	DX4 25/75		20	P24C, PC=16K
-/-	DX4 25/75		80	
-/-	DX4 25/75		**408**	Watcom 10.0a
-/-	DX4 33/100		26	P24C
-/-	DX4 33/100		106	
-/-	DX4 33/100		**544**	Watcom 10.0a
-/-	OVDP 25/63		19	P24T, PC=32K
-/-	OVDP 25/63		101	

System	CPU	Coprocessor	Value	Notes
-/-	OVDP 25/63		**652**	Watcom 10.0a
-/-	OVDP 33/83		26	P24T
-/-	OVDP 33/83		134	
-/-	OVDP 33/83		**870**	Watcom 10.0a
-/-	Cx5x86 25/75		17	M1sc, PC=16K
-/-	Cx5x86 25/75		398	WatCom 9.5
-/-	Cx5x86 33/100		**514**	PC=16K; WatCom 10.0a
Deskpro/66m	i486DX2 66		17	
-/-	i486DX2 66		81	
Prolinea 4/100	DX4 33/100		28	SC=128K
-/-	DX4 33/100		103	
-/-	DX4 33/100		534	Watcom 9.01
Deskpro 560 XE	Pentium 60		25	**no SC**
-/-	Pentium 60		129	
-/-	Pentium 60		1040	Watcom 9.05
-/-	PODP 60/120		44	
-/-	PODP 60/120			
-/-	PODP 60/120		1562	Watcom 9.05
-/-XL 590	Pentium 90		37	P54C, SC=256K
-/-	Pentium 90		204	
-/-	Pentium 90		1479	Watcom 9.01
-/-XL 5100	Pentium 100			SC=256K
-/-	Pentium 100			
-/-	Pentium 100			
Daewoo	Am386SX 40		4.2	
-/-	Am386SX 40		10	WatCom 9.01
DataGeneral ONE	80C88 4		.18	
Datek 386	Cx486DLC 33		8.4	PC=1K
-/-	Cx486DLC 33	Cx387+ 33	34	
-/-	386 40		6.6	
-/-	386 40	Cx387+ 40	28	
-/-	RapidCAD 33		6.5	386DX *replaced*
-/-	RapidCAD 33	RapidCAD 33	31.5	
-/-	RapidCAD 40		7.8	386DX *replaced*
-/-	RapidCAD 40	RapidCAD 40	37.7	
DECpc LPv+ 433s	i486SX 33		9	SC=128K
-/-XL 433SX	UMCU5S 33		13	SC=256K
-/-	UMCU5S 33		28	Watcom 9.01
-/-XL 466S2	i486SX2 33/66		18	8+256K
-/-XL 466D2	ST486 33/66		18	8+256K
-/-	ST486 33/66		91	
-/-	Amd486 33/66		20	8+256K
-/-	Amd486 33/66		92	
-/-XL 4100	DX4 33/100		30	16+256K
-/-	DX4 33/100		118	
-/-	DX4 33/100		672	Watcom 9.01
-/-	Amd DX4 33/100		24	8+256K
-/-	Amd DX4 33/100		627	Watcom 9.01
-/-	Am5x86 33/100			16+256K
-/-	Am5x86 33/100		122	
-/-	Am5x86 33/100		682	Watcom 9.5
-/-	Cx5x86 33/100		31	16+256K
-/-	Cx5x86 33/100		758	SVS 2.4
-/-XL 560	Pentium 60		25	SC=256K
-/-	Pentium 60		135	

-/-	Pentium 60		803	PowerFortran 1.0
-/-XL 590	Pentium 90		36	P54C; SC=256K
-/-	Pentium 90		197	
-/-	Pentium 90		1285	Watcom 9.01
-/-XL Celebris 5120	Pentium 120		49	SC=256K
-/-	Pentium 120		256	
-/-	Pentium 120		**1874**	Watcom 10.0a
-/-XL Celebris 5133	Pentium 133		52	SC=256K
-/-	Pentium 133		292	
-/-	Pentium 133		1980	Watcom 10.0
-/-	Pentium 133		2179	PowerStation32 1.0 oX g4
-/-XL Celebris 5150	PODP 90/150		56	
-/-	PODP 90/150		363	
-/-	PODP 90/150		2271	Watcom 10.5 oX 5 fp5
-/-XL Celebris 5166	PODP 100/166		64	
-/-	PODP 100/166		367	
-/-	PODP 100/166		2524	Watcom 10.5 oX 5 fp5
-/-XL Celebris 6150	PentiumPro 150			16+256K
-/-	PentiumPro 150			
-/-	PentiumPro 150			
-/-APX 3000/500	21064 150		3.6	SoftPC 2.0
Alpha Station 600 5/266	21164 266		12	16+96K+2M; (SoftPC)
-/-	21164 266		86	rmf 2.11
-/-	21164 266			FX!32, VisualC 4.0
-/-	21164 266			FX!32, PowerStation32 1.0
-/-	21164 266		10388	W_NT 3.51; f77 T1.2 -O4 -fast
Definicon DSI-32	32032 10	32081 10	6.6	add-on board
785	68020 25	68881 25	28	add-on board; SVS 2.4
785	68020 25	68882 25	36	add-on board; SVS 2.4
SP 1/4	CY7C601 20	TI8847 20	72	add-on board; Sun f77 no opt
T4/T800	T800 20		49	add-on board; 3L f77
Ericsson PC	8086 10		.39	8086 board on 8088 machine
Epson PCPlus	V30 7.16		.50	
Goupil G4	80186 7.16		.63	80186 ?, 7.16MHz ?
HP 95 LX	V20 5.37			
9000/3xx	80286 8		.41	add-on board
-/-	80286 8	80287 8	2.3	add-on board
9000/720	PA-1.1 50		2.3	SoftPC 2.0, 800's binary
IBM PC	8088 4.77		.21	
-/-	V20 4.77		.25	
PC/XT/286	80286 6		.87	
PC/AT-2	80286 6		.70	
-/-	80286 6	80287 4	2.	
PC/AT-3	80286 8		.94	
-/-	80286 8	80287 5.33	2.6	
PS/2 8570 R21	i486DX2 50		49	OverDrive
PS/2 8556/57	386SLC 20		3.9	PC=8K
-/-	386SLC 20		2.4	FTN 2.40
PC/RT	80286 6		.34	AT Coprocessor add-on board
PC/RT 6150-125	Romp 10		.41	software emulation
PC/RT 6150-135	Romp 12.5		.51	software emulation
RS/6000-540	Power 31		1.4	PCSIM software emulation
Intel SYP 301Z	80386 16		2.3	Z = zero wait state
-/-	80386 16	80287 10	9.8	
-/-UTS P6	PentiumPro 133			16+256K

-/-	PentiumPro 133			
-/-	PentiumPro 133			
-/-UTS P6	PentiumPro 200		69	16+256/512K
-/-	PentiumPro 200		226	
-/-	PentiumPro 200		4709	PowerStation32 1.0 oX g4
Iskra 1030.M	1810WM86 4.77		.22	
-/-	8086 4.77		.22	
-/-	V30 4.77		.29	
-/-1030.11	1810WM86 4.77		.20	
Kila Systems KS-1	V50 7.16		.70	
Leanord 286/20	80286 20		2.5	
-/-286/20	80286 20	80287 10	5.2	
Microflex PC1000	80C88 4.915		.23	2.5lb and hand held
Microway 287Turbo	80286 8		.75	host = Compaq Portable II
-/-	80286 8	80287 20	3.	host = Compaq Portable II
FastCache Plus	80386SX 20		.78	no SC; host = Compaq Deskpro ...
-/-	80386SX 20		2.7	SC=32K; ... 286 at 12MHz
-/-	80386SX 20	Cx83S87 20	32	SC=32K; SVS 2.4
Number Smasher 860	80860 33		276	mf860; host = Compaq Deskpro
Mitac/LCE 286	80286 16		2.0	
NeXT Station	68040 25		.70	software emulation
NexGen Nx586	Nx586 60		24	32+256K
-/-	Nx586 60		53	WatCom 9.01
-/-	Nx586 75		29	SC=256K
-/-	Nx586 75		63	WatCom 9.01
-/-	Nx586 90		34	SC=256K
-/-	Nx586 90		**76**	WatCom C 10.00a
-/-	Nx586PF100 93		37	32+256K
-/-	Nx586PF100 93		164	
-/-	Nx586PF100 93		**1352**	WatCom C 10.00a
Normerel S Turbo 2	V40 8		.33	
-/-	V40 8	8087 8	3.3	rmf 2.11
NT Vienna PC	80186 8		.51	
Olivetti PC 1	V40 xx		.39	
-/-M380	Cx486DLC 16		3.1	
Orchid TinyTurbo	80286 7.15		.75	host = Compaq 8086
Robotron EC 1834	1810WM86 xx		.27	
-/-A7150	1810WM86 xx		.22	
-/-A7150C	8086 xx	8087 xx	1.42	DCP 3.20
Ryad ES 1841	1810WM86 4.77		.20	
-/-ES 1842	1810WM86M 8		.38	
-/-ES 1845	1810WM86M 4.77+		.23	
Soura 86	1810WM86M 8		.35	
Shuttle Hot555	Am K5 100		44	SC=512K
-/-	Am K5 100		196	
-/-	Am K5 100		1111	Watcom 10.5 oX 5 fp5
-/-	Cx6x86 100		41	16+256K
-/-	Cx6x86 100		228	
-/-	Cx6x86 100		1088	Watcom 10.5 oX 4 fp3
-/-	Cx6x86 133		55	16+256K
-/-	Cx6x86 133		303	
-/-	Cx6x86 133		1614	PowerStation32 1.0 oX g4
Sun Integrated PC	80286 10		1.4	add-on board
-/-	80286 10	80287 10	2.8	
-/-386 i250	80386 25		2.8	VP/IX

-/-4/75 SparcSt.II	CY7C601 40		1.1	SoftPC software emulation
-/-	CY7C601 40		.6	DosWindows software emulation
Tadpole P1000	Pentium 100		41	SC=256K
-/-	Pentium 100		216	
-/-	Pentium 100		1680	WatCom 10.5 oX 5 fp5
-/-	Pentium 166			SC=256K
-/-	Pentium 166			
-/-	Pentium 166			WatCom C 10.00a
taiwanese ...	V20 8		.41	
... machines	V20 11.1		.52	
-/-	V20 12		.54	
-/-	80386SX 16	US83S87 16	7.2	
-/-	80386 33	US83C87 33	22.1	
Tandon	Cx486SLC 25		4.5	(25 MHz ?)
Toshiba 1200	80C86 4.77		.28	
-/-1200	80C86 9.54		.56	
-/-2100	8086-2 4.77		.28	
-/-2100	8086-2 7.16		.42	
-/-3100	80286-2 4.77		.44	
-/-3100	80286-2 7.16		.94	
-/-3200SX	80386SX 16		1.9	
-/-3200SX	80386SX 16	80387SX 16	8.4	
-/-3200SX	80386SX 16	80387SX 16	28.4	Watcom 9.5 /4 /oT
-/-4800CT	DX4 25/75		18	noSC
-/-4800CT	DX4 25/75		82	
-/-4800CT	DX4 25/75		379	Watcom 9.01
Victor PC-vi			.22	v-mode
-/-S1	8088 xx		.23	Ms/Dos 1.25
-/-Speed Pack	80286 7.15		.62	host = IBM PC/XT
Xerox Star 6085	80186(?) 8		.43	add-on board
-/-1186	80188 xx		.10	add-on board
(Forex chipset)	386DX 33		5	SC=128K
-/-	386DX 33	387DX 33	23	
-/-	386DX 33	387DX 33	**82**	WatCom C 10.00a
-/-	Cx486DRx^2 33/66		13	PC=1K, SC=128K
-/-	Cx486DRx^2 33/66	Cx387+ 33	49	
-/-	Cx486DRx^2 33/66	Cx387+ 33	122	
-/-	Cx486DRx^2 40/80		15	PC=1K, SC=128K
-/-	Cx486DRx^2 40/80	XC87DLX2 40/80	60	
-/-	Cx486DRx^2 40/80	XC87DLX2 40/80	186	WatCom C 10.00a
-/-	RapidCAD 33		6	PC=0K, SC=128K
-/-	RapidCAD 33	RapidCAD 33	25	
-/-	RapidCAD 33	RapidCAD 33	186	PowerStation32 1.0 oX g4
-/-	RapidCAD 40		8	PC=0K, SC=128K
-/-	RapidCAD 40	RapidCAD 40	38	
-/-	RapidCAD 40	RapidCAD 40	224	WatCom 9.01
(Triton chipset)	Cx6x86 120		48	PC=16K, SC=256K
-/-	Cx6x86 120		223	
-/-	Cx6x86 120		1197	WatCom 9.5

Machine	CPU & MHz	FPU & MHz	R	notes (detailed notes in Chapter 4)
Acorn R260	Arm3 26(?)	*no fpu*	6.1	f77 O ; RisciX 1.21
ADI AD-100			242	host = MicroVax
Alacron AL860	i860 40		446	gf77 1.8.5
-/- AL860XP-50	i860XP 50		850	pgf77 2.0 O4
Alcatel APX 1000	80386 20	80387 20	33	lpifortran (2)
-/- APX 2000	80386 25	80387 25	41	-/-
-/- APX 3000	80386 33	80387 33	65	-/-
ALR Veisa 486ASX	486SX 25	487SX 25	121	Absoft 3.1.4 "best"
Altos 400	80386SX 20		.67	mf77 1.4 O
Alliant FX/1	170ns		85	68020-compatible (41)
FX/8	170ns		101	8 CE
FX/80	85ns		199	1 CE
FX/80	85ns		248	4 CE
FX/2800	i860 40		268	14 x i860; fort 1.1.27 Ogcu AS (4)
FX/2800	i860 40		413	14 x i860; fort 1.1.27 Og uniproc
SRM/1	i860 40		436	OS V2.0.03
Amdahl 470 V5-1			92	
470 V7-B			135	
470 V7			155	
470 V8			150	
470 V8			165	
5850-S			348	S = scientific accelerator
5860			474	
Apollo DN 550	68010 10		.98	(8)
DN 580	68020 16.67	68881 12.5	16	
DN 580	68020 16.67	W1164 xx	34	
DN 660	68020 16.67	PEB xx	12	
DN 2500	68030 20	68882 20	33	ftn 10.6
DN 3000	68020 12.5	68881 12.5	16	ftn 10.6
DN 4000	68020 25	68881 25	33	ftn 10.6
DN 4000	68020 25	W3164 12.5	54	ftn 10.6
DN 3500	68030 25	68882 25	38	ftn 8.76
DN 3500	68030 25	W3164 12.5	55	ftn 9.95
DN 4500	68030 33	68882 33	58	ftn 10.6
DN 4500	68030 33	W3164 12.5	78	ftn 9.95
HP 9000/400T	68030 50	68882 50	81	ftn 8.40 cpu 3000
DN 10000	Prism 18.2		606	ftn 10.7 r105(1989.1)
Apple Mac Plus	68000 7.83		.58	MicroSoft 2.2 (1)
Mac Classic	68000 7.83		.67	MicroSoft 2.2
Mac SE/30	68030 15.67		2.7	MicroSoft 2.2
Mac II	68020 15.67		2.8	MicroSoft 2.2
Mac II	68020 15.66	68881 15.66	17	gf77 1.8.2h O (17)
Mac II x	68030 15.66	68882 15.66	22	Nkr 2.0.3 O
Mac II x	68030 15.66	68882 15.66	23	gf77 1.8.2h O
Mac II cx	68030 16	68882 16	34	Nkr 2.0.3 O
Mac II fx	68030 40		7.4	MicroSoft 2.2
Mac II si	68030 20		3.2	MicroSoft 2.2
Mac PowerBook 100	68000 15.67			MicroSoft 2.2
Mac PowerBook 140	68030 15.67			MicroSoft 2.2
Mac PowerBook 170	68030 25		2.0	MicroSoft 2.2

Mac PowerBook 170	68030 25	68882 25	9.1	MPW/LanguageSystems
Mac LC 475	68LC040 25		10.5	8K; MicroSoft 2.2
Mac Quadra 900	68040 25		10	MicroSoft 2.2
Power Mac 6100/66	PPC601 66		5.6	32K; MicroSoft 2.2
Power Mac 6200/75	PPC603 75		3.9	MicroSoft 2.2
Power Mac 7100/80	PPC601 80		6.2	32K; MicroSoft 2.2
Power Mac 8500&9500/120	PPC604 120		8.8	MicroSoft 2.2
Performa 5200	PPC603 75		**639**	L2=256K; CodeWarrior 1.3 Peep 601
Performa 6300	PPC603e 100		**934**	L2=256K; CodeWarrior 1.3 Peep 601
Power Mac 6100/66	PPC601 66		**467**	CodeWarrior 1.3 Peep 601
Power Mac 6100/60	PPC601 60		**392**	CodeWarrior 1.3 Peep 601
Power Mac 7100/80	PPC601 80		**900**	CodeWarrior 1.3 Peep 601
Power Mac 7200/90	PPC601 90		**852**	CodeWarrior 1.3 Peep 601
Power Mac 6200/75	PPC603 75		**522**	CodeWarrior 1.3 Peep 601
Power Mac 8500/120	PPC604 120		**1387**	L2=512K; CodeWarrior 1.3 Peep 601
Ardent Titan P2	R2000 16	W2264 16	97	**no R2010**; fc 3.0 O1 (10)
Stardent 3000 P3	R3000 32	W2264 32	440	**with R3010**; fc 3.0 O1 (10)
3010	R3000 32	R3010 32	520	64+64K; f77 4.0alpha
Vistra	i860 40		432	pgf77 O4 (4)
Atari 1040 ST	68000 7.77		.7	GEM & TOS (21)
ATT StarServer E	i486 33	W4167 33	213	SVS 2.8
Avalon Vaccel. AP/20	80386 16	W1167 16	51	host = Qbus VMS machine
Axil 240				Apogee 2.3 -O4 cg92 xt=ss10/41
320/61	390Z55 60		2996	Apogee 2.3 -O4 cg92 xt=ss10/41
320/HS11	RT625 100		3530	Apogee 2.3 -O4 cg92 xt=ss10/41
BBN TC 2000	88100 20		171	f77 OLM (25)
Bull 66 DPS3			6	Fortran77
68 DPS2			17	Fortran10, Multics 10.1
68 DPS3			17	Fortran9, Multics 9.1
68 DPS4			17	Fortran10, Multics 10.1
DPS 7/60			10	
DPS 717			37	ext.package
DPS 1017			139	<= NEC ACOS S750
DPS 8/46			6	Fortran77
DPS 8/482T			5	
DPS 8/52			7	Fortran77
DPS 8/62			7	Fortran77
DPS 8/70			8	
DPS 8/70M			31	Multics 10.2 (49)
DPS 88/x			194	
DPS 90/x			376	<= NEC ACOS S1000 (39)
DPS 9000	13.5ns		1202	<= NEC ACOS S2000
DPS 6000/622	i486 33		188	mf77 n23; coprocessor board
DPX 1000/30	68020 16.67	68881 16.67	19	f77 O
DPX 2000/20	68020 16.67	68881 16.67	18	f77 O
DPX 2000/27	68030 25	68881 25	25	f77 O
DPX 5000/25	Risc/6 xx		65	f77 F7
DPX/2 100	80386 25	80387 25	44	f77 OLM f387
DPX/2 210	68030 25	68882 25	39	
DPX/2 250	68040 25		158	f77 2.14 (gf77 1.8.5) FO F4
DPX/2 320	68030 25	68882 25	39	
DPX/2 340	68030 33	68882 33	51	f77 FO
DPX/2 350	68040 25		174	(50)
DPX/2 380	68040 33		239	f77 FO F4
DPX/2 510	R6000 60	R6010 60	1008	f77 2.10 O4 mips2

DPX/20 450	Power 41		1267	f77 O P Wp ewa
DPX/20 460	Power 50		1081	32+32K; f77 2.2 O P Wp ewa
DPX/20 470	Power 62.5		2737	32+32K; f77 3.1 pwx O3 (27)
DPX/20 620	Power 33		1081	f77 O P Wp ewa
DPX/20 650	Power 50		1625	f77 O P Wp ewa
DPX/20 150	PPC601 66		1637	32K; f77 3.1 ppc O3 (27)
DPX/20 690	Power2 66.5		4136	32+256K; f77 3.1 pwrx O3 (27)
Escala M401	PPC601 75		1760	32+512K; f77 3.1 ppc O3 (27)
SPS 7/50	68010 10		.43	
SPS 7/50	68010 10	32081 10	5.4	Opérateur Virgule Flottante
SPS 7/300	68020 16.67	68881 16.67	2.6	f77 v1.7 T16
SPS 7/300	68020 16.67	68881 16.67	15	f77 v1.7 T32
SPS 9/60	Risc/x 8		12	<= Ridge32 (13)
SPS 9/67	Risc/x xx		26	Unité Centrale Accélérée
SPS 9/67	Risc/x xx		31	gf77 + cache
SPS 9/400	Risc/x xx		32	f77 1.3 O
SPS 9/400	Risc/x xx		**32**	cc O
SPS 9/830	Risc/x xx		62	gf77 + cache
Micral 600	80386 20	80387 20	34	mf77 n23
Questar 700-20	68020 16.67	68881 16.67	2.8	f77 v1.7 T16
Questar 700-20	68020 16.67	68881 16.67	18	f77 v1.7 T32
Isis	20ns		343	fortran 2.10, moniteur 2.21
CII 10070			10	Fortran4 (48)
CCI Power 6/32	prop.chip 10		51	100ns; <= Sperry 7000 (23)
Celerity C1200	(NCR) 10		31	f77
1260	-/-	(Weitek) xx	48	Unix 4.2 bsd 3.2.50
6000	prop.chip xx			=> FPSComputing 500
Celi Logo 6000	68020 16.67	68881 16.67	15	<= Masscomp
-/-	68020 16.67	(Weitek) xx	24	
Cern 3081/e			148	VSFortran opt=2 (32)
Ch River DS UV68/35	68010 12.5	Sky FFPoint	2.6	UNOS 4.0 v7
Concurent 3280			106	F7o opt=3280
Computer 3280	120ns		158	F7z
Convergent MightyFrame	68020 12.5	68881 12.5	13	
CSEE Unigraph 6272	68020 16.67	68881 12.5	13	(52)
Cetia 2000	68030 20	68882 20	28	gf77 1.8.4
2000	68030 25	68882 25	35	gf77 1.8.4
VMTV2c	68030 25	68882 25	37	gf77
VMTV2c	68030 33	68882 33	48	gf77
VMTV2d	68040 25		196	gf77 1.8.4 O
VMCB2	88100 25		230	
Compaq 386/25	80386 25	**no** 80387	.44	mf77 n0 & IX's emul.rel1 (2)
386/25	80386 25	**no** 80387	.98	mf77 n0 & IX's emul.dflt
386/25	80386 25	80387 25	44	mf77 n23
386/25	80386 25	W3167 25	75	mf77 n4
386/33	80386 33	W3167 33	111	mf77 n4
486s/16m	i486SX 16	i487SX 16	100	Absoft 3.1.4 "best"
Deskpro/i	i486SX 25	i487SX 25	158	Absoft 3.1.4 "best"
486s/25m	i486SX 25		2	mf77 OLM n23 & SCO 3.2.2 fp emul.
486/25	i486 25		145	gf77 1.8.3A f387x
486/33	i486 33		191	gf77 1.8.3A f387x
486/50	i486 50		298	gf77 1.8.4 OLM
Deskpro/50m	i486DX2 50		303	Absoft 3.1.4 "best"
Deskpro/66m	i486DX2 66		401	Absoft 3.1.4 "best"
SystemPro	Pentium 66		1246	Win_NT, C 8.10 Ox G5

Proliant 4500	Pentium 166		**1938**	UnixWare, cc -O3
Control 6400			24	64Kw, NOS 1 531 (35)
Data 6600	100ns		82	131+512Kw
7600	27.5ns		458	64(SCM)+256/512(LCM)Kw
73			25	
76			459	131+512Kw
171			22	
173			36	
175			167	
720			32	
730			44	
740			114	
750			228	
760			302	
815			20	
825			33	
835			79	
845			184	
855			246	
875			379	
810			18	
830			35	
840			99	
850			157	
860			187	
870			239	
990			533	Fortran v2 scalar
830-A			37	Fortran v1 opt=high
840-A			123	Fortran v1 opt=high
850-A			217	Fortran v1 opt=high
860-A			283	Fortran v1 opt=high
870-A			282	Fortran v1 opt=high
990-E	16ns		592	Fortran v2 opt=high
995-E			586	Fortran v2 opt=high
930-11			55	Fortran v1 opt=high
930-31			82	Fortran v1 opt=high
960-11	15ns		234	FTN5.1+ opt=2
960-31	11ns		460	Fortran opt=high (35)
2000-U	9ns		1263	(scalar)Fortran opt=high + AFT
2000-V	9ns		1340	(scalar)Fortran opt=high + AFT
205	20ns		471	2 pipes; Fort 2.0
ETA 10Q	19ns		459	(34) and (35)
910-400	R2000 xx	R2010 xx	126	8+16K; f77 1.31 O4
910-579	R2000 xx	R2010 xx	114	f77 1.31
920-162	R2000 16.67	R2010 16.67	208	f77 1.31 O4
4320	R3000 25	R3010 25	422	f77 O
4350	R3000A 33	R3010 33	685	f77 2.20 O4 (10)
4360	R3000 25	R3010 25	455	f77 1.31 O4 (10)
4460	R4000SC 100		993	8+8K+1MB; f77 2.20 O3
4680	R6000 60	R6010 60	1114	f77 2.20 O2 mips2 (10)
4680-312	R6000 80	R6010 80	1415	f77 2.20 & pftn 1.1 O2 mips2
9460	R4400 150	R4010 150	1781	IP19; 32K+1M; f77 2.20 O3
Convex C1	100ns		69	fc 4.1 O1 (42)
C120	100ns		103	fc 4.1 O2
C201	55ns		198	fc 4.1 O2

Model			Score	Notes
C210	40ns		428	ESP; fc 5.1 O2
C220	40ns		503	ESP; ac 1.02
C3410	20ns		517	
C3810	16.67ns		1271	
Cray 1.M			695	CFT 1.11, COS 1.11; SN:M02
Research 1.S	12.5ns		751	CFT 1.9; SN:26 (40)
1.S	12.5ns		1084	CFT 1.10&11; SN:27
2	4.1ns		1435	cft 3.1; SN:2027
X/MP 48	9.5ns		878	CFT 1.13, SCS/CTSS; SN:mfecc
X/MP 28	8.5ns		1701	cft77 2.0.19; SN:xxx; ECL memory (40)
X/MS	55ns		218	cft77 4.0
Y/MP 8/128	6ns		2235	cft77 4.0; SN:1033
Y/MP 2E	6ns		2237	cft77 4.0; SN:xxx
Y/MP 2/16	6ns		2089	cft77 5.0.3; SN:1413 (40)
Y/MP16 (C90)	4ns		3846	
Y/MP EL			491	
J 916	10ns		1017	cft77 6.0.0 full
M 98			3625	cft77 7.0
SCSystem 40	45ns		278	CFT 1.13, SCS-CTSS
SuperTek S-1			121	CFT x13g, CTSS
Culler PSC	200ns		126	
ESDassault SDX 500	80386 25	80387 25	41	gf77 1.8.3A
SDX 1000	80386 20	80387 20	34	gf77 1.8.3A
SDX 2000	80386 25	80387 25	42	-/-
SDX 3000	80386 33	80387 33	66	-/-
SDX 3400	i486 25		133	gf77 1.8.3A f387x
SDX 3400	i486 25	W4167 25	96	gf77 1.8.2H 1167 (3)
Data MV/2000DC			17	
General MV/2500DC			31	f77 4.01 opt=full (46)
MV/4000		*no fpu*	6	f77 2.21
MV/4000		w/ fpu	13	
MV/4000DC			12	f77 2.30, DG/UX 2.01
MV/8000		*no fpu*	12	
MV/9500			55	f77 4.02 opt=3
MV/10000			57	
MV/20000	85ns		99	
MV/40000	50ns		246	f77 4.01 opt=3/full
AViiON 200	88100 16.67		148	ghf77 1.8.4 OLM (25)
AViiON 300	88100 20		173	ghf77 1.8.4 OLM
AViiON 310C	88100 20		180	ghf77 1.8.4 OLM
AViiON 532	88100 33		355	hf77 5.2 O3 lfast ... (25)
AViiON 5200	88100 25		231	ghf77 1.8.4 OLM
AViiON 4600	88100 33		308	16+16K (88200); epcf77 O123
AViiON 6225	88100 25		251	128+128K (88204); ghf77 1.8.5.5 OLM
Diab 1136	68040 33		247	D-F77 1.00a
-/- DS90/45	68040 33		264	64K; D-F77 1.00a
Digital micro Vax 1			3	Fortran v4
Equip- micro Vax 2	78032 20	78132 20	22	KA630; Fort v4, VMS
ment Vax 11/725		*no FPA*	1.4	Fortran v4, VMS
Corp. 11/730		*no FPA*	1.4	Fortran v4 (47)
-/-			6	Fortran v4
11/750		*no FPA*	5	Fortran v4 (47)
-/-			12	Fortran v4
11/780	200ns		27	Fortran v5.1-10 (47)
-/-			18	f77, Eunice 2.2 (47)

-/-			14	f77, Ultrix 2.1 (47)
11/785			35	Fortran v4
-/-			22	f77, Unity 5.2.3 (47)
-/-			23	f77, bsd 4.3 (47)
Vax Station 2000	78032 20	78132 20	21	Fortran v4
3100-30 & 40	90ns		62	Fortran v5.10
3100-38 & 48	60ns		87	Fortran v5.10
3100-76	REX520 28ns	DC523 28ns	168	Fortran v5.10
3400	78034 45ns			no cache
3500	78034 22		63	Fortran v4
-/-			41	f77, 64K, Ultrix 2.2 (47)
3800 & 3900	60ns		88	Fortran v4
4000 VLC	SOC 25		136	Fortran v5.6
4000/60	KA46 55		287	Fortran v5.6
4000/90	DC246 71.43		916	Fortran v5.6
4000/200	KA660 35ns		118	Fortran v5.3-500
4000/300	KA670 28ns		212	Fortran v5.3-500
4000/400	KA675 16ns		622	Fortran v5.7 & KAP v1.0
4000/500	KA680 14ns		839	Fortran v5.7 & KAP v1.0
4000/600	KA690 12ns		1049	Fortran v5.7 & KAP v1.0
6000/210	80ns		46	f77, Ultrix 2.2 (47)
-/-			70	VaxFortran, Ultrix 2.4 (47)
6000/220 & 6220	80ns		70	Fortran v4
6000/310	60ns		91	
6000/410	KA640 28ns		188	Fortran v5.0-1
6000/510	KA650 16ns		354	Fortran v5.0-1
6000/610	KA680 12ns		1029	Fortran v5.7 & KAP v1.0
7000/6x0	KA7AA 11ns		1098	Fortran v5.7 & KAP v1.0
8200	40MHz		24	Fortran v4
8250	50MHz		26	Fortran v2
8530			100	Fortran v4
8550	45ns		136	Fortran v4
8600	80ns	*no FPA*	26	Fortran v4 (47)
-/-			91	Fortran v4
8650	55ns		129	Fortran v4
8700 & 8800	45ns		135	Fortran v4
9000	16ns		1181	Fortran v5
-/-			751	f77 O, Ultrix 4.2 (47)
9000/210			1203	fort O, Ultrix 4.2
-/-			1016	Fortran-HPO-uv -v, Ultrix 4.2 (47)
APX 3000/300	21064 125(?)		1454	Fortran 3.4.1 /opt=4 (28)
-/- 3000/300X	21064 175			16+256K;
-/- 3000/400	21064 133		2184	-/-
-/- 3000/500	21064 150		2385	16+512K; -/-
Alpha Station 3000/600	21064 175		3712	16K+2M; f77 3.8 -O5 -fast
-/- Station 200 4/166	21064 166		3099	16+512K; f77 3.8 -O5 -fast
-/- Server 2100 4/275	21064 275		5970	f77 3.8 -O5 -fast
-/- Station 600 5/250	21164 250		9060	16+96K+2M; f77 3.7 -O4 -fast
-/- Station 600 5/266	21164 266		9164	16+96K+2M; f77 3.8 -O5 -fast
-/- Station 600 5/266	21164 266		10388	16+96K+2M; f77 T1.2 -O4 -fast
-/- Server 8400 5/300	21164 300		10349	16+96K+4M; f77 3.8 -O5 -fast
-/- 5/xxx	21164 333			16+96K+4M; f77 3.8 -O5 -fast
DEC Station 2100	R2000 12.5	R2010 12.5	175	f77 T2.0
Station 3100	R2000 16.67	R2010 16.67	247	f77 1.0 (1.31) O4 (10)
System 5000/200	R3000 25	R3010 25	441	f77 2.0 (2.02) O3

System	CPU	FPU	Value	Notes
System 5900	R3000A 40	R3010A 40	697	f77 O
System 5000/260	R4400 60		1597	
DEC 20/20			3	Fortran6, TOPS20 (47)
20/50	KL10		25	Fortran5
20/60			25	Fortran6
FoonLee F4			21	TOPS20, -> *36bits-precision* <-
Systems Concepts 30M	80ns	*no FP-30M*	59	Fortran10
-/-			50	TOPS-10
Dolphin System 100/125	88100 25		238	gf77 1.8.3 O2 (25)
-/- 300/320	88100 20		188	-/-
-/- 500/525E	88100 25		262	-/-
DTK Saturn SS 10	390Z50 33		1183	f77 1.4 O4 fast
Dynatech DCS-1/320	68030 33	68882 33	51	SVS 2.8
Edge 1	EdgeI 7.7		53	7.7MHz=130ns
Elxsi S/6400			96	64bits-precision
Encore APC-01	32032 15	32081 15	19	
APC-02	32032 15	W1164 15	31	
Multimax 310	32332 15	W1164 15	31	32081 and W1164/1165 all at 15MHz
Multimax 510	32532 30	32381 30	52	XPC (w/ W3164 ?)
Series 93	88100 25		260	f77 -q opt=time
Evans Sutherland ES-1			116	ES/IX
FPSystems 164			113	64bits-precision
264			396	
FPS 300	50ns		126	<= Stellar GS1000 (43)
Computing 350S			140	<= Stellar GS2000 (43)
500	30ns		349	<= Celerity 6000 (43)
500EA			365	(43)
500	B5000 67	Weitek 33	788	Sun's f77 1.4 fast (5)
Formation 4000/100			3.6	Fortran G1
4000/200			3.6	Fortran G1
Fujitsu M 380			675	F77 opt=3
VP 100	15ns scalar		706	7.5ns vector (33)
VP 200	14ns scalar		915	7ns vector (33)
VP 2400	3.2ns		3034	frt Of,p (37)
VP 2600	3.2ns		3590	
GEC 63			28	
GiGamachine	390Z50-50C xx		1098	f77 x.x O4
Gould SEL 32/27		*no fpu*	7	
32/27			18	fp
32/67			32	MPX
32/67			22	UTX 1.0
32/7780			18	no WCS
32/7780			19	WCS
32/87			87	WCS
32/8750			82	
32/8750		w/ macc	118	w/ shadow memory (45)
32/9750			63	UTX 1.0
Gould PN 6040	115ns		28	(45)
PN 6050	115ns		30	
PN 9050	115ns	w/ macc	92	64K
PS 2000	68xxx xx		.8	<= Convergent Miniframe
PS 3000	68xxx xx		.8	<= Convergent Megaframe
NP/1		no AA	60	(45)
NP/1	52ns	AA 26ns	207	Fort 1.0 ur
NP/2			519	

Goupil G50DX-33	80386 33	80387 33	61	f77 O n23 (2)
G60-25	i486 25		130	f77 O n23
G60-33	i486 33		183	f77 O n23
Harris 300			1.5	*-> 96bits-precision <- (Mar.1983)*
500			23	6K
700			18	no cache
800			41	6K
1000	75ns		89	
1200	75ns		120	
HCX-7			64	<= CCI Power 6/32 (InterSys)
Night Hawk 3800	68030 20	29C327 8	67	hf77 4.1 O1 (20)
Night Hawk 4400	88100 25		285	hf77 5.2 O3 ... (25)
Night Hawk 4800	88100 25		309	hf77 5.3 O3 lfast ...
Night Hawk 5800	88110 50		1150	hf77 6.3 O3 ...
Hewlett 1000/A700	HP16bits xx		7	F77
Packard 1000/A900	HP16bits xx		15	F77
9000/320	68020 16.67	68881 16.67	12	
9000/340	68030 16.67	68882 16.67	25	
9000/350	68020 20	68881 20	21	(9)
9000/360	68030 25	68882 25	37	
9000/370	68030 33	68882 33	47	
9000/370	68030 33	(Weitek)	68	
9000/375	68030 50	68882 50	81	f77 O3
9000/400S & T	68030 50	68882 50	79	f77 7.0 O3
9000/425S & T	68040 25		161	f77 7.0 O3 K
9000/425S	68040 25		189	f77 8.0 Wl a archive O3 K
9000/433	68040 33		210	f77 8.0 Wl a archive O3 K
9050-B	HP32 18		20	
9000/500	HP32 18		23	
9000/520	HP32 18		16	
9000/705	PA-1.1 35		795	f77 8.07 Wl a archive O3 OP3
9000/710	PA-1.1 50		1057	f77 8.05 Wl a archive O3 OP4
9000/712-60	PA7100LC 60		1330	f77 8.05 Wl a archive O3 OP4
9000/712-80i	PA7100LC 80		2037	f77 8.05 Wl a archive O3 OP4
9000/715-33	PA7100 33		1077	
9000/715-50	PA7100 50		1323	f77 8.05 Wl a archive O3 OP4
9000/715-100	PA7100 100		2424	f77 8.05 Wl a archive O3 OP4
9000/720	PA-1.1 50		1313	f77 8.05 Wl a archive O3 OP4
9000/730 & 750	PA-1.1 66.66		1760	f77 8.05 Wl a archive O3 OP4
9000/735	PA7100 99		3678	f77 9.0 Wl a archive OP3 O3
9000/735-125	PA7100 125		4179	f77 9.0 Wl a archive OP3 O3
9000/807S	PA-1.1 32	*no fpu*	6.3	f77 Wl a archive O
9000/807S	PA-1.1 32	2293A	653	f77 Wl a archive O
9000/817S	PA-1.1 48		961	f77 Wl a archive O
9000/808 & 815	HP-PA 16.67		62	65ns; f77 7.0 O
9000/822	HP-PA 25		109	f77 7.0 O
9000/825	HP-PA 12.5		55	80ns; f77 7.0 O
9000/832	HP-PA 30		161	66.7ns; f77 7.0 O
9000/835	HP-PA 16.67		227	66.7ns; f77 7.0 O
9000/837	PA-1.1 48		1072	f77 Wl a archive O
9000/840	HP-PA 8		53	
9000/842	HP-PA 28		546	
9000/845	HP-PA 30		285	33ns; f77 7.0 O
9000/850	HP-PA 13.7		206	73ns
9000/852	HP-PA 50		847	

Model				
9000/855	HP-PA 25		266	40ns
9000/860	HP-PA 27.5		270	f77 7.0 O
9000/870-100	HP-PA 50		904	20ns; f77 7.0 O
9000/877	PA-1.1 64		1631	f77 +DA1.1 Wl a archive O3
9000/887S	PA7100 96		3518	f77 9.0 Wl a archive OP DS1.1b DA1.1
9000/890-1	PA-1.1 60		989	f77 9.0 Wl a archive OP3 O3
9000/F10	PA-1.1 32		856	f77 9.0
9000/F20	PA-1.1 48		1337	64+64K; f77 9.0
9000/F30/H30	PA-1.1 48		1476	256+256K; f77 9.0
9000/H40	PA-1.1 64		1950	f77 9.0
9000/H50	PA7100 96		3518	f77 9.0
HighLevel Orion 1/05	C100 30		33	
Hardware Orion	prop.chip 8		4	AMD 2901 based
Hitachi M 280H			530	F77 opt=3; no IAP
S810/20	14ns		595	F77 opt=3; no HAP
HDS EX-50			958	F77 O3 K
-/- EX-60			1320	F77 O3 K
-/- EX-80	16.5ns		1518	F77 O3
-/- EX-??			2274	vsf 2.5.0 opt(3)
Hyundai WS 210	CY7C601 40		443	f77 1.4beta O4 fast (5)
ITRI-CCL St. M10	ITRI-CCL 40	W3171 40	449	f77 1.4 O4 fast (5)
IBM 360/91	60ns		65	Fort 4.H.ext opt=2; OS/MVT 21.7
370/158-1			21	Fort 4.H.ext opt=2
370/168-1.5	80ns $\approx$ 12MHz	HSMU	103	= 370/168-1 + 32K cache; F4.H.ext opt=4
370/168-3		HSMU	100	R_{78} **reference**; F4.H.ext opt=2
3031			26	Fort 4.H.ext opt=2
3032			89	Fort 4.H.ext opt=2 (31)
3032			88	Fort 4.H.ext opt=2
3033-U	57ns		170	F4.H.ext opt=2
3081-D			181	Fort 4.H.ext opt=2
3081-G			181	Fort 4.H.ext opt=2
3081-K			236	Fort 4.H.ext opt=2
3081-K			291	VSFortran 1.4 opt=3
3083-B			136	Fort 4.H.ext opt=2
3083-J			172	Fortran 4Hext opt=2
3083-J			232	VSFortran 1.3 opt=2
3084-Q			254	Fort 4.H.ext opt=2
3090-150	17.75ns		436	Fortran 4Hext opt=2
3090-150			331	VSFortran2 2.1.1 opt=3
3090-150			309	f77 O tr0, UTSV 1.1.2
3090-180S			959	O3, VM/CMS (31)
3090-180S			917	fvs XA f'opt(3)' t f, AIX/370 (31)
3090-180S			893	Fujitsu-f77 O3, UTS 2.1 (31)
3090-200	17.2ns		688	Fujitsu F77, opt=3
3090-200			709	VSFortran2 1.1.0 opt=3, scalar
3090-200			666	VPF, VSFortran2 1.1.0 opt=3
3090-200			847	VSFortran2 2.1.1 opt=3, scalar
3090-200			776	VPF, VSFortran2 2.1.1 opt=3
3090-600J			1005	fortran O2, AIX/370 (31)
4331-1			2	
4341-1			24	
4341-2			36	
4341-12			39	
4341gp2			43	FTNQ, TSS/370 3.0 (30)

4361-5			25	
4361-L5			34	VSFortran
4381-2			90	
9000-720			969	fvs optimize(3), novector (31)
ES 9021			928	fortvs2 opt(3), vector
9370-40	90ns		62	VSFortran
PC/RT 6150-25	Romp 5.88	*no fpu*	.3	170ns
PC/RT 6150-20	Romp 5.88	32081 10	6	(26)
PC/RT 6151-115	Romp 10	32081 10	7	
PC/RT 6151-115	Romp 10	68881 20	11	
PC/RT 6151-115	Romp 10	AFPA xx	32	f77 O f2
PC/RT 6151-115	Romp 10	AFPA xx	34	vsf O f2
PC/RT 6150-135	Romp 12.5	AFPA xx	37	f77 O f2
PC/RT 6150-135	Romp 12.5	AFPA xx	41	vsf O f2
PS/2 8570-121	80386 20	80387 20	28	vsf 1.1 O, AIX/PS/2 (2)
PS/2 Power Platform	i486 25		135	-/-
RS/6000-220	PowerRSC 33		526	xlf 2.3 O P Wp ea478
RS/6000-230	PowerRSC 45.5		759	xlf 2.3 O P Wp ea478
RS/6000-320	Power 20		596	xlf 2.1 O P Wp eaw
RS/6000-320H	2532 25		756	8+32K; xlf 2.1 (3005) O P Wp ewa
RS/6000-340	3332 33		1033	xlf O P Wp ewa
RS/6000-350	4132 41		1292	xlf O P Wp ewa
RS/6000-360	5032 50		1792	xlf 2.3 O P Wp ea78
RS/6000-370	6232 62.5		2217	xlf 2.3 O P Wp ea78
RS/6000-520	Power 20		558	xlf 1.0 O (27)
RS/6000-530	Power 25		715	xlf 1.0 O (27)
RS/6000-530H	3364 33		1019	xlf 2.1 (3005) O P Wp ewa
RS/6000-540	Power 30		852	xlf 1.0 O (27)
RS/6000-550	4164 41.67		1291	xlf 2.1 (3005) O P Wp ewa
RS/6000-560	5064 50		1611	8+64K; xlf O P Wp ewa
RS/6000-580	6264 62		2323	32+64K; xlf 2.3 O P Wp ewa
RS/6000-930	Power 25		774	xlf 2.1 (3005) O P Wp ewa
RS/6000-970	5064 50		1728	32+64K; xlf 2.1 O P Wp ewa
PowerStation 250	PPC601 66		1437	xlf 2.2 O3 Pk
PowerStation 390	Power2 66.67		3908	xlf 3.1 O3 pwrx
PowerStation 590	Power2 66.5		3484	xlf 2.2 O3 Pv
PowerStation 591	Power2 77			32+256K; (77 MHz = 13 ns)
40 N	PPC601 50		1126	f77 3.1 ppc O3 (27)
40 P	PPC601 66			32+256K; f77 3.1 ppc O3 (27)
43 P	PPC604 133		3820	32+512K; f77 3.1 ppc O3 (27)
ICL 2966			24	VME
3980	25ns		185	VME
IN2 IN 6130	R2000 16.67	R2010 16.67	280	f77 O4 (10)
Inter- IN 6230	R3000 25	R3010 25	419	f77 O4
Technique IN 6600	R3000 25	R3010 25	451	f77 O4
Intel SYP 310	8086 8	8087 8	4.3	Intel Fortran, iRmxII(16bits)
SYP 310	80286 8	80287 8	4.5	-/-
SYP 301	80386 16	80287 10	7.5	LPI fortran, Xenix
SYP 301	80386 16	80387 16	20	gf77
SYS 320	80386 16	80287 8	5.9	
SYS 320	80386 16	80387 16	23	
SYS 320	80386 16	W1167 16	52	gf77
SYP 302	80386 25	80387 25	35	ATT f77, Microport
SYP 302	80386 25	80387 25	43	gf77, IX
SYP 302	80386 25	W3167 25	72	-/-

386.133	80386 33	80387 33	39	iRmxII, Intel Fortran/286
386.133	80386 33	80387 33	67	gf77, IX
486.125	i486 25		75	iRmxII, Intel Fortran/286
486.125	i486 25		126	gf77, IX
	i486DX2 50		300	if77 v0.2 O4 (2)
	i486DX2 66		403	if77 v0.2 O4 (2)
Pentium/60	Pentium 60		1187	Intel f77 beta O tp p5 w
Pentium/66	Pentium 66		1284	Intel f77 beta O tp p5 w
Pentium 735/90	Pentium 90		1875	Intel f77 1.4.3
Pentium 815/100	Pentium 100		2066	Intel f77 1.4.3
Star 860	80860 33.3		407	gf77 1.8.5
iPsc/860	80860 40		402	if77 O4, NX 3.x
Paragon	i860XP 50		735	PGFTN 4.1.1 (4)
Intergraph C145	C100 25		32	gf77 1.8.4.2i
InterView 32C	C100 30		38	gf77 1.8.4.2i (24)
InterPro C245	C100 33		40	gf77 1.8.4.2i
InterAct C370	C300 40		72	gf77 1.8.4.2i
Intergraph 2430 & 6430	C411 40	C421 40	584	af77 6.3.1.50 O3
Intergraph 2700	C411 58	C421 58	715	af77 1.57 O3
Itel AS 3.5			37	
AS 6			110	
Kaypro 386	80386 16		.23	mf77 n0 & IX's emul.rel1 (2)
KSR KSR-1		*no fpu*	8.2	
MasPar MP-1		*no fpu*	91	DECmpp Fort 1.1.0 -Omin
-/- (DEC Mips front-end)		*no fpu (?)*	201	DECmpp Fort 1.1.0 -scalar
MassComp 6x00	68030 25	68882 25	35	gf77
Mercury MC 3200		W3132 10		-> *32bits-precision* <- (22)
MC 6400		W3164 10	160	af77 OLM (22)
MIPS M/500	R2000 8	W1164 8	35	R2360 board (10)
M/500	R2000 8	R2010 8	100	
M/800	R2000 12.5	R2010 12.5	190	f77 1.21
M/1000	R2000 15	R2010 15	228	(10)
M/120-5	R2000 16.67	R2010 16.67	279	f77 2.0beta O3
M/2000	R3000 25	R3010 25	463	f77 1.31 O4
RC 2030	R2000 16.67	R2010 16.67	238	f77 2.0beta O3
RC 3230 Magnum 3000	R3000 25	R3010 25	439	f77 2.10 O3
RC 6280	R6000 60	R6010 60	879	f77 2.0 O3
Leris LRS-3025-16	R3000 25	R3010 25	437	
Modular 11/45		EAU3516	14	(34)
Computer 11/75			20	F66/FR5 (34)
32/85			27	(34)
Motorola 8864SP	88100 20		168	32+32K, Absoft 2.0a4
8864SP	88100 20		211	64+64K, gf77 1.8.5
8864SP	88100 25		264	64+64K, gf77 1.8.5
8612	88100 33		318	16+16K, gf77 1.8.5
Multiflow Trace 14/200	125ns		386	125ns = 8MHz
Trace 14/300	130ns		605	130ns = 7.7MHz; fort 2.2 opt
NAS AS 8040			130	
AS 9060			698	VSFortran2 2.1.1, scalar (33)
AS 9060			535	VSFortran2 + VAST + IAP
AS 9080			438	Fortran4.H.ext level 2.3
NatSemi / ICM 16/32	32016 10	32081 10	6	(52)
NCR Tower 1632	68000 10		.55	SVS-fortran v2.2
Tower XP	68010 10		.75	SVS-fortran v2.2
NEC SX-2	6ns		1435	Fortran/SX, SX/OS (38)

Model	CPU	FPU	Perf	Notes
SX/3-12 & 14	2.9ns		3192	(Dec.1990) (38)
Next	68040 25		206	Absoft 3.1 O N40
-/-	68040 33		263	D-F77 1.00a (19)
Nixdorf Targon 35	prop.chip xx	*no fpu*	8	<= Pyramid 9x0
Targon 35	prop.chip xx		23	
Targon 31/10	68020 20	68881 20	14	TOS 3.3.02, f77 O
Targon 31/5	68030 20	68882 20	24	TOS 3.3.01, f77 O (16)
Targon 31/15-45	68030 33	68882 33	37	TOS 4.0.01, f77 O(GPE) (16)
Norsk ND 560			45	WCS
Data 530CX			13	-/-
550CX			31	-/-
560CX			47	-/-
570CX	70ns		80	WCS
Uniline 88	88100 20		188	gf77 1.8.3 O2 (25)
Uniline 88 25-4s	88100 25		228	gf77 OLM
Olivetti CP 486	i486 25		140	Fort X/OS 5.05 (gf77 1.8.4) f387x (2)
CP 486	i486 25	W4167 25	130	mf77 1.4e n4 (3)
LSX 3020	68020 16.67	68881 16.67	17	gf77 1.8.2.e
LSX 3035	68020 33	68881 33	38	Fort X/OS 4.04 (gf77 1.8.3A) OLM (15)
LSX 3070	EdgeI 7.7		70	Fortran-EDGE1 3.2 O
(ATT) 3B15-200	WE32100 14	WE32106 14	8.5	
(ATT) 3B2-600	WE32200 18	WE32206 18	14	f77-XLA+ X/OS 1.0 (gf77) O (14)
Opus 220 PM	32332 15	32081 15	15	
350 PM	C100 30		34	gf77
532	32032 10	32081 10	9	GeNiX f77 (53)
Paracom TPM-4 Speed	T800 20		63	Helios f77, Helios 1.1beta
Parallel XR 300	68020 16.67		2.0	
Plexus P/35	68000 12.5		.33	
Computers P/60	68000 12.5	Sky FFPoint	.95	
Prime 2250			6	(44)
250-2			6	
350			4	
400			6	
550-1			6	
550-2			13	
650			11	
750			20	
850			20	biprocessor
4450			78	
9950			46	F77
EXL 316	80386 16	80387 16	7.5	SVS-fortran 2.7
EXL 320	80386 20	80387 20	36	
EXL 320	80386 25	80387 25	44	
EXL 1227	80386 16	80387 16	22	<= Sequent S27; ATS f77
EXL 6330	R3000 25	R3010 25	445	
Pyramid 9x0	prop.chip 8		5.2	125ns
9810	prop.chip 10		55	100ns (12)
MiServer			155	f77 OG
Ridge 32	prop.chip 8	*no fpu*	13	ROS 1.0 (13)
3200	prop.chip 12		26	= Bull SPS9; ROS 3.3
Ryad EC 1022			1.4	Fortran G; serie 2
1036			7	-/-; serie 2M
1045			21	Fortran OE opt=2, OS SVS
1046			27	Fortran SE; serie 2M (29)
1060	150ns		31	-/-; serie 2

Model	CPU	FPU	Perf	Notes
1061			62	Fortran OE opt=2 (29)
1130			30	Fortran OE opt=2 (29)
Sequent S27	80386 16	80387 16	23	gf77 O
Symmetry S27	80386 16	W1167 16	47	gf77 O
Siemens PC-MX-2	32016 10	32081 10	6.2	
X/20	32332 15	32081 15	15	
MX 300-20	32032 15	32081 15	15	
MX 300-30	32532 25	32381 25	38	
MX 300i	i486 25		122	gf77 1.8.3A O
MX 500-20	32032 10	32081 10	7	
RM 200-120	R4600 100		915	16+0K; f77 1.00 -O3
RM 400-330	R4400SC 100		930	16K+1M; f77 1.00 -O3
RM 400-530	R4400SC 150		1671	16K+4M; f77 1.00 -O3
RM 600-15/25	R3000 37	R3010 37		
WX 200	80386 33		1.7	mf77 n23 & SCO's fp emulation
C 30 & WS-2000	32016 10	32081 10	6.8	Sinix & BS2000
PC 2000			5	BS2000
7530-D			10	BS2000
7550-D			20	BS2000
7551-10			19	BS2000
7570-G			164	Scientific Instruction Unit ?
7580-E			153	Scientific Instruction Unit ?
7760			26	7760 = 7750 + arithmetic proc.
7880			212	OS/MVS 3.8
7890-S			759	<= Facom M380; Fujitsu F77
VP 400-EX	14ns scalar		770	7ns vector; F77/VP V10L30
Silicon Iris 1400	68020 16.67		2.4	
Graphics -/-	68020 16.67	W1064 16.67	31	
Iris 2400	68020 16.67	W1064 16.67	31	
Iris 3130	68020 16.67		2.3	
-/-	68020 16.67	W1064 16.67	31	
4D/25	R3000 20	R3010 20	291	f77 O4
4D/35	R3000 36	R3010 36	642	IP12; f77 2.0 O3
4D/50	R2000A 8	R2010 8	72	IP4; (11)
4D/70	R2000 12.5	R2010 12.5	170	(11)
4D/220	Rx000 xx	Rx010 xx		IP7
4D/240S	R3000 25	R3010 25	422	
4D/280	R3000 25	R3010 25	443	f77 O4
4D/320VGX	R3000 33	R3010 33	534	f77 O4
Indigo	R3000 33	R3010 33	554	f77 O4
4D/420	R3000 40	R3010 40	670	IP7; f77 O4
Indy	R4000PC 50/100		801	16K; f77 4.0beta O3 ...
Crimson	R4000SC 50/100		1329	32K+1M; f77 3.1 O3 ...
Challenge L	R4400 50/100		1407	f77 3.15
Indigo2	R4400 75/150		1950	32K+1M; f77 4.0beta O3 ...
-/-	R4400 175	R4010 175		IP22; 32K+1M
-/-	R4400 200	R4010 200	2463	IP22, 32K+1M; f77 6.1 mips1 O2
-/-	R4600 100	R4610 100		IP22; 32K
Impact	R4400 250	R4010 250	3030	IP22, 32K+2M; f77 3.4.1 ...
Power Challenge	R8000 75	R8010 75	2879	IP21; 32K+4M; f77 O3 mips4
-/-	R8000 90	R8010 90	3724	IP21; 32K+4M; f77 O4 mips4
Onyx	R10000 190	R10010 190	9106	IP25; 64K+1M; f77 6.2 O3 -64
-/-	R10000 190	R10010 190	9496	IP25; 64K+1M; f90 x.y O3 -64
Solair 2	LSI64811 40	LSI64814 40	441	f77 1.4 O4 fast (5)
Solbourne Series 4	LSI64801 16.67	W1164 16.67	78	(5)

Series 5	CY7C601 33.33	W3171 33.33	389	128K; f77 1.4 O4 fast
Series 5/E	CY7C601 40.1	TI602A 40.1	311	f77 1.2 O4 libm.il ...
-/- 5E/702	CY7C601 40	W3171 40	471	128K; f77 1.4 O4 fast
-/- 6/901	390Z50 33.33		1367	apogee 0.9 O w Bstatic
S 4000	MN10501 33		271	8K; f77 1.4 O4 fast
S 4000DX	MN10501 36		434	8+256K; f77 1.4 O4 fast
Sony News 1750	68030 25	68882 25	32	bsd f77 2.0 O (18)
News 1750	68030 25	68882 25	34	gf77 1.8.5beta
News 1850	68030 25	68882 25	40	Nkr ftn 1.7.2 O
News 3260	R3000 20	R3010 20	**261**	cc O3 (10)
News 3860	R3000 20	R3010 20	358	
Sord M680 UX	68020 16.00		9.4	
Sperry 1190	30ns		220	(36)
-/-			200	vector & ISP (33)
-/-			238	scalar
Star 910/VP-300	CY7C601 33	CY7C602 33	400	Sun f77 1.4 fast
Sun m/120 2.0CPU	68010 10	Sky FFPoint	3	(6)
Micro- m/150 1.5CPU	68010 10		.69	
systems m/160 2.0CPU	68010 10	Sky FFPoint	3	
m/170 2.0CPU	68010 10	Sky FFPoint	3	
2/xx	68010 10		.87	(bsd) f77 1.1
2/xx	68010 10	Sky FFPoint	3.5	(bsd) f77 1.1
3/50	68020 15		1.8	
3/50	68020 15	68881 12.5	14.5	(bsd) f77 Rev3.2
3/60	68020 20		3.3	(bsd) f77 Rev3.2
3/60	68020 20	68881 20	22	(bsd) f77 Rev3.2
3/80	68030 20		3	(bsd) f77 Rev3.2
3/80	68030 20	68882 20	25	(bsd) f77 Rev3.2
3/110	68020 16.67		2.7	
3/110	68020 16.67	68881 16.67	17	
3/110	68020 16.67	W1164 16.67	36	
Matra MS 3/160	68020 16.67		2.7	
Matra MS 3/160	68020 16.67	68881 12.5	14	
Matra MS 3/160	68020 16.67	W1164 16.67	35	
3/260	68020 25		5	
3/260	68020 25	68881 20	22	
3/260	68020 25	W1164 16.67	62	f77 1.3
3/470	68030 33	68882 33	56	f77 1.3
3/470	68030 33	W1164 16.67	75	f77 1.1; FPA
3/470	68030 33	TI8847 16.67	92	f77 1.1; FPA+
386 i150	80386 20	80387 20	25	f77 1.1 O4 (2)
386 i150	Am386 20	80387 20	25	f77 1.1 O4
386 i150	80386 20	3C87 20	28	f77 1.1 O4
386 i150	80386 20	Cx83D87 20	29	f77 1.1 O4
386 i150	80386 20	US83C87 20	29	f77 1.1 O4
386 i150	Am386 20	3C87 20	28	f77 1.1 O4
386 i250	80386 25	80387 25	28	f77 1.1
386 i250	80386 25	W3167 25	41	f77 1.3
486 i	i486 25		143	
4/110	MB86901 14.275	*no fpu*	.43	70ns; f77 1.4 fast (5)
4/110	MB86901 14.275	W1164 14.275	74	f77 1.1 O3
4/110	MB86901 14.275	TI8847 14.275	164	FPU2; f77 1.4 fast
4/260	MB86901 16.67	*no fpu*	.57	60ns; f77 1.4 fast
4/260	MB86901 16.67	W1164 16.67	95	
4/260	MB86901 16.67	TI8847 16.67	167	FPU2; f77 1.3

4/15 Classix & LX	390S10 50		443	Apogee 0.82
4/20 SLC	LSI64801 20	*no fpu*	.6	f77 1.4 O4 fast
4/20	LSI64801 20	W3172 20	103	f77 1.2
4/25 ELC	MB86903 33	*no fpu*	1.0	f77 1.4 O4 fast
4/25	MB86903 33		364	f77 1.4 O4 fast
4/40 IPC	LSI64801 25	*no fpu*	.72	f77 1.4 O4 fast
4/40	LSI64801 25	W3172 25	209	f77 1.4beta O4 fast
4/50 IPX	W8601 40		422	f77 1.4 O4 fast
4/50	MB86903 40	*no fpu*	1.3	f77 1.4 O4 fast
4/50	MB86903 40		417	f77 1.4 O4 fast
4/60 SparcStation I	LSI64801 20	W3170 20	119	f77 1.2
4/60	CY7C601 20	TI8847 20	165	f77 1.3
4/65 SparcStation I+	LSI64801 25	W3170 25	158	f77 1.3 O3 fast
4/75 SparcStation II	CY7C601 40	*no fpu*	1.3	f77 1.4 O4 fast
4/75	CY7C601 40	TI602A 40	473	f77 1.4 O4 fast
4/75 & Sp-Power uP	Weitek 80		731	f77 1.4 O4 fast
4/370	CY7C601 25	TI8847 25	313	f77 1.4beta O4 fast
4/490	CY7C601 33	*no fpu*	1.1	f77 1.4beta O4 fast
4/490	CY7C601 33	TI8847 33	449	f77 1.4 O4 fast
670 MP	CY7C601 40	CY7C602 40	493	f77 1.4 O4 fast
4 m 110	MB86904 110		1806	24+0K; Apogee 2.3 -O5 cg92 xt=ss10/41
5 m 80	MB86904 80		1378	Apogee 2.3 -O4 cg92 xt=ss10/41
5 m 110	MB86904 110		1806	Apogee 2.3 -O5 cg92 xt=ss10/41
10 m 20	390Z50 33		945	f77 1.4 O4 fast
10 m 30	390Z50 36		1054	f77 2.0 O4 fast
10 m 40	390Z50 40		1311	36+0K; f77 2.0 O4 fast
10 m 40 (no SC)	390Z50 40		1908	R_{96} **reference**; f77 3.0 O4 fast
10 m 51	390Z50 50		1740	f77 2.0 O4 fast
20 m 612	390Z55 60		2992	Apogee 2.3 -O4 cg92 xt=ss10/41
20 m 71	390Z55 75			36K+1M; Apogee 2.3 -O4 cg92 xt=ss10/41
1000	390Z55 50		1992	Apogee 2.3 -O3 cg92 xt=ss10/41
1000E-85	390Z55 85		3490	Apogee 2.3 -O4 cg92 xt=ss10/41
20 HS 11	RT625 100		3600	Apogee 2.3 -O3 cg92
20 HS 22	RT625 125		4498	Apogee 2.3 -O3 cg92
20 HS 151	RT626 150		5823	8+512K; Apogee 2.3 -O3 cg92
Ultra 1 m 140	UlSp 143		5353	32+512K; Apogee 2.3 -O3 cg92
Ultra 1 m 170	UlSp 167		6191	32+512K; Apogee 2.3 -O3 cg92
Ultra 2 m 2200	UlSp 200		7392	32K+1M; Apogee 2.3 -O3 cg92
Symbolics 3600		*no fpa*	6	(51)
3620		*no fpa*	17	Fortran 6.27
3620		W1164 16.67	25	
3650		*no fpa*	7	
3670		*no fpa*	6	
Mac Ivory	10MHz	*no fpa*	7.5	
Tadpole SparcBook		W3171 25	276	f77 1.4 O4 fast
SparcBook 2		W3171 40	430	f77 1.4 O4 fast
Tandem S200	R2000 xx	R2010 xx	256	
Integrity S300	R3000 25	R3010 25	430	
Tektronik 6130	32016 10	32081 10	6	
4317	68020 16.67	68881 16.67	17	gf77 1.8.3A
XD 88/30	88100 20		199	gf77 1.8.3A O1 (25)
Telefile T85			12	Fortran4, TCP-V/LVM (48)
Telmat STE 30	68020 20	68881 20	15	bsd's f77
T 2000/STE-30	68020 25	68882 25	27	bsd's f77 O

T 3000	68020 25	68882 25	28	bsd's f77 O
T 4000	68020 25	68882 25	28	bsd's f77 O
STX 40	68040 33		**222**	f2c+gcc
STX 40	68040 40		**265**	f2c+gcc
TR 5000	88100 25		238	gf77 1.8.3A O2 (25)
TR 5000	88100 33		303	gf77 1.8.3A O2 (25)
TR 7156-64	88110 50		1419	epf77 2.6.6 O123
T-Node	T800 20		68	3L f77 2.1
T-Node	T800 25		77	3L f77 2.1
Concerto	Sparc xx	i860 40	460	f77apx OLMA (gf77 1.8.5) (4)
Texas BS1500	68020 16.67	68881 16.67	19	
Unisys S2000 TWS	CY7C601 33.33	W3171 33.33	387	f77 1.4 O4 fast
5000/50	68020 16.67	68881 16.67	17	
6000/30	80386 16	80387 16	26	epcf77 2.4
6000/50	80386 20	80387 20	30	epcf77 2.4
6000/55-B	80386 33	80387 33	64	SVS fortran 2.7
7000/40	prop.chip 10		49	<= CCI Power 6/32
Unixsys NX 32VX	prop.chip xx		37	
NX 6T	32016 8	32081 8	5	
Videoton VT3220	68030 33	68882 33	(!)	incorrect result
WhiteChapel Hi Tech 10	R2000 16.67	R2010 16.67	212	(10)
MG1	32016 8	32081 8	4	
Wicat System 200	68000 8		.4	
YARC = **Y**et **A**nother	29000 25		34	TopExpress v1.01 O i
Ruddy **C**oprocessor	29000 25	29027 25	82	TopExpress v1.01
Zenith NoteBook	DX4 25/75		**192**	gcc 2.7.0 -O6

- R values are given :
    - with MicroSoft fortran v3.31 (1985) 8087.lib if **numerical data processor** present and MicroSoft fortran v3.20 (1985), altmath.lib if no **floating point unit** present, for Dos16 runs ;
    - with any best value for all Dos32 and/or Win32 runs ;
    - in **bold** value when coming (thru f2c) from the C source .

1. Floating point computation times with and without floating point units :

- With numerical data processors (or floating point units) :
- **Software 80x87 emulations** = third party floating point emulation softwares :
    - (0) *EMUL87* v1.01B (1988 ?) - Floating Point Emulator by Martin Weigel ;
    - (1) *EM87* v1.3 2/10/89 Ron Kimball ;
    - (2) *Emulator i87*, (c) C 2 V, 1992 ;
    - (3) *Soft87* SEARCHER INTERNATIONAL 80x87 software emulator, v2.6, May 1990 ;
    - (4) *Franke.387* Coprocessor Emulation v2.4, 1990. Operational **only** on i386SX or plus .

- Without numerical data processor = compiler's floating point emulation .

- Through the operating system, eg. Win32 or FX!32 ...

WITH fpu compiler version	Prospero f66 2.144	f77 1.241	MicroSoft 3.31	4.0	5.0	IBM IBM RM Pro. 1.0	F/2 1.0	Far. 2.11	Lahey 2.04	2.22	3.00	Digi. Res. 4.1
ref.time = DAT35												
Compaq 8086 (4.77MHz)			6216	5831	xxxx	abend	xxx	3447				
-/- (7.16MHz)			3195	2913	xxxx	abend	xxx	1909				
-/- KR1810WM86 (4.77)	11214	4701	6188	xxxx	xxxx	abend	xxx	3423	3972	4068	3951	5524
-/- KR1810WM86 (7.16)			3200	xxxx	xxxx	abend	xxx	1912	xxxx	xxxx	2166	
-/- V30 (4.77MHz)	10311	4450	5826	5427	xxxx	abend	xxx	3322	3860	3961	xxxx	5044
-/- V30 (7.16MHz)	5114	2380	2952	2688	xxxx	abend	xxx	1824	xxxx	2142	2042	2747
Amstrad (9.54MHz)	3956	1835	2232	xxxx	xxxx	xxxx	1412	1383	xxxx	xxxx	1565	2180
IBM PC/XT	11333	4714				abend	4229	3457	4040	4045	3979	5497
-/- & V20	10443	4456	5705	5478	6437	abend	xxxx	3362	xxxx	3918	3870	5027
Olivetti M24 (8MHz ?)	xxxx	1841	2312	xxxx	xxxx	xxxx	xxxx	1377	xxxx	xxxx	1566	2212
Zenith 181 (4.77MHz)	11611	4825	6544	6182	xxxx				4556	4255	xxxx	
Zenith 181 (7.16MHz)	7836	3165	4464	4247	xxxx				xxxx	2839	xxxx	3732
Compaq 286/6	6477	4047	4208	4123	xxxx	3867	xxxx	3308	3950	3688	xxxx	4541
-/- + Am287	6449	4028	4294	4131	4725	3845	3669	3288	3933	3660	3650	4554
-/- + 287XL	4807	2427	3142	2990	xxxx	2287	1847	1901	2292	2232	2148	2922
-/- + 2C87	3860	2005	3221	xxxx	xxxx	xxxx	xxxx	1797	2159	2095	2015	2347
-/- + 82S87	4540	2188				xxxx	xxxx	1669	2067	2003	1953	2589
Compaq 286/8	5571	3585	3619	3448	xxxx	3480	xxxx	2964	3490	3238	xxxx	3984
-/- + Am287	5554	3574	3634	3464	xxxx	3472	xxxx	2952	3478	3253	3214	4002
-/- + 287XL	3913	2096	2549	2506	xxxx	2003	1606	1649	1991	1904	1841	2496
-/- + 2C87	3506	1729	2345	xxxx	2317	1589	3100	1334	1614	1567	1500	2043
-/- + 82S87	3383	1636	2289	xxxx	2271	1473	1927	1254	xxxx	xxxx	1464	1528
Compaq 286/12	3421	2185	2290	2204	2520	2092	2075	1785	2131	1984	1974	2463
-/- + Am287	3424	2186	2295	xxxx	2523	2095	4219	1782	xxxx	xxxx	1981	2466
-/- + 287XL	2718	1514	1795	1737	1891	1490	1555	1209	1463	1372	1347	1789
-/- + 2C87	2641	1416	1803	1703	1791	1331	1077	1099	1345	1320	1233	1669
-/- + 82S87	2538	1342	1734	xxxx	1741	xxxx	1076	1032	xxxx	xxxx	1195	1569
Compaq SLT/286	3969	1419	1744	1727	xxxx	1357	xxxx	1116	1368	1303	1266	1661
Access System	xxxx	1872	1956	xxxx	xxxx	xxxx	xxxx	1515	xxxx	xxxx	1680	2123
-/- + 2C87	xxxx	1245	1598	xxxx	xxxx	xxx	xxxx	968	xxxx	xxxx	1067	1479
IBM AT-3			3249	xxxx	xxxx	2890	xxxx	2477				
IBM AT-3 + 287/10.67			2560	xxxx	xxxx	2092	xxxx	1801				

(...continued...)					
MicroWay Turbo	xxxx 2053	2819 xxxx xxxx	xxxx xxxx 1269	xxxx xxxx 1831	2493
SUN IPC (8MHz ?)		3060 2360 xxxx	abend xxx 1879	2257 xxxx xxxx	
Donatec 386SX/16 + 387SX	2542 921	1567 1431 1549	xxx 860 707	836 848 823	1095
-/- + 3C87SX	2505 866	1559 1436 1500	xxx 814 658	782 800 773	1036
-/- + 487SLX	2442 809	1530 1411 1450	xxx 753 605	732 756 727	961
Compaq 386-s/16 + 387SX	1647 682	1051 943 1053	648 708 525	634 616 593	811
-/- + 3C87SX	1596 621	1019 949 995	552 xxx 476	570 565 538	750
-/- + 487SLX	1530 556	988 907 948	487 xxx 423	512 505 490	664
-/- + 83S87	1552 578	995 912 964	506 xxx 442	528 528 505	687
386SX/16 + US83S87	1667 621	1183 xxx xxx	xxx 741 470	xxx xxx 542	715
Compaq 386-s/20	1179 501	754 687 761	496 423 407	471 463 442	605
ADD-X 325SX + 3C87SX	907 359	586 xxx 566	346 375 284	330 325 313	437
-/- + 83S87	881 337	556 xxx 548	xxx 247 264	308 305 294	394
Amstrad 7386SX + 387SX	1115 455	674 627 687	xxx xxx 362	419 402 398	535
-/- + 3C87SX (25MHz)	1076 422	663 620 649	xxx xxx 320	379 365 364	500
-/- + 487SLX	1041 380	**698** xxx 642	xxx xxx 284	338 342 329	453
Compaq 386/16 + 287/8	2747 1795	1841 xxxx 2004	1770 1582 1467	1821 1721 1658	1968
-/- + 287XL	2130 1243	1334 xxxx 1467	1266 2452 986	xxxx xxxx 1076	1420
-/- + 2C87	1957 1043	1262 1150 1295	xxx xxx 801	975 904 881	1167
-/- + 82S87	5734 3794	**ab.** xxxx 3726	xxxx xxxx 3721	xxxx xxxx 3509	5164
-/- Am386 + 287		2844 xxxx xxxx	xxxx xxxx 2394	xxxx xxxx 2679	3179
-/- Am386 + Am287		2843 xxxx xxxx	xxxx xxxx 2394	xxxx xxxx 2675	3176
-/- Am386 + 287XL	xxxx 1209	1343 xxxx 1467	xxx 1293 982	xxxx xxxx 1070	1419
-/- Am386 + 2C87	xxxx 1137	1333 xxxx xxxx	xxx xxx 881	xxx xxx 972	1311
-/- + 387	1506 616	935 856 925	627 933 507	573 576 536	764
-/- + 387DX	1456 548	911 833 xxx	563 464 454	503 511 473	683
-/- + 3C87	1455 559	998 831 871	xxx xxx 434	504 495 474	664
-/- + XC87DLX2	1396 496	885 810 833	xxx 620 390	454 450 435	604
-/- + 83D87	1416 531	889 811 838	487 426 412	471 482 449	649
-/- + Cx387+	1422 531	883 801 853	xxx xxx 426	481 471 461	627
-/- + 38700	1424 518	891 815 xxx	491 422 416	469 484 449	627
-/- 38600 + 38700	1468 547	962 877 904	500 659 422	488 506 478	659
Compaq 386/20	1106 454	854 xxx xxx	449 xxx 385	438 428 402	571
-/- + 3C87	1066 407	835 xxx xxx	xxx xxx 337	381 380 357	520
-/- + 83D87	1036 379	819 xxx xxx	xxx xxx 309	xxx 358 335	
-/- + EMC87	1022 377	821 xxx xxx	365 271 306	348 349 331	472
-/- + US83C87	1044 385	838 xxx xxx	xxx xxx 324	366 368 347	
Compaq 386/25 + 287/10	xxxx 1919	1875 xxxx xxxx	xxxx xxxx 1595	xxxx xxxx 1776	2104
-/- + 387	877 363	536 498 xxx	403 281 309	345 335 322	452
-/- + 387DX	xxx 320	541 xxx xxx	xxx xxx 278	xxx xxx 283	402
-/- + 3C87	833 321	622 476 497	326 xxx 261	297 290 278	397
-/- + 4C87DLC	841 327	661 482 506	xxx xxx 270	302 294 286	411
-/- + XC87DLX2	795 283	527 465 474	xxx xxx 233	267 263 254	361
-/- + 83D87	828 303	569 477 486	295 576 249	281 289 263	378
-/- + Cx387+	819 307	528 xxx xxx	xxx xxx 253	283 277 271	377
-/- + 38700	816 302	524 479 491	298 256 251	280 288 264	371
-/- + US83C87	821 307	538 474 494	xxx xxx 255	292 285 276	379
-/- 38600 + 387	797 348	526 xxx xxx	xxx 410 281	xxx xxx 302	424
-/- 38600 + 3C87	760 306	586 464 484	xxx xxx 243	281 273 262	367
-/- 38600 + 4C87DLC	762 310	512 xxx 470	xxx xxx 248	281 276 266	377
-/- 38600 + XC87DLX2	**2052** 319	609 518 526	xxx 398 256	291 283 274	396
-/- 38600 + 83D87	761 312	518 493 513	xxx xxx 252	290 281 274	380
-/- 38600 + Cx387+	819 307	526 646 xxx	xxx xxx 253	283 278 270	377
-/- 38600 + 38700	772 322	520 xxx 515	xxx 258 265	297 292 280	384
-/- 38600 + US83C87	762 312	523 476 495	xxx xxx 251	292 287 275	378
-/- Ti486DLC + 387DX	711 323	447 xxx 445	xxx xxx 271	306 294 285	
-/- DLC + 3C87	670 282	466 xxx 404	xxx xxx 223	258 251 241	
-/- DLC + 4C87DLC	671 285	430 386 410	xxx 321 229	260 254 247	347
-/- DLC + XC87DLX2	633 248	xxx xxx 375	xxx xxx 195	228 224 217	
-/- DLC + EMC87	649 264	422 370 390	xxx xxx 209	240 235 229	313
-/- DLC + Cx387+	653 268	424 xxx 396	xxx xxx 213	245 240 234	

(...continued...)

-/- DLC + 38700	650 264	421 371 393	xxx xxx 212	242 238 231	311
-/- DLC + US83C87	653 267	428 377 395	xxx xxx 214	250 244 237	317
-/- Cx486DLC + Cx487DLC	588 256	513 xxx 365	xxx 479 208	xxx xxx 227	322
-/- Cx486DRx^2 (1K) + 4C87DLC	434 210	364 258 284	xxx xxx 177	193 188 186	256
-/- DRx^2 (0K) + XC87DLX2	512 192	352 298 299	xxx 137 153	174 185 168	243
-/- DRx^2 (1K) + XC87DLX2	389 170	285 246 244	xxx 130 142	154 164 150	220
-/- DRx^2 (0K) + EMC87	533 209	339 xxx 290	xxx xxx 168	188 187 183	244
-/- DRx^2 (1K) + EMC87	411 187	297 262 263	183 301 157	169 167 166	224
-/- DRx^2 (0K) + 38700	533 209	342 288 316	xxx 337 171	190 188 183	241
-/- DRx^2 (1K) + 38700	409 187	xxx 251 260	185 xxx 159	171 180 167	231
Compaq 386/33L + 387	620 237	382 351 365	xxx 182 203	221 215 208	289
-/- + 3C87	615 238	389 xxx xxx	xxx xxx 191	218 213 205	286
-/- + 3C87 + EMC87	613 238	xxx 353 374	xxx 474 192	218 213 206	203
-/- + 4C87DLC	619 242	383 357 377	xxx xxx 199	223 216 210	296
-/- + 83D87	xxx 221		xxx xxx 181	xxx xxx 192	283
-/- + EMC87	602 224	374 341 361	xxx xxx 182	207 201 197	268
-/- + Cx387$^+$	606 228	376 345 366	xxx xxx 186	210 204 200	273
-/- + CT38700	603 224	374 344 366	xxx xxx 185	208 203 198	266
-/- + US83C87	608 228	384 353 369	xxx xxx 188	216 210 204	274
-/- 38600 + EMC87	552 229	361 344 358	xxx xxx 184	213 205 201	276
-/- 38600 + 387DX	555 225	360 325 335	xxx xxx 183	211 204 197	270
-/- 38600 + 387DX + EMC87	552 229	362 344 358	xxx xxx 185	213 206 201	276
-/- 38600 + 3C87	549 226	365 324 338	xxx xxx 178	207 201 192	268
-/- 38600 + 3C87 + EMC87	550 227	xxx 325 340	xxx 471 180	208 201 195	268
-/- 38600 + 4C87DLC	550 228	357 325 341	xxx xxx 182	208 201 195	274
-/- 38600 + 4C87DLC + EMC87	550 229	357 324 341	xxx xxx 182	207 201 195	273
-/- 38600 + Cx387$^+$	549 229	360 327 342	xxx xxx 179	214 207 202	266
-/- 38600 + Cx387$^+$ + EMC87	551 232	361 327 343	xxx xxx 180	216 209 203	269
-/- 38600 + 38700	559 237	320 344 359	xxx 270 194	221 215 209	274
-/- 38600 + 38700 + EMC87			abend		
-/- 38600 + US83C87	551 229	365 330 346	xxx xxx 183	215 209 202	274
-/- Ti486DLC + EMC87	417 186	263 246 263	xxx xxx 147	169 164 161	216
-/- DLC + 387DX	444 200	276 257 270	xxx xxx 170	188 181 176	239
-/- DLC + 387DX + EMC87	417 186	264 247 264	xxx xxx 148	170 164 161	216
-/- DLC + 3C87	434 200	277 256 274	xxx xxx 158	183 177 171	234
-/- DLC + 3C87 + EMC87	434 202	**ab.** 276 296	xxx xxx 160	184 177 173	235
-/- DLC + 4C87DLC	435 202	271 258 279	xxx xxx 163	185 178 175	241
-/- DLC + 4C87DLC + EMC87	435 202	271 256 279	xxx xxx 163	185 178 175	240
-/- DLC + Cx387$^+$	421 189	265 249 269	xxx xxx 151	173 167 165	219
-/- DLC + Cx387$^+$ + EMC87	424 192	**ab.** 250 270	xxx xxx 157	175 169 167	222
-/- DLC + 38700	418 187	265 247 267	xxx xxx 152	172 167 164	216
-/- DLC + 38700 + EMC87			abend		
-/- DLC + US83C87	421 188	270 251 267	xxx xxx 152	177 173 169	219
-/- Cx486DRx^2 + EMC87	370 151	224 202 223	xxx 184 121	136 134 131	172
-/- DRx^2 + 387DX	396 169	239 215 230	xxx 210 147	159 154 150	199
-/- DRx^2 + 387DX + EMC87	290 134	183 163 180	xxx xxx 112	123 120 118	154
-/- DRx^2 + 3C87	385 165	238 214 234	xxx 434 132	151 146 141	191
-/- DRx^2 + 3C87 + EMC87	385 166	xxx 214 235	xxx xxx 134	152 148 144	191
-/- DRx^2 + 4C87DLC	308 151	197 177 196	xxx xxx 127	140 134 133	180
-/- DRx^2 + 4C87DLC + EMC87	387 169	xxx xxx 240	xxx xxx 136	152 150 145	196
-/- DRx^2 + 83D87	370 151	224 202 223	xxx 184 121	136 134 131	172
-/- DRx^2 + Cx387$^+$	292 138	184 166 185	xxx xxx 115	127 123 122	158
-/- DRx^2 + Cx387$^+$ + EMC87	296 140	186 168 187	xxx xxx 117	129 125 123	161
-/- DRx^2 + 38700	371 153	224 215 230	xxx 186 125	137 136 133	171
-/- DRx^2 + 38700 + EMC87	292 xxx	182 185 179	xxx xxx 112	xxx 127 117	155
-/- DRx^2 + US83C87	372 154	228 205 224	xxx xxx 125	143 140 135	175
ADD-X 340 + 3C87	508 191	318 xxx 308	xxx 149 156	xxx xxx 167	230
-/- + 83D87	507 191	318 xxx 307	xxx 138 155	177 174 161	232
-/- + EMC87	507 191	314 xxx 307	xxx 126 155	177 171 168	231
-/- + US83C87	513 194	322 xxx xxx	xxx xxx 160	184 183 174	241
Am386/40 + 3C87	508 201	320 xxx xxx	xxx 149 164	xxx xxx 175	256

(...continued...)

Datek + Cx387+ (33MHz)	495 187	301 xxx 300	xxx 188 152	xxx xxx 161	225
-/- Cx486DLC + Cx387+	411 186	252 xxx 263	xxx 193 148	xxx xxx 161	216
-/- + RapidCAD (33MHz)	428 133	269 xxx 266	xx 140 95	xxx xxx 109	148
-/- + RapidCAD (40MHz)	358 111	225 xxx 222	xx 120 80	xx xx 91	124
Intel SYP 301 (16MHz)	1709 674	999 931 998	661 540 547	615 613 575	831
-/- + 3C87	1677 610	1022 942 xx	570 xxx 477		753
Intel SYP 301z (16MHz, 0ws)	726 614	865 847 xxx	636 xxx 549	602 672 xxx	
Intel SYP 302 (25MHz, no SC)	898 378	536 543 564	410 xxx 371	369 446 xxx	481
Intel SYP 302 (25MHz, 64K)		632 xxx xxx	477 xxx xxx		553
Olivetti M380 + 83D87	xxx 362	530 xxx xxx	xxx xxx 307	xxx xxx 321	476
-/- Cx486DLC + 83D87	xxx 300	511 xxx xxx	xxx xxx 243	xxx xxx 266	380
OPTi 495 SLC + 387DX/33 (256K)	626 248	402 359 377	xxx xxx 209	230 223 215	299
-/- + 3C87/33 (256K)	623 252	408 362 380	xxx xxx 200	231 225 215	301
-/- + 4C87DLC/33 (256K)	626 257	382 364 385	xxx xxx 207	234 228 220	309
-/- + CT38700/33 (256K)	607 237	394 352 373	xxx xxx 192	218 214 207	278
-/- + 4C87DLC/40 (256K)	528 216	324 306 323	xxx xxx 175	197 192 185	262
-/- + US83C87/40 (256K)	518 204	324 302 317	203 xxx 166	193 190 180	243
-/- + US83C87/40 (0K)	1096 365	667 647 664	306 xxx 284	319 325 314	432
-/- & 487SX/33 (PC+256K)	315 109	**ab.** 187 206	xx xx 77	89 98 90	122
-/- & ST486/66 (0+0K)	1471 389	888 791 807	xxx xxx 258	316 345 337	435
-/- & ST486/66 (0+256K)	557 161	332 295 304	xxx xxx 113	127 140 133	178
-/- & ST486/66 (PC+0K)	218 87	159 145 145	xx xx 70	79 84 83	106
-/- & ST486/66 (PC+256K)	171 61	120 101 110	xx xx 46	51 57 51	70
-/- & Amd486/66 (PC+256K)	176 64	136 105 114	xx xx 48	51 57 53	73
-/- & AmdDX4 (8+256K)	137 50	104 82 88	xx xx 39	40 47 42	58
Compaq 486s/16m + 487SX	636 212	417 xxx 415	183 235 147	184 197 180	250
Compaq 486s/25m + 487SX	415 141	276 xxx 272	121 115 99	121 134 120	168
Alaris Cougar 486BL3X + 387	358 226	234 224 258	xxx xxx 202	227 207 205	273
-/- + 3C87	313 185	204 194 216	xxx xxx 155	177 162 160	215
-/- + 4C87DLC	314 188	201 198 225	xxx 199 159	180 166 166	223
-/- + XC87DLX2 (0+0K)	1178 389	720 682 692	xxx xxx 271	333 342 328	452
-/- + XC87DLX2 (PC+0K)	355 187	242 238 246	xxx xxx 161	178 165 165	213
-/- + XC87DLX2 (PC+256K)	273 149	178 174 185	xxx 123 125	139 133 129	180
-/- + Cx387+	294 166	188 xxx xxx	xxx xxx 141	xxx xxx 148	
-/- + US83C87	293 168	194 185 205	xxx xxx 145	166 153 152	194
Compaq 486/25	410 137	269 247 267	116 84 95	118 128 116	162
UMC 4913 (25MHz, 256K)	409 136	270 247 267	xx 82 95	126 128 116	156
DECpc 425SLC/e	438 151	277 259 284	xxx xxx 108	130 136 128	171
IBM 8570 R21 (25MHz)	449 151	284 xxx xxx	131 109 104	133 160 130	202
-/- Overdrive (25/50MHz)	254 86	173 xxx xxx	xx xx 67	78 xx 79	108
Compaq Prolinea 450 (no SC)	213 67	136 xxx 132	58 40 46	47 64 57	80
-/- & 486/33 (PC+0K)	317 105	203 186 204	xx xx 76	92 97 91	122
Arche 486/33 (PC+0K)	320 105	201 xxx 204	xx xx 76	xx xx 91	123
-/- (PC+256K)	303 101	196 xxx 199	xx xx 70	xx xx 86	117
Compaq 486/33	316 104	206 194 206	93 85 73	93 105 89	104
DECpc XL 433DX (0+0K)	925 255	**ab.** 492 506	xxx xxx 154	202 224 207	269
-/- 433DX (PC+0K)	317 106	**ab.** 188 204	xx xx 75	92 99 91	124
-/- 433DX (PC+128K)	309 101	xxx 183 214	xx xx 70	87 94 86	118
-/- 433DX (PC+256K)	308 100	xxx 181 198	xx xx 70	86 92 85	116
Compaq 486/66m	166 52	105 92 101	xx 62 36	44 47 44	60
DECpc XL 466D2 (0+0K)	830 233	491 443 458	xxx xxx 134	177 195 182	232
-/- 466D2 (PC+0K)	176 60	113 102 110	xx xx 45	54 57 54	72
-/- 466D2 (PC+128K)	163 53	106 95 102	xx xx 38	45 49 45	63
-/- 466D2 (PC+256K)	160 52	102 92 101	xx xx 37	45 48 44	60
-/- & Amd486/66 (256K)	162 52	108 xx xxx	xx xx 37	45 48 44	61
-/- & ST486/66 (0+0K)	795 222	466 429 437	xxx xxx 149	175 192 185	242
-/- & ST486/66 (256K)	155 59	93 85 94	xx xx 43	51 53 50	67
-/- & Cx486/66 (0+0K)	795 223	466 432 437	xxx xxx 149	175 192 186	242
-/- & Cx486/66 (PC+0K)	186 69	109 101 110	xx xx 51	60 62 61	79
-/- & Cx486/66 (256K)	155 61	100 85 94	xx xx 43	50 51 49	67
Toshiba 4800 (DX4/75)	163 51	103 92 97	xx xx 39	45 49 46	63

(...continued...)

ALI-VIP DX4/100 (PC+0K)	489 450	102 85 86	xx xx 38	43 46 44	58
-/- DX4/100 (PC+256K)	115 38	82 68 74	xx xx 29	34 38 34	46
Compaq Prolinea 4/100	113 37	82 65 71	32 28 28	32 35 32	44
DECpc XL 4100 (0+0K)	799 212	474 431 444	xxx xxx 127	171 187 175	223
-/- 4100 (PC+0K)	125 39	82 72 74	xx xx 30	34 38 36	46
-/- 4100 (PC+128K)	116 35	74 65 69	xx xx 26	31 34 32	41
-/- 4100 (PC+256K)	114 35	72 63 68	xx xx 26	30 33 31	40
-/- & PODP/83 (0+0K)	1259 277	702 xxx xxx	xxx xxx 145	214 240 224	
-/- & PODP/83 (32+256K)					
Compaq XE 560 (no SC)	103 28	66 53 54	xx 27 24	26 29 27	38
DECpc XL 560 (256K)	102 28	63 52 53	xx 28 24	24 28 26	37
SUN 4/75 DosWindows	xx 10307	**ab.** xxx xxx	xxx xxx abend	xxx xxx 10371	11813

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AS600 5/266, WNT 3.51	1410 665	**ab.** 963 985	xxx xxx 565	655 655 657	722
Toshiba 3200SX (16MHz)	9509 3841	5806 5420 6011	xxxx xxxx 3070	3583 3500 3383	4262
... 386DX + 387DX/33	3537 1347	2121 1999 2076	xxxx xxxx 1158	1262 1216 1182	1543
... Cx486DRx^2 + Cx387$^+$/33	1623 760	983 903 1013	xxx xxx 635	703 677 667	819
... Cx486DRx^2 + XC87DLX2/80	1301 591	805 737 797	xxx xxx 488	538 521 510	662
... RapidCAD/33	2482 754	1921 1408 1524	xxx xxx 541	631 670 626	788
... RapidCAD/40	2061 626	1284 1168 1265	xxx xxx 449	524 555 519	653
Compaq XE 450 (PC+256K)	1262 414	847 727 794	xxx xxx 300	363 380 359	454
Compaq Prolinea 450 (no SC)	1347 435	777 702 765	xxx xxx 337	383 410 392	485
-/- & 486/25 (PC+0K)	2456 802	1560 1431 1565	xxx xxx 577	701 739 696	871
-/- & 486/33 (PC+0K)	1841 601	1167 1073 1174	xxx xxx 433	526 554 522	653
-/- & 486/66 (PC+0K)	1009 326	587 526 574	xxx xxx 253	287 308 294	364
-/- & DX4/75 (PC+0K)	981 295	604 xxx 568	xxx xxx 228	263 285 274	325
-/- & DX4/100 (PC+0K)	737 223	456 406 426	xxx xxx 171	198 214 207	247
-/- & PODP/63 (32+0K)	840 214	478 389 397	xxx xxx 172	196 214 207	242
-/- & PODP/83 (32+0K)	629 159	363 291 297	xxx xxx 129	149 163 149	182
-/- & Cx5x86/75 (PC+0K)	1188 341	**ab.** 487 497	xxx xxx 237	280 306 306	341
-/- & Cx5x86/100 (PC+0K)	889 256	**ab.** 364 xxx	xxx xxx 177	209 229 229	255
Toshiba 4800 (DX4/75)	937 287	592 526 557	xxx xxx 222	255 278 259	334
OPTi 895 & Amd486/80	781 262	530 xxx 499	xxx xxx 191	227 xxx 227	301
ALI Vi15G & Amd486/120	517 172	358 302 330	xxx xxx 126	149 158 149	188
ALI-VIP DX4/100 (PC+256K)	663 213	462 385 416	xxx xxx 161	161 206 188	239
Asus 486SP3 & Am5x86/100	662 199	433 365 xxx	xxx xxx 143	(100MHz=25x4)	
Asus 486SP3 & Am5x86/100	637 196	426 358 xxx	xxx xxx 139	(100MHz=33x3)	
Asus 486SP3 & Am5x86/133	497 150	336 262 294	132 xxx 107	140 130 162	164
Asus 486SP3 & Am5x86/160	450 132	304 237 253	116 xx 97	125 117 117	146
Asus 486SP3 & Cx5x86/100	547 182	331 279 306	xxx xxx 144	156 175 162	209
Asus 486SP3 & Cx5x86/120	488 157	296 240 239	148 xxx 127	134 149 142	180
Asus 486SP3 & PODP/83	441 115	**ab.** 217 223	xx xx 98	98 118 104	146
Asus 486SP3 & PODP/100	**ab.** 101	**ab.** xxx xxx	xx xx 88	86 xx 92	129
DECpc XL 4100 (PC+128K)	673 201	449 380 396	xxx xxx 150	178 194 177	225
-/- & Am5x86/100 (16+256K)	622 195	399 357 386	xxx xxx 139	169 183 169	218
-/- & Cx5x86/100 (16+256K)	551 187	**ab.** 278 306	xxx xxx 144	158 182 159	213
DECpc XL 560 (256K)	588 156	358 xxx xxx	xxx xxx 136	136 161 146	195
Compaq XE 560 (no SC)	594 162	370 298 310	xxx xxx 137	146 157 149	198
Compaq XL 566 (256K)	507 143	xxx 270 279	xxx xxx 123	141 154 150	190
OPTi 586 PCI (66MHz, no SC)	662 184	434 322 325	xxx xxx 158	165 193 176	228
-/- (66MHz, 1024K)	574 150	357 278 282	xxx xxx 129	132 155 140	188
xxx (90MHz, 256K)	400 107	251 197 206	xx xx 92	93 105 99	132
NexGen Nx586PF100/93	490 113	296 234 234	xx xx 85	96 103 96	139
DECpc XL 590 (0+0K)	5299 1240	2960 2814 2827	xxx xxx 666	947 1056 959	1175
-/- 590 (PC+0K)	462 120	278 217 222	xxx xxx 105	108 124 115	150
-/- 590 (PC+256K)	394 107	246 205 205	xx xx 91	93 111 99	134
Compaq XL 590 (256K)	383 104	238 194 201	xx xx 88	91 102 96	123
Compaq XL 5100 (256K)	345 94	216 174 181	xx xx 79	83 91 86	116
Gateway P5-100 (no SC)	394 100	233 182 189	xx xx 86	92 99 94	124
OPTi PB586 (100MHz, no SC)	397 110	286 xxx 203	xx xx 96	99 111 106	135
-/- (100MHz, 256K)	362 102	252 186 192	xx xx 89	90 102 97	126

(...continued...)					
Tadpole P1000 (256K)	356 96	225 180 185	xx xx 83	84 98 89	122
xxx (Cx6x86/120, 256K)	381 128	218 170 183	xx xx 83	115 49 42	137
xxx (P54/120MHz, 256K)	337 94	218 167 171	xx xx 81	86 95 89	118
xxx (P54/133MHz, 256K)	278 74	190 135 141	xx 54 64	65 73 69	91
DEC Celebris 5120 (0+0K)	5278 1222	2977 2847 2802	xxx xxx 662	953 1055 950	1161
-/- (PC+256K)	295 80	190 151 155	xx xx 68	70 83 74	100
DEC Celebris 5133 (0+0K)	4742 1099	2677 2561 2518	xxx xxx 595	856 950 867	1045
-/- (PC+256K)	278 74	179 140 141	xx xx 64	65 79 70	95
Asus (180MHz)	212 54	145 100 104	xx xx 47	48 54 51	67
-/- (200MHz)	192 49	131 90 94	xx xx 42	43 49 46	60
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DECpc XL 590	1618 394	911 859 758	xxx xxx 337	344 397 364	608
DEC Celebris 5120	1226 299	1194 655 580	311 xxx 257	257 301 277	465
DEC Celebris 5133	1143 276	704 599 523	xxx xxx 237	250 292 257	435
Intel UTS P6/133	2384 466	1336 1342 1171	xxx xxx 303	477 507 432	589
Intel UTS P6/200	1589 311	910 890 781	xxx xxx 202	319 338 288	393
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IBM 8570 R21 & P23T/50		45373 xxxx xxxxx	xxxxx xx 18635		
DECpc XL 466D2		26760 xxxx xxxxx	12601 xx 10721		
-/- & Ti486/66	41881 17091	25354 xxxx xxxxx	14006 xx 12379	xxxxx xx 14153	
DECpc XL 4100 (128K)	30869 9914	19167 18452 19688	xxxx xxxx 7415	8714 9583 8709	10923
-/- (256K)	29200 9585	18050 17684 19203	xxxx xxxx 6871	8321 9044 8280	10301
-/- & AmdDX4 (256K)	31253 10480	20362 18558 20141	8924 xxxx 7814	9001 9724 8975	11601
-/- & Am5x86/100	30792 9896	18550 17987 19564	8562 xxxx 7246	8545 9312 8516	10847
-/- & Cx5x86/100	30044 9772	**ab.** 14955 15907	8697 xxxx 7092	8411 9300 8842	10925
Asus 486SP3 & Am5x86/160	xxxx 6566		xxxx xxxx 4843	xxxx xxxx 5786	
Asus 486SP3 & Cx5x86/120					
Asus 486SP3 & PODP/100	xxxx 4999		xxxx xxxx 4324	xxxx xxxx 4582	
Compaq XE 560	27413 8049	17237 14955 15458	xxxx xxxx 6726	7163 7829 7370	17499
-/- & PODP/120	16437 4485	10144 8103 8323	4460 xxxx 3845	4025 5131 4262	5561
DECpc XL 590	18218 5304	11318 10033 10170	5387 xxxx 4480	4618 5385 4867	6668
Asus P55T2P4 & P54/100	15793 4652	10644 xxxx xxxxx	xxxx xxxx 3870	xxxx 4468 4213	5690
Shuttle Hot555 & Amd K5/100		14169 xxxx xxxxx	xxxx xxxx 4735		
Shuttle Hot555 & Cx6x86/100		12166 xxxx xxxxx	xxxx xxxx 4881		
Shuttle Hot555 & P54/100		9856 xxxx xxxx	xxxx xxxx 3891		
OPTi PB586 (100MHz)	xxxx 5102		xxxx xxxx 4415	xxxx xxxx 4764	
Tadpole P1000	16405 4772	11496 9213 9148	xxxx xxxx 4033	4178 4953 4379	6055
Compaq Prolinea 5100E		16363 xxxx xxxxx	xxxx xxxx 4771		
Compaq XL 5100		9956 xxxx xxxx	xxxx xxxx 3902	xxxx 4502 4265	5708
DEC Hinote VP (100MHz)		11581 xxxx xxxx	xxxx xxxx 4311		
DEC Celebris 5100	16681 4872	10897 9185 9346	xxxx xxxx 4047	4608 5052 5005	6285
yyy (Cx6x86/120, 256K)		11233 xxxx xxxxx	xxxx xxxx 4826		
UMC 8890 (120MHz)	14823 4184	9601 xxxx 7895	xxxx xxxx 3617	3676 4226 3931	5137
DEC Celebris 5120	13770 4061	9030 7762 7782	4064 xxxx 3434	3475 4030 3725	5019
Asus P55T2P4 & P54/120	13528 3933	8820 7304 7559	xxxx xxxx 3295	xxxx 3782 3581	4775
Shuttle Hot555 & Cx6x86/133		9185 xxxx xxxx	xxxx xxxx 3650		
DEC Celebris 5133	12818 3682	8201 6925 7004	xxxx xxxx 3157	3186 3786 3437	4557
DEC Celebris 5150	12138 3406	7652 6340 6377	xxxx xxxx 2942	2988 3624 3208	4282
OPTi PB586 (166MHz)		9792 xxxx xxxx	xxxx xxxx 2977		
DEC Celebris 5166	10924 3071	7580 xxxx xxxx	3074 xxxx 2655	2709 3101 2891	3741
Shuttle Hot555 & P54/166		6905 xxxx xxxx	xxxx xxxx 2454		
xxx (180MHz)		6620 xxxx xxxx	xxxx xxxx 2297		
Intel UTS P6/133	20090 6291	16745 xxxx xxxxx	xxxx xxxx 4048	6328 6682 5762	6535
Intel UTS P6/200	18150 4913	12059 9496 10498	3102 xxxx 2693	4222 4465 3852	4305

Software 8087 compiler version		Prospero f66 f77 2.144 1.241	Micro--Soft 3.31	Ryan Mac Farland 2.11 2.45	Lahey 3.00	Digital Res. 4.1
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Compaq 286/6	(0)	abend abend	abend	abend 20371		121703
-/-	(1)	125919 107739	abend	abend 99354		134793
-/-	(2)	54222 39814	abend	63527 abend	abend	121703
-/-	(3)	44692 33060				
Compaq 286/8	(0)	abend abend	abend	abend 15033		89886
-/-	(1)	93363 79930	abend	abend 73658		99921
-/-	(2)	39877 29273	abend	28627 abend	abend	89886
-/-	(3)	33087 24480				90657
Compaq 286/12	(0)	abend abend	abend	abend 10066		65015
-/-	(1)	62151 53208	abend	abend 49020		66511
-/-	(2)	26825 19679	abend	19613 abend	abend	60166
-/-	(3)	25180 16279				60188
Sanyo 286	(0)	abend abend	abend	abend 11583	abend	68154
-/- (12MHz)	(1)	70038 59924	abend	abend 55293		75161
-/-	(2)	31129 22816	abend	22093 abend	abend	68153
-/-	(3)	25585 19011			17419	68203
Toshiba 3100	(1)	93298 79873	abend	abend 73610		99886
-/- (7.16MHz)	(2)	40204 29506	abend	28756 abend	abend	90344
-/-	(3)	33019 24436				
Compaq 386-s/16	(0)	abend abend	abend	abend 7234		
-/-	(3)	15600 11519				42615
-/-	(4)	13218 9586	8505	8830 8926	8341	
Compaq 386-s/20	(4)	9499 7140	6084	6695 xxxx	6119	
Compaq 386/16	(0)	abend abend	abend	abend 6236		35478
-/-	(1)	37305 31716	abend	abend 29200		39443
-/-	(2)	17449 12714	abend	12367 abend	abend	35477
-/-	(3)	14067 10383				35678
-/-	(4)	10826 7813	6990	7198 7271	6772	9304
Compaq 386/20	(0)	abend abend	abend	abend 4161		30224
-/-	(1)	28321 23192	abend	abend 21809		29272
-/-	(2)		abend	11623 abend	abend	29823
-/-	(4)	7641 5455	4867	5069 5120	4751	6536
Compaq 386/25	(0)	abend abend	abend	abend 6785		47024
-/-	(1)	26165 21272	abend	abend 20067		27076
-/-	(2)	12717 12350	abend	9616 abend	abend	23594
-/-	(4)	9876 7052	6034	6802 6831	6102	8838
-/- 38600	(4)	10956 7671	6463	7419 7537	6803	10162
IBM 8570	(0)	abend abend	abend	abend 5054		29090
-/- (20MHz)	(1)	30746 23993	abend	abend 23993		32389
-/-	(2)	14226 10332	abend	10048 abend	abend	29043
-/-	(3)	8928 6411				7658
-/-	(4)	8859 6356	5686	5864 5921	5523	7566
HP Vectra QS/20	(0)	abend abend	abend	abend 5584		41323
-/- (20MHz)	(1)	38712 32366	abend	abend 29949		40532
-/-	(2)	24692 17731	abend	14210 abend	abend	41125
-/-	(4)	13753 10072	8905	9803 9565	8826	12433
Compaq 386/33L & Cx486DRx^2	(4)	xxxx 1505	1357	1421 1405	1304	
Compaq 486s/16m	(0)	abend abend	abend	abend 2893		13824
-/-	(1)	15423 13042	abend	abend 11859		16021
-/-	(2)	8643 6306	abend	6149 abend	abend	13800
-/-	(4)	5119 3636	3309	3340 3373	3169	4344
Compaq 486s/25m	(0)	abend abend	abend	abend 1860		12159
-/-	(1)	11722 9585	abend	abend 8824		11923
-/-	(4)	3289 2342	2135	2161 xxxx	2048	2809
Headland 486SX/33	(4)			xxxx 1409		
NexGen Nx586 (60MHz, 256K)	(4)			abend 638	abend	3153

WITHOUT fpu compiler	Prospero f66 f77	MicroSoft 3.20 4.0 5.0	RmF. 2.11	D.Res. 4.1	Lahey 3.00
ref.time = DAT35					
Compaq 8086 (4.77MHz)	48029 45532	38412 xxxxx xxxxx		348840	
-/- (7.16MHz)	24589 23364	20078 20381 xxxxx	60521	175140	71925
-/- LTE (9.54MHz)	17912 17026	14610 14938 xxxxx	40984	84712	42418
-/- KR1810WM86 (4.77MHz)	47883 45382	38340 xxxxx xxxxx	115133	89351	114221
-/- KR1810WM86 (7.16MHz)	24556 23332			88814	58360
-/- V30 (4.77MHz)	39272 36793	30585 xxxxx 31757	176031	148879	99560
-/- V30 (7.16MHz)	19023 17921	15002 xxxxx 15423	98211		48075
IBM PC/XT	50604 47961	xxxxx 42513 xxxxx	124754	370044	116432
muXT & V20	42139 39817	33868 32980 35065	98621	156982	107082
Normerel & V40 (8MHz ?)	31348 29653	25459 26418 26441		77496	
Kila KS-1 & V50 (7.16MHz)		12110 xxxxx xxxxx			
Goupil G4 80186 (?) (xxMHz)	17035 16185	13412 xxxxx 13799	86543	44497	42973
Compaq 286/6		12120 xxxxx 12465			39255
Compaq 286/8	11161 10667	8880 9294 9207	60658	89909	28934
Compaq 286/12	7560 7148	6023 6203 6170	40386	60227	19296
IBM PC/AT-2 (6MHz)	15411 14587	12540 12604 xx	81419	123178	39067
Sanyo 286 (12MHz)	8807 8359	7259 xxxx 7453	46302	68187	
Tandon 286 (12MHz)	8306 7853	6616 6829 6790	44373	66249	21215
Toshiba 3100 (4.77MHz)	24251 22904	19292 xxxxx 19829	146901	193585	62990
Toshiba 3100 (7.16MHz)	11330 10709	9029 9293 9262	42602	90304	30629
Donatec 386SX/16	10231 9615	7989 8237 8772	38860		
Compaq 386-s/16	5555 5264	4289 4440 4443	29408	42223	13865
Compaq 386-s/20	3641 3417	2893 3003 3001		27616	
ADD-X 325SX	2889 2716	2332 2393 2390		20983	
Amstrad 7386SX (25MHz)	3749 3646	2800 2784 2899	18841	33605	
Daewoo (Am386SX/40MHz)	2692 2541	2030 xxxx 2084		20492	6770
Compaq 386/16	4825 4558	3873 3985 3965	25832	36351	12118
-/- Am386	4842 4570	3872 xxxx 3984	25656	33364	
-/- 38600	5012 4756	3835 xxxx xxxx	25890	38330	12578
-/- Cx486DRx^2 (1K)	2121 2011	2014 xxxx xxxx			
Compaq 386/20	3231 3010	2664 xxxx xxxx			
Compaq 386/25	2583 2415	2128 2205 2209	14518	18559	9830
-/- 38600	2258 2135	1823 xxxx 1937	11747		9947
-/- Ti486DLC	2029 1898	1636 1690 1698	11522	15795	5361
-/- Cx486DLC	1678 1577	1465 xxxx xxxx			
-/- Cx486DRx^2 (0K)	1714 1591	1284 xxxx 1341	9809	15392	4453
-/- Cx486DRx^2 (1K)	1164 1117	986 xxx 1018	7037	12962	5518
Compaq 386/33L (64K)	1864 1748	1574 1613 1617	10214	13150	4599
-/- 38600	1610 1526	1351 1390 xxxx			
-/- Ti486DLC	1202 1139	1042 1070 1063	6687	10054	3197
-/- Cx486DRx^2	1186 1118	920 957 953		9439	
ADD-X 340	1579 1480	1333 xxxx 1367			
Intel SYP 301 (16MHz)	5567 5165	4215 4370 4346	29047	41594	13985
Olivetti M380 & Cx486DLC	3024 2896	2722 xxxx xxxx			
Toshiba 5100 (16MHz)	4794 4527	3782 3915 3905	26003	35157	11907
Sicomp PC 32-20 (16MHz)	4681 4389	3756 xxxx 3800	24660	34417	11724
IBM 8570 (20MHz)	4012 3789	3186 xxxx xxxx		29013	9869
IBM 8556 (386SLC/20MHz)	2329 2225	2153 xxxx xxxx	13510	16945	5804
Siemens WX 200 (33MHz)	1983 1857	1828 1981 xxxx	12043	26559	9709
OPTi 495 SLC & Amd386/33	1847 1735	1542 xxxx xxxx			
-/- & Amd386/40 (0K)	4369 4143	3235 xxxx xxxx			
-/- & Amd386/40 (256K)	1582 1480	1299 xxxx xxxx			
-/- & 486/33 (0+0K)	6046 5703	4366 xxxx 4519		46570	
-/- & 486/33 (0+256K)	2761 2618	2069 2195 2136		21009	
-/- & 486/33 (PC+0K)	1093 1032	1011 1044 1039		7423	
-/- & 486/33 (PC+256K)	1051 1000	969 997 993	5202	6883	
-/- & ST486/66 (0+0K)	6238 5816	4451 xxxx xxxx			
-/- & ST486/66 (0+256K)	2228 2077	1583 xxxx xxxx			
-/- & ST486/66 (PC+0K)	757 708	589 xxx xxx			

(...continued...)					
-/- & ST486/66 (PC+256K)	560 558	499 xxx xxx			
-/- & Amd486/66 (PC+256K)	576 529	508 xxx xxx		4561	
-/- & AmdDX4 (8+256K)	476 425	382 414 407			
Compaq 486s/16m	2163 2068	2000 2059 2051	10749	13862	4679
Compaq 486s/25m	1400 1335	1422 1336 1328	6924	9002	4082
Compaq 486/25	1391 1328	1319 1320 1320		8943	
UMC 4913 (25MHz, 256K)	1387 1323	1281 xxxx xxxx			
DECpc 425SLC/e	1426 1353	1325 1361 1340		9610	
IBM 8570 R21 (25MHz)	1496 1420	1375 1443 xxxx		10285	
-/- Overdrive (25/50MHz)	921 845	753 801 805		9121	
Headland 486SX/33	1053 1003	978 xxx xxx	5181	8682	3737
Arche 486/33 (PC+0K)	1057 998	972 xxx xxx		7027	
-/- (PC+256K)	1033 989	954 xxx xxx		6590	
Compaq 486/33	1057 1006	979 1013 1005		8169	
Compaq Prolinea 450 (no SC)	699 659	656 xxx 660		4391	
-/- & U5S/33 (PC+0K)	769 726	678 689 692	3393	5748	
DECpc LPv+ 433sx (0+128K)	4103 3172	1897 xxxx 2149		31730	
-/- (PC+0K)	1049 999	973 1001 999	5165	6852	
-/- (PC+128K)	1033 988	959 982 1009	5120	6632	
DECpc XL & U5S/33 (0+0K)	3198 3025	2314 2313 2332	15707	24427	
-/- & U5S/33 (PC+0K)	763 727	679 689 690		5733	
-/- & U5S/33 (PC+256K)	745 712	652 660 662	3348	5538	
-/- 433DX (0+0K)	3665 3463	2680 2804 2749		27388	
-/- 433DX (PC+0K)	1052 999	976 1002 998			
-/- 433DX (PC+128K)	1039 989	964 987 983		6573	
-/- 433DX (PC+256K)	1038 988	xxx 985 982		6575	
DECpc XL 466D2 (0+0K)	3409 3198	2427 xxxx xxxx		31079	
-/- 466D2 (PC+0K)	556 517	515 531 530		3729	
-/- 466D2 (PC+128K)	531 499	501 507 503		4558	
-/- 466D2 (PC+256K)	530 497	484 502 502		3466	
-/- 466S2 (PC+256K)	523 496	xxx 499 497	2582	3415	1148
-/- & Amd486/66 (256K)	531 499	485 xxx xxx			
-/- & ST486/66 (0+0K)	3269 3031	2297 2387 2409		25113	
-/- & ST486/66 (256K)	517 488	483 544 557		3940	
-/- & Cx486/66 (0+0K)	3270 3034	2297 xxxx xxxx			
-/- & Cx486/66 (PC+0K)	547 516	540 581 595		4205	
-/- & Cx486/66 (256K)	518 488	487 xxx xxx			
Compaq 486/66m	531 496	490 505 502		3419	
Alaris Cougar 486BL3X (0+0K)	4800 4568	3585 xxxx xxxx	23369	45233	
-/- 486BL3X (PC+256K)	618 580	570 596 582	3287	4511	1561
Toshiba 4800 (DX4/75)	552 501	xxx 460 450		4249	
ALI-VIP DX4/100 (PC+0K)	489 450	378 xxx xxx			
-/- DX4/100 (PC+256K)	355 323	296 313 309		2911	
Asus 486SP3 & Am5x86/100	359 333	337 348 xxx	(100MHz = 25x4)		
Asus 486SP3 & Am5x86/100	354 331	332 342 xxx	(100MHz = 33x3)		
Asus 486SP3 & Am5x86/133	269 250	342 262 260			
Asus 486SP3 & Am5x86/160	232 211	220 229 226			
Asus 486SP3 & Cx5x86/100	298 272	263 278 xxx			
Asus 486SP3 & Cx5x86/120	255 229	227 xxx xxx		1721	
Asus 486SP3 & PODP/83	265 238	249 xxx xxx			
Asus 486SP3 & PODP/100	227 200	218 186 191	101		
Compaq Prolinea 4/100	348 319	304 305 313			
DECpc XL 4100 (0+0K)	3303 3106	2356 2456 2435		25600	
-/- 4100 (PC+0K)	376 339	323 334 338		2536	
-/- 4100 (PC+128K)	358 323	308 320 321		2495	
-/- & Am5x86/100 (16+256K)	352 331	325 336 334	150		
-/- & PODP/83 (0+0K)	4696 4355	3140 xxxx xxxx			
Compaq XE 560 (no SC)	359 326	345 357 359		3175	
DECpc XL 560 (256K)	359 325	339 357 357		2870	
OPTi 586 PCI (1024K)	331 295	324 342 342			
NexGen Nx586 (60MHz)	414 386	353 370 370	1967	3181	961

(...continued...)								
-/- (75MHz, 0+0K)	4503	4305	3402	xxxx	xxxx			
-/- (75MHz, PC+256K)	342	307	296	308	313	1637	2676	809
-/- (90MHz, 256K)	285	261	247	255	255	1364	2226	676
DEC 3000/500, OSF/1 3.0, SoftPC	2613	2346	2351	2365	2368			2335
AS600 5/266, WNT 3.51 (SoftPC)	801	713	706	720	730			
ref.time = DAT50								
Toshiba 3200SX (16MHz)	32407	30528	25116	25984	xxxxx			
Daewoo (Amd 386sx/40MHz)			11660	xxxxx	xxxxx			
... 386DX (33MHz))	10765	10097	8960	xxxx	xxxx			
... RapidCAD/33	9160	8671	7541	xxxx	xxxx			
... RapidCAD/40	7607	7201	6261	xxxx	xxxx			
... Cx486DRx^2 (66MHz))	4242	4081	3814	xxxx	xxxx			
... Cx486DRx^2 (80MHz))	3532	3399	3176	xxxx	xxxx			
IBM 8570 R21 & P23T/50	xxxx	4856	4292	xxxx	xxxx			
Compaq XE 450 (PC+256K)			3836	xxxx	xxxx			
Compaq Prolinea 450 (no SC)			4056	xxxx	xxxx			
-/- & 486/25 (PC+0K)	xxxx	7672	7499	xxxx	xxxx			
-/- & 486/33 (PC+0K)	6078	5753	5623	5783	5774	455	36402	
-/- & 486/66 (PC+0K)	2387	xxxx	3041	3124	3115	268	18881	
-/- & DX4/75 (PC+0K)	2925	2621	2484	2578	2609	242	18149	
-/- & DX4/100 (PC+0K)	2187	1962	1862	1933	1957	182	13822	
-/- & PODP/83 (32+0K)			1904	xxxx	xxxx			
-/- & PODP/63 (32+0K)	2939	2617	2541	2714	2764	181	22390	
-/- & Cx5x86/75 (PC+0K)	3012	2580	2915	3279	3652	251		
-/- & Cx5x86/100 (PC+0K)	2348	2012	xxxx	2899	2795			
OPTi 895 & Amd486/80 (256K)	2559	2415	2382	xxxx	xxxx			
ALI Vi15G & Amd486/120 (256K)	1699	1604	1573	xxxx	xxxx			
ALI-VIP DX4/100 (PC+256K)	2043	1861	1694	1801	1775		15667	
DECpc XL 4100 (PC+256K)	1788	1653	1619	1681	1667		16030	
-/- & AmdDX4 (8+256K)	2294	2092	2007	2108	2141	622	18869	
-/- & Am5x86/100 (16+256K)	2282	2079	2010	2104	2107		14071	
-/- & Cx5x86/100 (16+256K)	1588	1435	1592	1737	1752	155	12734	
Compaq XE 560 (no SC)	2073	1879	1978	2051	2060		17331	
-/- & PODP/120	1104	960	1100	1154	1163		10646	
DECpc XL 590 (0+0K)	20215	18862	13470	13971	13890		141645	
-/- 590 (PC+0K)	1456	1275	1461	1375	1363		14431	
-/- 590 (PC+256K)	1384	1253	1332	xxxx	xxxx			
Compaq XL 590 (256K)	1368	1245	1297	xxxx	xxxx			
xxx (90MHz, 256K)	1391	1256	1326	1385	xxxx			
NexGen Nx586PF100	1543	1392	1298	xxxx	xxxx			
Asus P55T2P4 & P54/100	1232	1127	1159	1206	1205			
Shuttle Hot555 & Amd K5/100	1116	983	1092	xxxx	xxxx			
Shuttle Hot555 & Cx6x86/100	xxxx	1091	965	xxx	xxx			
Shuttle Hot555 & P54/100	xxxx	1127	1168	xxxx	xxxx			
Gateway P5-100 (no SC)	1287	1335	1251	1298	xxxx			
OPTi PB586 (100MHz, no SC)	1321	1157	1318	1391	1403		13314	
-/- (100MHz, 256K)	1288	1145	1254	1317	1325		11110	
Tadpole P1000 (256K)	1253	1135	1198	1238	1233		9868	
Compaq Prolinea 5100E	xxxx	1152	1323	xxxx	xxxx			
Compaq XL 5100 (256K)	1231	1120	1159	1206	1214		9385	
DEC Hinote VP (100MHz)	1295	1133	1257	xxxx	xxxx			
DEC Celebris 5100	1246	1130	1197	xxxx	xxxx			
yyy (Cx6x86/120, 256K)	xxx	955	1171	xxxx	xxxx			
xxx (Cx6x86/120, 256K)	917	800	1010	xxxx	xxxx			
xxx (P54/120MHz, 256K)	1116	959	1114	1173	1168		11022	
xxx (P54/133MHz, 256K)	946	848	xxx	954	957	69	7933	
UMC 8890 (120MHz)	xxx	951	1034	xxxx	xxxx			
DEC Celebris 5120 (0+0K)	20131	18928	13352	13907	13816	765	141145	
-/- (PC+256K)	1037	945	997	1034	1016		8074	
Asus P55T2P4 & P54/120	xxx	941	993	xxx	xxx			
Shuttle Hot555 & Cx6x86/133	816	721	887	xxx	xxx			

(...continued...)					
DEC Celebris 5133 (0+0K)	18087 16983	12001 12499 12412	689	126812	
-/- (PC+256K)	948 855	916 959 960	73	7919	
DEC Celebris 5150	861 761	859 xxx xxx			
OPTi PB586 (166MHz)	xxx 700	836 xxx xxx			
DEC Celebris 5166	775 686	755 801 788		6806	
Shuttle Hot555 & P54/166	759 679	734 xxx xxx			
xxx (180MHz)	xxx 631	679 xxx xxx			
Asus (180MHz)	708 630	681 xxx xxx			
-/- (200MHz)	640 569	615 xxx xxx			
Intel UTS P6/133	1201 1071	1059 1075 1067	84	7504	
Intel UTS P6/200	801 715	704 716 711	56	5017	78

ref.time = DAT100					
DEC Celebris 5120	3719 3465	3650 3805 3776	3699		
DEC Celebris 5133	3398 3132	3392 3534 3498			
DEC Celebris 5150	3086 2807	3077 xxxx xxxx		33545	244
Intel UTS P6/200	2876 2643	xxxx 2649 2636	2774	22253	

2. 16 bits Fortran compilers :

- Microsoft Fortran versions 3.20 (1984), 3.31 (1985), 4.0 (1987), 5.0 (1989), 5.10 (1991) ;

- Ryan Mac Farland versions 2.11, 2.43, 2.45 ;

- IBM Professional Fortran versions 1.0, 1.3 and IBM Fortran/2 version 1.0 ;

- (for Prospero f66 v2.144 and f77 v1.241; Lahey versions 2.04, 2.22 and 3.00 and Digital Research v4.1: see note (1)) .

library	altmath.lib				math.lib		decmath.lib	
MSFortran version	3.20	3.31	4.0	5.0	3.20	3.31	3.20	3.31
Compaq 8086	20077	xxxxx	20381	xxxxx				
Compaq LTE	14610	14876	14938	xxxxx	21639	xxxxx		
Compaq 286-8	9249	9480	9228	xxxx	xxxxx	17568	xxxxx	abend
Compaq 286-12	6023	6106	6203	6170	abend	11611	abend	abend
Compaq SLT/286	6044	6146	xxxx	6170	xxxxx	11653		
DEC VaxMate	10975	11384	11486	11104	xxxxx	21627	abend	abend
Compaq 386-s/20	2893	xxxx	3003	3001	xxxx	758 (¶)		
Compaq 386-16	3967	3973	3982	3965	xxxxxx	7517	xxxxx	abend
Compaq 386-25	2156	2281	2216	2209	xxxx	650 (¶)	xxxxx	abend
Intel SYP 301	4215	4333	4370	xxxx	1031 (¶)	12285		
Intel SYP 301z	3688	3732	3812	xxxx	xxxxxx	870 (¶)	xxxxx	abend
Intel SYP 302	2254	2327	2284	xxxx	xxxxxx	637 (¶)		
Sicomp PC 32-20	3756	3758	3851	3800	xxxx	7205		
Compaq 486/25	xxxx	1319	1321	1320	116 (¶)	272 (¶)		
Compaq 486/33	xxxx	1013	1013	1005	abend	241 (¶)		
IBM 8570 Overdrive (25/50MHz)	753	xxx	801	805	abend	173 (¶)		

(¶) : floating point automatic recognition at run time.

MSFortran version	4.0			5.0			5.10		
switches : g0 or g2 , oX	fpc87	fpc	fpa	fpa	fpc87	fpi87	fpa	fpc87	fpi87
ref.time = DAT35									
Compaq 8086		80749	20381						
Compaq 8086 + 8087		3915	20381						
Compaq & V30		32711	15478						
Compaq & V30 + 8087		2685	15474						
Compaq LTE		28437	14938						
IBM PC/XT		85479	42513						
IBM & V20		75745	32980						
IBM & V20 + 8087		5701	35009		6437				
Olivetti M24		36724	19084						
Compaq 286/6 + Am287				12465	4725	3225			
-/- + 2C87					3155	1671			
-/- + 287XL					3236	1781			
-/- + 82S87					3069	1616			
Compaq 286/8		19749	9294	9207					
-/- + 2C87					2552	1454			
-/- + 287XL					2641	1547			
-/- + 82S87					2271	1207			
Compaq 286/12	2204	2205	6203	6170	2520	1754	6326	2669	1899
-/- + Am287			6203		2523	1758			
-/- + 287XL	1737				1891	1142		2012	1252
-/- + 2C87	1710				1792	1051		1919	1169
-/- + 82S87					1741	1008			
SUN iPC + 80287		2358	6346						
Donatec 386SX/16 + 387SX	1431	1435	8237	8272	1549	623		1623	679
-/- + 3C87SX	1436				1500	581			
-/- + 487SLX	1411				1450	547		1528	598
Compaq 386-s/16 + 387SX	943		4463	4445	1053	462		1108	507
-/- + 3C87SX	943	943	4467		995	413	8558	**1567**	**634**
-/- + 487SLX	907				948	381		998	417
-/- + 83S87			4443		964	383			
386SX/16 + US83S87					989	428			
Compaq 386-s/20	685	683	2990	3001	761	343			
Amstrad 7386SX + 387SX	627				687	311		721	336
-/- + 3C87SX (25MHz)	619				649	279		686	303
-/- + 487SLX	611		2784	2899	642	263	2915	667	283
Daewoo (Amd 386sx/40MHz)				2084			2147		
Compaq 386/16 + 287			3915	3905	2004	1444	4010	2128	1558
-/- + 287XL					1460	901		1437	869
-/- + 2C87								1393	826
-/- Am386 + 287XL					1468	900			
-/- + 387	857	8492	3985	3965	925	418			
-/- + 387DX	833	836			855	364			
-/- + 83D87	811	814			838	335			
-/- + 38700		819			841	348			
Intel SYP 302 (25MHz)	535	533	2295						
Compaq 386/25 + 387	498	500	2211	2209	543	249	2280	578	271
-/- + 387DX	490				493	218			
-/- + 3C87	476				497	213		535	232
-/- + 4C87DLC	482				506	218		541	237
-/- + XC87DLX2	474		2265	2298	474	196	2270	508	214
-/- + 83D87	477				486	200			
-/- + 38700	479				491	206			
-/- + US83C87	474				494	210		530	230
-/- 38600 + 387	480	482				239			262
-/- 38600 + 3C87	464				484	214		526	238
-/- 38600 + 4C87DLC	470				492	214		533	236
-/- 38600 + XC87DLX2	518				526	255		567	276
-/- 38600 + 83D87	493				513	233		552	253
-/- 38600 + 38700			1929	1937	515	237	1969	553	256

(...continued...)

	C1	C2	C3	C4	C5	C6	C7	C8	C9
-/- 38600 + US83C87	476				495	239		537	263
-/- Ti486DLC + 387DX			1690	1698	445	226	1734	475	244
-/– DLC + 3C87	xxx				404	189		435	207
-/– DLC + 4C87DLC	386				410	194		441	210
-/– DLC + XC87DLX2					375	171		405	187
-/– DLC + EMC87	370				390	177		420	193
-/– DLC + Cx387$^+$					396	192		428	200
-/– DLC + 38700	371				393	183		423	198
-/– DLC + US83C87	377				395	186		426	204
-/- Cx486DRx^2 (0K) + 38700	288	290		1336	316	148	1381	337	160
-/– DRx^2 (1K) + 38700	251	253			260	136		281	147
-/– DRx^2 (0K) + EMC87	290	292		1336	317	144	1381	335	159
-/– DRx^2 (1K) + EMC87	242	244		1018	213	135	1069	281	147
-/– DRx^2 (0K) + XC87DLX2	298	300			299	131		318	143
-/– DRx^2 (1K) + XC87DLX2	246	248			244	120		263	131
Compaq 386/33L (64K)	351	351	1613	1617	365	159		390	175
-/- + 3C87 + EMC87	353				374	154		401	169
-/- + 4C87DLC	357				377	159		404	173
-/- + EMC87	341				361	146			
-/- + Cx387$^+$	345				366	150		392	164
-/- + CT38700	344				366	150		392	164
-/- + US83C87	353				369	154		396	169
-/- 38600 + EMC87	344				358	169		383	185
-/- 38600 + 387DX	325				335	160		361	177
-/- 38600 + 387DX + EMC87	344				358	169		383	185
-/- 38600 + 3C87	324				338	157		365	174
-/- 38600 + 3C87 + EMC87	325	325			340	157		366	173
-/- 38600 + 4C87DLC	325				341	156		369	172
-/- 38600 + 4C87DLC + EMC87	324				341	156			173
-/- 38600 + Cx387$^+$	327				342	170		370	186
-/- 38600 + Cx387$^+$ + EMC87	327				343	170		370	186
-/- 38600 + 38700	344		1399	1396	359	174	1425	385	189
-/- 38600 + US83C87	330				346	175		372	193
-/- Ti486DLC + EMC87	246				263	122		283	135
-/– DLC + 387DX	257				270	138		289	153
-/– DLC + 387DX + EMC87	247				264	123		283	135
-/– DLC + 3C87	256				274	132		295	146
-/– DLC + 3C87 + EMC87	256				276	133		296	146
-/– DLC + 4C87DLC	258				279	135		300	148
-/– DLC + 4C87DLC + EMC87	256				279	135		302	149
-/– DLC + Cx387$^+$	249				269	127		289	140
-/– DLC + Cx387$^+$ + EMC87	250				270	128		290	141
-/– DLC + 38700	247		1070	1063	267	128	1102	287	140
-/– DLC + US83C87	251		1070	1059	267	130	1102	288	143
-/- Cx486DRx^2 + EMC87	202				223	103		234	112
-/– DRx^2 + 387DX	215				230	121		244	132
-/– DRx^2 + 387DX + EMC87	163				180	95		191	103
-/– DRx^2 + 3C87	214				234	114		247	125
-/– DRx^2 + 3C87 + EMC87	214				235	115		248	126
-/– DRx^2 + 4C87DLC	177	178	717	707	196	110	739	210	119
-/– DRx^2 + 4C87DLC + EMC87					240	118		252	128
-/– DRx^2 + 83D87	202				223	103		234	112
-/– DRx^2 + Cx387$^+$	166				185	99		197	107
-/– DRx^2 + Cx387$^+$ + EMC87	168				187	100		199	109
-/– DRx^2 + 38700	202	202	957	953	224	107	973	236	116
-/– DRx^2 + 38700 + EMC87	185				179	114		193	117
-/– DRx^2 + US83C87	205				224	106		236	117
OPTi 495 SLC + US83C87/40 (0K)	613				647	251		664	269
-/- + US83C87/40 (256K)	302				317	137		341	151
ADD-X Am386/40 + 83D87					308	127			
Am386/40 (128K) + 3C87					313	132		334	143

(...continued...)

	C1	C2	C3	C4	C5	C6	C7	C8	C9
Datek + Cx387$^+$ (33MHz)					300	123			
-/- Cx486DLC + Cx387$^+$					263	126			
-/- + RapidCAD (33MHz)					266	88			
-/- + RapidCAD (40MHz)					222	74			
Compaq 486s/16m + 487SX			2050		415	140			
Compaq 486s/25m + 487SX			1328		272	90			
DECpc LPv+ 433sx (128K)			984	982			1009		
DECpc XL & U5S/33 (0+0K)			2313	2332			2387		
-/- & U5S/33 (PC+0K)			689	690			701		
-/- 466S2 (PC+256K)			499	497			510		
Alaris Cougar 486BL3X + 387	224				258	174		274	187
-/- + 3C87	194				216	134		233	148
-/- + 4C87DLC	198				225	141		240	154
-/- + XC87DLX2 (0+0K)	682		3669	3609	692	259	3698	743	279
-/- + XC87DLX2 (PC+128K)	238				246	141		257	152
-/- + XC87DLX2 (PC+256K)	175	175	596	582	185	107	604	198	116
-/- + Cx387$^+$				582	207	124			
-/- + US83C87	185				205	126		220	138
Compaq 486/25	247	247	1320	1320	267	87			
UMC 4913 (25MHz, 256K)	247	248			267	86			95
DECpc 425SLC/e	259		1361	1340	284	96	1370	305	104
-/- Overdrive (25/50MHz)	148	149	801	805	156	60	824	170	66
Compaq 486/50			660		132	43			
Compaq Prolinea 450 (no SC)	129	130	682	681	141	50		151	54
-/- & U5S/33 (PC+0K)			689	692			703		
Arche 486/33 (PC+0K)			997	996	204	69			75
-/- (PC+256K)			978	978	199	65	1003	215	71
Compaq 486/33	194	195	1013	1005	206	70			
DECpc XL 433DX (0+0K)	492		2804	2749	506	152	2828	539	161
-/- 433DX (PC+0K)	188		1002	998	204	68	1023	219	74
-/- 433DX (PC+128K)	183		987	983	199	64	1011	214	71
-/- 433DX (PC+256K)	181				198	64		214	70
Compaq 486/66m	92	92	505	502	101	33	514	108	36
DECpc XL 466D2 (0+0K)	443				458	133		487	140
-/- 466D2 (PC+0K)	102		531	530	110	41	541	117	44
-/- 466D2 (PC+128K)	95		507	504	102	34	516	110	38
-/- 466D2 (PC+256K)	92		502	502	101	33	511	108	36
-/- & ST486/66 (0+0K)	429		2387	2409	437	140	2498	469	147
-/- & ST486/66 (256K)	85		544	557	94	36	505	100	39
-/- & Cx486/66 (0+0K)	432				437	140		470	147
-/- & Cx486/66 (PC+0K)	101		581	595	110	44	545	115	47
-/- & Cx486/66 (256K)	85				94	36		101	39
Toshiba 4800 (DX4/75)	92		460	450	37	35	466	106	39
ALI-VIP DX4/100 (PC+0K)	85				86	34		93	35
-/- DX4/100 (PC+256K)	68		313	309	74	26	323	80	28
Compaq Prolinea 4/100	65	65	305	313	71	25	316	76	27
DECpc XL 4100 (0+0K)	431		2456	2437	444	128	2474	470	135
-/- 4100 (PC+0K)	72		334	338	74	28	349	79	29
-/- 4100 (PC+128K)	65		320	321	69	24	333	74	26
-/- 4100 (PC+256K)	63				68	23		74	25
Compaq XE 560 (no SC)	53		357	355	54	21	359	59	23
DECpc XL 560 (256K)	52	52	357	357	53	20	395	57	22
NexGen Nx586 (60MHz, 256K)			370	370			376		
-/- (75MHz, 256K)				306					
-/- (90MHz, 256K)			255	255			262		
AS600 5/266, WNT 3.51	963		720	730	985	490	805	1009	539

ref.time = DAT50

	C1	C2	C3	C4	C5	C6	C7	C8	C9
Toshiba 3200SX (16MHz)	5420		25984		6011	2602			2810
Compaq XE 450 (PC+256K)	727				794	273			298
Compaq Prolinea 450 (no SC)	702				765	299		817	322
-/- & 486/25 (PC+0K)	1431				1565	525		1680	571

(...continued...)

-/- & 486/33 (PC+0K)	1073		5783	5774	1174	393	5923	1260	428
-/- & 486/66 (PC+0K)	526		3124	3115	574	224	3145	613	242
-/- & DX4/75 (PC+0K)	542			2609	568	207	2691	611	223
-/- & DX4/100 (PC+0K)	406		1933	1957	426	155	2017	458	167
-/- & PODP/63 (32+0K)	389		2714	2764	397	150	2698	429	164
-/- & PODP/83 (32+0K)	291				297	112		320	122
Toshiba 4800 (DX4/75)	526				557	201		604	223
ALI-VIP DX4/100 (PC+256K)	385		1801	1775	416	144	1855	448	159
Asus 486SP3 & Am5x86/133	275				294	99		317	109
Asus 486SP3 & Am5x86/160	237				253	90		273	97
Asus 486SP3 & Cx5x86/100	279				306	112		331	123
Asus 486SP3 & Cx5x86/120	240				264	101		285	109
Asus 486SP3 & PODP/83	216				223	84		240	91
Asus 486SP3 & PODP/100	186				191	75		205	81
DECpc XL 4100 (PC+256K)			1681	1667			1719		
-/- & AmdDX4 (8+256K)			2108	2141			2196		
-/- & Am5x86/100 (16+256K)	357				386	128		417	140
-/- & Cx5x86/100 (16+256K)	278				306	110			123
DECpc XL 560 (256K)	296	296			305	117		329	128
Compaq XE 560 (no SC)	298		2051	2060	310	119	2094	334	130
Compaq XL 566 (256K)	270				279	107		300	117
OPTi 586 PCI (66MHz, no SC)	322				325	135		349	148
-/- (66MHz, 1024K)	278				282	111		304	121
xxx (90MHz, 256K)	197		1385		206	79			87
DECpc XL 590 (0+0K)	2814				2827	698		3046	715
-/- 590 (PC+0K)	217				222	91		239	100
-/- 590 (PC+256K)	205		1375	1363	205	79	1378	222	86
Compaq XL 5100 (256K)	174		1206	1214	181	69	1226	196	75
Gateway P5-100 (no SC)	182		1298		189	75			81
OPTi PB586 (100MHz, no SC)	196		1391	1403	203	84			
-/- (100MHz, 256K)	186		1317	1325	192	77	1331	207	84
Tadpole P1000 (256K)	180		1238	1233	184	71	1244	199	78
xxx (120MHz, 256K)	167		1173	1168	171	69	1180	184	76
xxx (133MHz, 256K)	135		954	957	141		962		
DEC Celebris 5120 (0+0K)	2848		13921	13815	2802	684	12742	3007	719
-/- (PC+256K)	151		1034	1016	154	59	1039	167	65
DEC Celebris 5133 (0+0K)	2561		12499	12412	2518	615	13013	2701	646
-/- (PC+256K)	140		959	960	141	56	965	152	60
ref.time = DAT999									
DECpc XL 4100 (128K)	18558				20141	6989			7656
-/- (256K)	17684				19203	6325			
-/- & Am5x86/100	17987				19564	6645		20918	7333
-/- & Cx5x86/100	14955				15907	5988		17190	6517
Asus 486SP3 & Cx5x86/120									
Asus 486SP3 & PODP/100						3716			3993
Compaq XE 560	14955				15458			16630	6346
-/- & PODP/120	8517				8323	3357		8994	3677
DECpc XL 590	10033				10170	3909		11019	4227
Asus P55T2P4 & P54/100	8720				9005	3388		9737	3635
OPTi PB586 (100MHz)						3838			4109
Tadpole P1000	9213				9148	3517		9909	3800
Compaq XL 5100						3408			3645
DEC Celebris 5100	9185				9346	3630		10117	3913
UMC 8890 (120MHz)					7895	3147		8559	3431
DEC Celebris 5120	7763				7782	2984		8445	3232
Asus P55T2P4 & P54/120	7304				7559	2876		8164	3077
DEC Celebris 5133	6925				7004	2749		7590	2965
DEC Celebris 5150	6340				6377	2559		6927	2770
DEC Celebris 5166	5648				5755	2328		6243	2500
Intel UTS P6/200	9496				10498	2257		11254	2363

compiler	Ryan Mac Farland					Fortran/2		Pro Fortran	
version	2.11		2.43	2.45		1.0		1.0	1.3
floating point unit	none			none		required			
switch						/z	(opt)		
ref.time = DAT35									
Compaq 8086 (4.77MHz)		3447							
-/- (7.16MHz)	60521	1909		60659					
-/- KR1810WM86 (4.77MHz)	115133	3423		60180	3497	4707	4349		
-/- KR1810WM86 (7.16MHz)		1912			1956				
-/- V30 (4.77MHz)	176031	3322							1931
-/- V30 (7.16MHz)	98211	1826		25157					
IBM PC	124754	3457		63172	3518				
-/- V20	98621	3362		56893	3411				
Compaq 286/6 + Am287		3288	3075	20366					
-/- + 287XL		1901	1723			2537	1847		
-/- + 2C87		1803	1600						
-/- + 82S87		1669	1526						
Compaq 286/8 + 287XL	60658	1650	1504	15113		1773	1606		
-/- + 2C87		1553	1390						
-/- + 82S87		1254	1132			1753	1217		
Compaq 286/12	40386	1801	1673	10066	1766	1816	2075	2092	1986
-/- + Am287		1782	1675			2163	4219		
-/- + 287XL		1209	1121		1226	1256	1555	1490	1391
-/- + 2C87		1106	1015		1128	1142	1349	1341	1261
-/- + 82S87		1032	960			1076	1383		
Donatec 386SX/16 + 387SX	38860	707	624		737	737	860		752
-/- + 3C87SX		658	ab.		703	690	814		695
-/- + 487SLX		605	533		647	635	753		636
Compaq 386-s/16 + 387SX	29408	537	463	7224	560	738	708		610
-/- + 3C87SX		476			499			552	528
-/- + 487SLX		423	363		444			487	467
386SX/16 + US83S87		470	410			776	741		
Compaq 386-s/20	27616	406		4737	423	386		496	
Amstrad 7386SX + 387SX	18841	363	308	4747	367				405
-/- + 3C87SX (25MHz)		320			333				353
-/- + 487SLX		284	244		297				312
Daewoo (Am386SX/40MHz)				**19610**					
Compaq 386/16 + 287	26003	1470	1377	6235	1451		1582	abend	1658
-/- + 287XL		986	910		878	1069	2452	1109	1020
-/- + 2C87		801	725		815				935
-/- + 82S87		**3722**	**3649**						
-/- Am386 + 287	25656	2394	2229						
-/- Am386 + Am287		2394	2295						
-/- 38600	25890			6474					
-/- + 387	25832	507	433	6235	519	**957**	**993**	628	520
-/- + 387DX		454	386		467	443	464	563	525
-/- + 3C87		434	366		454				497
-/- + 83D87		412	345		429	405	426	487	467
-/- + 38700		416	353		431	403	422	491	471
Compaq 386/20		385	329		393				
-/- + 3C87		337				584	342		
-/- + 83D87		309	256		323				
-/- + EMC87		306	254		319		271		
-/- + US83C87		324	244		361				
Compaq 386/25	14518	307		3405			281		
-/- + 387DX		278	237		286	557	285	347	329
-/- + 3C87		267	219		272				302
-/- + 4C87DLC		270	229		284				313
-/- + XC87DLX2		233	197		246				268
-/- + 83D87		249	206		259	587	576		
-/- + Cx387+		253	210						
-/- + 38700		252			261	528	256	298	284

(...continued...)

-/- + US83C87		255	218		265				292
-/- 38600 + 387		281	246		293	296	**410**		333
-/- 38600 + 3C87		243	219		258		232		280
-/- 38600 + 4C87DLC		248	223		268				287
-/- 38600 + XC87DLX2		256	251		282		398		303
-/- 38600 + 83D87		252	241		277		393		298
-/- 38600 + 38700		265	252		287		258		309
-/- 38600 + US83C87		251	233		268				287
-/- Ti486DLC + 387DX	11522	271	236	2776	279				
-/- DLC + 3C87		223	188		233				
-/- DLC + 4C87DLC		229	196		241				263
-/- DLC + XC87DLX2		195			206				
-/- DLC + EMC87		209	175		219				239
-/- DLC + Cx387+		213	179		223				
-/- DLC + 38700		212	**ab.**		221				239
-/- DLC + US83C87		214	182		223				243
-/- Cx486DRx^2 (0K) + XC87DLX2		153	136		163	327	137		183
-/- DRx^2 (1K) + XC87DLX2		142	125		148	312	130		171
-/- DRx^2 (0K) + EMC87	9809	168	150	2237	177	159	235		
-/- DRx^2 (1K) + EMC87	7037	157	140	1698	163	310	301	183	187
-/- DRx^2 (0K) + 38700		171	152		179	344	337		188
-/- DRx^2 (1K) + 38700		159	141		164			185	190
Compaq 386/33L (64K)	10124	203	173	2377	208	272	182		
-/- + 3C87 + EMC87		192	160		199		474		224
-/- + 4C87DLC		199	168		208				229
-/- + EMC87		182	151		190				
-/- + Cx387+		186	155		193				215
-/- + CT38700		185	156		191				210
-/- 38600 + EMC87		184	177		202				220
-/- 38600 + 387DX		183	165		190				217
-/- 38600 + 387DX + EMC87		185	177		202				220
-/- 38600 + 3C87		178	161		188				202
-/- 38600 + 3C87 + EMC87		180	163		189		471		210
-/- 38600 + 4C87DLC		182	164		195				211
-/- 38600 + 4C87DLC + EMC87		182	164		195				
-/- 38600 + Cx387+		179	166		193				207
-/- 38600 + Cx387+ + EMC87		180	168		195				209
-/- 38600 + 38700		194	186		210				229
-/- Ti486DLC + EMC87		147	122		152				169
-/- DLC + 387DX	6687	170	147	1723	173				201
-/- DLC + 387DX + EMC87		148	123		152				170
-/- DLC + 3C87		158	133		162				184
-/- DLC + 3C87 + EMC87		160	134		163				185
-/- DLC + 4C87DLC		163	139		169				188
-/- DLC + 4C87DLC + EMC87		163	140		169				188
-/- DLC + Cx387+		151	126		154				173
-/- DLC + Cx387+ + EMC87		153	128		157				176
-/- DLC + 38700		152	127		154				172
-/- DLC + US83C87		152	128		155				173
-/- Cx486DRx^2 + EMC87		121	108		126		184		137
-/- DRx^2 + 387DX		147	136		150		210		171
-/- DRx^2 + 387DX + EMC87		112	99		114				128
-/- DRx^2 + 3C87		132	119		134		434		152
-/- DRx^2 + 3C87 + EMC87		134	121		138				154
-/- DRx^2 + 4C87DLC + EMC87		136	126		144				
-/- DRx^2 + 83D87		121	108		126				136
-/- DRx^2 + Cx387+		115	102		117				131
-/- DRx^2 + Cx387+ + EMC87		117	105		119				134
-/- DRx^2 + 38700						190	186		139
-/- DRx^2 + 38700 + EMC87		112	100		114				128
-/- DRx^2 + US83C87		125	112		129				140

OPTi 495 SLC + US83C87/40 (0K)		284	248		293			306	297
-/- + US83C87/40 (256K)		166	143		173			203	190
ADD-X 340 + 83D87 (40MHz)		156	131						
-/- + EMC87		155			161	157	138		
-/- + US83C87		160	137		167				
Datek + Cx387$^+$ (33MHz)		152	126			195	188		
-/- Cx486DLC + Cx387$^+$		148	122			150	193		
-/- + RapidCAD (33MHz)		95	90			99	140		
-/- + RapidCAD (40MHz)		80	73			84	120		
Compaq 486s/16m + 487SX	10749	147		2892		250	235		
Compaq 486s/25m + 487SX	6924	99	91	1877	105				
DECpc LPv+ 433sx (PC+128K)	5120			1378					
DECpc XL & U5S/33 (0+0K)	15707								
-/- & U5S/33 (PC+0K)	3395			1053					
-/- & U5S/33 (PC+128K)				1020					
-/- 466S2 (PC+256K)	2582			700					
Alaris Cougar 486BL3X + 387		202	187		204				242
-/- + 3C87		155	140		157				185
-/- + 4C87DLC		160	148		165				
-/- + XC87DLX2 (0+0K)	5911	271	248		287				282
-/- + XC87DLX2 (PC+0K)		161	145		162				186
-/- + XC87DLX2 (PC+256K)		125	110		127		126		149
-/- + Cx387$^+$	3287	141		850	143				
-/- + US83C87		145	129		146				169
Compaq 486/25		95				193	84	131	124
UMC 4913 (25MHz, 256K)		95	87		101	**186**	**182**		113
DECpc 425SLC/e		108	97		115				122
IBM 8570 R21 (25MHz)		109			116	170	109	131	124
-/- Overdrive (25/50MHz)		67	62		73	65	102	75	74
Compaq Prolinea 450 (no SC)		46	42		48	111	40		
Compaq 486/33		77	70		82	94	85	93	
DECpc XL 433DX (0+0K)		154	140		178				166
-/- 433DX (PC+0K)		75	69		80				88
-/- 433DX (PC+128K)		70	64		74				83
-/- 433DX (PC+256K)		70	63		73				80
DECpc XL 466D2 (0+0K)		134	**ab.**		158				139
-/- 466D2 (PC+0K)		45	41		49				50
-/- 466D2 (PC+128K)		38	34		40				45
-/- 466D2 (PC+256K)		37	33		39				42
-/- & ST486/66 (0+0K)		149	132		170				153
-/- & ST486/66 (256K)		43	37		45				48
-/- & Cx486/66 (0+0K)		149	132		171				153
-/- & Cx486/66 (PC+0K)		51	44		55				56
-/- & Cx486/66 (256K)		43	37		45				48
Compaq 486/66m		36	33		39	62	243		42
Toshiba 4800 (DX4/75)		39	36		42				44
ALI-VIP DX4/100 (PC+0K)		38	33		41				39
-/- DX4/100 (PC+256K)		29	26		33				33
Compaq Prolinea 4/100		28	25		30	31	28	32	31
DECpc XL 4100 (0+0K)		127	115		153				132
-/- 4100 (PC+0K)		30	27		32				33
-/- 4100 (PC+128K)		26	24		28				30
-/- 4100 (PC+256K)		26	23		27				29
-/- & PODP/83 (0+0K)		145	135		185				
NexGen Nx586 (60MHz, 256K)	1967			645					
AS600 5/266, WNT 3.51		565	475		599				

ref.time = DAT50

Toshiba 3200SX (16MHz)		3070	2646		3171				3442
Compaq XE 450 (PC+256K)		300	273		319				337
Compaq Prolinea 450 (no SC)		337	307		363				373
-/- & 486/25 (PC+0K)		577	526		577				652

(...continued...)

	C1	C2	C3	C4	C5	C6
-/- & 486/33 (PC+0K)	455	433	395	463		489
-/- & 486/66 (PC+0K)		253	230	272		279
-/- & DX4/75 (PC+0K)		228	205	246		248
-/- & DX4/100 (PC+0K)		171	154	184		186
-/- & PODP/63 (32+0K)		172	150	180		182
-/- & PODP/83 (32+0K)		129	113	135		137
-/- & Cx5x86/75 (PC+0K)	251	237	203	256		260
-/- & Cx5x86/100 (PC+0K)		177	152	192		195
Toshiba 4800 (DX4/75)		222	203	237		248
OPTi 895 & Amd486/80 (256K)		191	174	209		
ALI-VIP DX4/100 (PC+256K)		161	145	177		179
Asus 486SP3 & Am5x86/133	118	118	108	97	132	126
Asus 486SP3 & Am5x86/160		98	88	109	116	116
Asus 486SP3 & Cx5x86/100	158	144	107	154		167
Asus 486SP3 & Cx5x86/120		127	95	137	148	142
Asus 486SP3 & PODP/83	109	98	86	105	ab.	118
Asus 486SP3 & PODP/100		88	77	94	ab.	109
DECpc XL 4100 (PC+128K)		150	137	161		172
-/- & Am5x86/100 (16+256K)		139	126	150		162
-/- & Cx5x86/100 (16+256K)		144	114	153		167
DECpc XL 560 (256K)		136	120	142		161
Compaq XE 560 (no SC)		137	121	145		159
Compaq XL 566 (256K)		123	108	128		145
OPTi 586 PCI (66MHz, no SC)		158	138	172		182
-/- (66MHz, 1024K)		129	115	137		155
DECpc XL 590 (0+0K)		679	611	798		666
-/- 590 (PC+0K)		105	93	112		123
-/- 590 (PC+256K)		91	81	97		111
DEC Celebris 5120 (0+0K)	765	662	606	786		
-/- (PC+256K)		68	61	74		81
DEC Celebris 5133 (0+0K)	689	595	544	706		
-/- (PC+256K)	73	64	57	69		78
ref.time = DAT999						
DECpc XL & Ti486/66		12379	11067	13708	14006	
DECpc XL 4100 (128K)		7415	6826	9021		
-/- (256K)	7391	6871	6321	8289		
-/- & AmdDX4 (256K)		7814	7236	9247	8924	8685
-/- & Am5x86/100	7871	7246	6683	8478	8562	8182
-/- & Cx5x86/100	8236	7696	6387	10377	8697	
Asus 486SP3 & Am5x86/160		4843	4424			
Asus 486SP3 & Cx5x86/120						
Asus 486SP3 & PODP/100		4324	3847			
Compaq XE 560	7345	6726	6022	8029		7793
-/- & PODP/120	4424	3845	3432	3410	4460	4556
DECpc XL 590	4890	4480	4005	5262	5387	5412
Asus P55T2P4 & P54/100	4059	3870	3461	4276		4539
OPTi PB586 (100MHz)		4415	3977			
Tadpole P1000	4573	4033	3606	5401		4982
Compaq XL 5100		3902	3496	4341		4558
DEC Celebris 5100		4139	3697	4682		4823
UMC 8890 (120MHz)	39883622	3232				
DEC Celebris 5120		3434	3065	4025	4064	4030
Asus P55T2P4 & P54/120	3454	3293	2959	3615		3822
DEC Celebris 5133	3668	3157	2830	4046		3735
DEC Celebris 5150		2942	2625	4031		3447
DEC Celebris 5166	2924	2655	2363	3133	3074	3015
Intel UTS P6/133		4048	3792	4269		
Intel UTS P6/200	2774	2693	2531	2845	3102	3088

Lahey 3.00 ; source version =	original	VAST	SPAG	FOREST	KAP
ref.time = DAT35					
Compaq 286/12	19295	23272			
Compaq 386/16	11911	14324	11471		
Compaq 386-s/20	13885	17033	13160	13176	14067
Daewoo (Am386SX/40MHz)	6770				
Compaq 386/20	7950	9573	7655	7602	8088
Compaq 386/25	6470	7799	6232	6186	6582
Compaq 386/25 & Ti486DLC	5361	6470	5167		
OPTi 495 SLC (486SX/33, 256K)	2294	2735		2198	2326
Alaris Cougar 486BL3X (PC+0K)	1651	1979	1587	1579	1673
-/- 486BL3X (PC+256K)	1562	1828	1488	1497	1540
NexGen Nx586 (60MHz, 256K)	962	1185	933	916	983
-/- (75MHz, 256K)	810	998	777	770	835
-/- (90MHz, 256K)	676	838	648	644	689
DEC 3000/500, OSF/1 3.0, SoftPC	2335	3008	2440	2416	
ref.time = DAT50					
AS600 5/266, WNT 3.51 (SoftPC)	2462	2986	2435	2487	2390
DECpc LPv+ 433sx (PC+128K)	13025	15449	12565	12514	
DECpc XL & U5S/33 (PC+0K)	10513	12498	10073	10015	10613
-/- & U5S/33 (PC+128K)	10291	12297		9858	10441
Alaris Cougar 486BL3X	8995	10442			
IBM PC/XT + 8087	23146	26909	21986		
-/- & V20 + 8087	22502	26213	21387	20767	
Compaq 286/12 + 287	11386	13936	11018	10898	11071
-/- + 287XL	7832	9531	7541	7433	7519
-/- + 2C87	7271	8986	7010	6905	6912
Donatec 386SX/16 + 387SX	4751	5556	4432	4328	4351
-/- + 3C87SX	4465	5238		4038	4062
-/- + 487SLX	4213	4908	3904	3793	3820
Compaq 386-s/16 + 387SX		4091	3266	3195	3280
-/- + 3C87SX	3136	3747	2973	2896	2942
-/- + 487SLX	2852	3405	2710	2635	2687
Amstrad 7386SX + 387SX	2318	2740	2155	2145	2160
-/- + 3C87SX (25MHz)	2121	2533	1972	1954	1957
-/- + 487SLX	1924	2296	1790	1778	1786
Compaq 386/16 + 287		11501		9029	9194
-/- + 2C87	5195	6462	5028	4950	4971
-/- + 3C87	2764	3294	2599	2522	2579
-/- + 4C87DLC	2809	3334	2640	2560	2631
-/- + XC87DLX2	2536	2990	2377	2300	2371
-/- + Cx387$^+$	2636	3116	2484	2411	2476
Compaq 386/25 + 4C87DLC	1163	1389	1085	1069	1090
-/- + XC87DLX2	1482	1761	1381	1346	
-/- + US83C87	1609	1911			
-/- Cx486DRx^2 + CT38700	1069	1241	988	964	989
Compaq 386/33 (64K)					
-/- CT38600 + US83C87	1176	1362	1082	1053	1122
-/- Ti486DLC + US83C87	986	1182	931	910	934
-/- Cx486DRx^2 + 4C87DLC	843	1008	796		
-/- + 83D87	755	823	652	635	649
-/- + Cx387$^+$	773	929	730		
-/- + CT38700	766	912	728	710	716
-/- + US83C87	711	861	686		
OPTi 495 SLC + US83C87/40 (256K)	1050	1244	975	953	987
Alaris Cougar 486BL3X + 4C87DLC	966	1180			
-/- + XC87DLX2	752	927	717		
-/- + US83C87	882	1082	841	834	
DECpc 425SLC/e	742	838	708	671	700
DECpc XL 433DX (0+0K)	1199	1318	1101	1057	1064
-/- 433DX (PC+0K)	525	588	495	476	492
-/- 433DX (PC+128K)	495	559	472	449	463

(...continued...)

-/- 433DX (PC+256K)	491	557	467	447	460
-/- 466S2 (PC+256K)	13250	13531		12607	12578
-/- 466D2 (0+0K)	1052	1169	973	936	934
-/- 466D2 (PC+0K)	315	342	295		
-/- 466D2 (PC+128K)	262	291	250	236	244
-/- 466D2 (PC+256K)	256	287	242	232	239
-/- & Amd486/66 (256K)	260	291	244	235	243
-/- & ST486/66 (0+0K)	1072	1176	979	932	941
-/- & ST486/66 (256K)	291	336	273	269	269
-/- & Cx486/66 (0+0K)	1074	1177		934	943
-/- & Cx486/66 (256K)	290	335	268	259	269
OPTi 495 SLC & 487SX/33 (PC+256K)	528	581	484	471	481
-/- & ST486/66 (PC+256K)	300	318	270	260	267
Toshiba 4800 (DX4/75)	257	293	248	239	242
OPTi 895 & Amd486/80 (0+0K)		1335	1111	1064	1071
-/- & Amd486/80 (256K)	231	257	214	206	215
ALI-VIP DX4/100 (PC+0K)	249	281	243	236	227
DECpc XL 4100 (0+0K)	1003	1125	936	899	897
-/- 4100 (PC+0K)	199	225	193	188	186
-/- 4100 (PC+128K)	178	199	173	165	165
-/- 4100 (PC+256K)	173	194	167	161	161

ref.time = DAT100

Toshiba 3200SX (16MHz)	15125	15038	14263	11663	14356
Compaq 386/16 + 287		42595		39478	39107
DECpc 425SLC/e	3173	3114	2987	2500	2602
Compaq XE 450 (PC+256K)	1545	1505	1461	1222	1244
Compaq Prolinea 450 (no SC)	1692	1607	1585	1323	1373
-/- & 486/25 (PC+0K)	2998	2918	2829	2363	2441
-/- & 486/33 (PC+0K)	2247	2187	2120	1773	1829
-/- & 486/66 (PC+0K)	1268	1204	1187	988	1028
-/- & DX4/75 (PC+0K)	1146	1125	1115	943	930
-/- & DX4/100 (PC+0K)	862	842	834	704	700
-/- & PODP/63 (32+0K)	743	872	749	862	712
-/- & PODP/83 (32+0K)	559	652	560	644	532
-/- & Cx5x86/75 (PC+0K)	1338	1163	1277	1300	980
-/- & Cx5x86/100 (PC+0K)	1002	871	956	974	734
DECpc XL 466D2 (PC+128K)	1118	1079	1067	873	901
-/- 466D2 (PC+256K)	1094	1065	1033	867	
-/- & ST486/66 (256K)	1272	1245	1195	1193	996
-/- & Ti486/66 (256K)	1140	1218	1064	946	937
Compaq 486/66m	1089	1064	1026	860	
Toshiba 4800 (DX4/75)	1095	1084	1058	884	894
Asus 486SP3 & Am5x86/133	559	549	520	441	449
Asus 486SP3 & Am5x86/160	500	489	460	399	
Asus 486SP3 & Cx5x86/100	720	697		655	562
Asus 486SP3 & Cx5x86/120	630	601	570	569	494
Asus 486SP3 & PODP/83	387	456	365		
Asus 486SP3 & PODP/100	343	405			
ALI-VIP DX4/100 (PC+256K)	804	782	744	635	640
DECpc XL OVDR/100 (PC+128K)	758	736	737	610	613
-/- 4100 (PC+128K)	760	739	739	619	614
-/- 4100 (PC+256K)	721	709	680	571	584
-/- & AmdDX4 (8+256K)	772	**745**	724	605	**621**
-/- & PODP/83 (32+256K)	716	685	679	672	561
-/- & Cx5x86/100 (16+256K)	716	683	680	676	561
-/- & Am5x86/100 (16+256K)	723	711	683	572	586
Compaq XE 560 (no SC)	557	642	521	605	531
Compaq XL 566 (256K)	550	587	531	539	472
DECpc XL 590 (0+0K)	3532	4098	3274	3668	3136
-/- 590 (PC+0K)	432	482	395	475	415
-/- 590 (PC+256K)	370	423	345	398	350

(...continued...)					
Compaq XL 5100 (256K)	322	374	302	347	305
xxx (90MHz, 256K)	370	428	345	397	351
Gateway P5-100 (no SC)	352	400	326	380	334
OPTi PB586 (100MHz, 256K)	362	411	331	395	347
Tadpole P1000 (256K)	333	382	311	356	314
xxx (120MHz, 256K)	337	369	305	364	313
xxx (133MHz, 256K)	260	296	240	277	247
DEC Celebris 5120 (0+0K)	3508	4055	3240	3616	3109
-/- (PC+256K)	277	318	256	297	261
DEC Celebris 5133 (0+0K)	3184	3638	2883	3286	2777
-/- (PC+256K)	261	296	240	281	247

ref.time = DAT999					
DECpc XL 4100					
-/- & AmdDX4 (128K)	9208	9986	8750	8391	8486
-/- & AmdDX4 (256K)	9042	9845	8493	8104	8346
-/- & Am5x86/100	8646		8282	7974	7993
-/- & Cx5x86/100	9275	9692	9152	8784	8069
Compaq XE 560	7443	8467	6984	6875	7147
-/- & PODP/120	4355	4936	4665	4352	4321
DECpc XL 590	4928	5992	5399	4808	5089
Asus P55T2P4 & P54/100	4248	4886	4015	3909	4073
Compaq XL 5100	4317	4891	4036	3944	4107
Tadpole P1000	4437	5007	4148	4054	4200
DEC Celebris 5100	4906	5240	4690	4283	4387
UMC 8890 (120MHz)	3997	4423	3676	3625	3773
DEC Celebris 5120	3770	4209	3492	3427	3531
Asus P55T2P4 & P54/120	3619	4139	3390	3350	3475
DEC Celebris 5133	3493	3897		3189	3318
DEC Celebris 5150	3266	3560	3036	2968	3052
DEC Celebris 5166	2941	3239	2664	2671	2774
Intel UTS P6/133	5761	6970	5894	5680	6135
Intel UTS P6/200	3842	4651	3801	3636	4022

IBM 8580 (16 MHz)	original version	SPAG version
ref.time = DAT35		
FTN77/386 1.59	384	371
FTN77/386 1.67	377	365
Lahey EM-32 2.01	399	387
Lahey 3.00	508	493
Lahey 4.00	557	544
MicroSoft 4.10	471	464
MicroSoft 5.0	456	454
Prospero 1.252	674	649

3. 32 bits Fortran compilers (with and without Dos Extenders: Dos32 and Win32) :

- FTN77/386 & 486 versions 1.4, 1.6, 2.4, 2.76 and 3.16; FTN/NT version 2.05 from Polyhedron Software - Salford University; (DBOS 2.50 is a "386-specific" version) ;

- Salford FTN90 versions 1.12 and 2.01 (with DBOS 2.69 and 2.76), from NAG & Polyhedron Software ;

- MicroSoft PowerStation version 1.0 (1993), PowerStation 32 version 1.0 (1995), PowerStation version 4.0(1996) ;

- Lahey F77L/EM-32 versions 1.0, 3.01, 4.0 and 5.01, 5.10, 5.20; Lahey F90 versions 1.0, 1.0j, 2.0b (1995) ;

- MicroWay version 3.0 ;

- Silicon Valley Software version 2.4 (?) (1988) ;

- Watcom versions 9.01, 9.5 and 10.5 (1995) ; (floating-point emulation is done, on system without floating-point unit, by dos4gw.exe (versions 1.3, 1.4, 1.8, 1.92, 1.95, 1.97) at run-time; − to be compared with floating-point emulation by compiler −) .

| (Dos32) FTN77/386 version | 2.40 1.60 1.40 | 2.40 1.60 1.40 | 2.40 1.60 1.40 | 2.40 1.60 1.40 |
library version	DBOS 2.40	**DBOS 2.50**	DBOS 2.69	DBOS 2.76
ref.time = DAT50				
Compaq 386/16 + 287	xxxx xxxx 7508			
Compaq 386/25	37223 38218 38405			
-/- Ti486DLC	37390 38387 xxxxx			
-/- + 387	1101 1143 1234	1107 1142 1258	1108 1143 1238	
-/- + 3C87	899 944 1039	901 947 1040	905 944 1041	
Compaq 386/33L & Ti486DLC	10717 11056 11115			
-/- + Cx387$^+$	629 662 735	628 661 733	630 xxx xxx	
-/- + CT38700	629 661 733			
-/- 38600 + 38700	747 786 802	746 784 800	747 787 805	
-/- Ti486DLC + 387DX	627 645 abend			
-/- DLC + Cx387$^+$ + EMC87	572 592 abend			
-/- DLC + 38700	563 583 abend	568 590 abend	563 582 abend	
-/- DLC + US83C87	572 593 abend	580 601 abend	575 594 abend	576 595 abend
-/- Cx486DRx^2 + EMC87		443 455 481		
-/- DRx^2 + 4C87DLC	535 553 582	535 552 580	536 553 583	
-/- DRx^2 + Cx387$^+$	475 495 525	479 496 528		
-/- DRx^2 + 38700	475 493 521	475 492 520	476 493 523	
-/- DRx^2 + US83C87				480 500 525
Compaq Prolinea 4/25S	9949 10205 10285	24851 25514 25640	10709 10993 11068	
DECpc 425SLC/e	390 414 438	487 533 578	392 415 439	393 417 442
UMC 4913 (25MHz, 256K)	346 373 394	523 530 575	346 374 395	
DECpc LPv+ 433sx (0+0K)		31874 32743 32925	33112 xxxxx xxxxx	
DECpc LPv+ 433sx (PC+0K)			8376 8590 8647	
DECpc LPv+ 433sx (PC+128K)	7327 7601 7638	29383 30430 29505	7852 8104 8179	
Compaq 486/33	287 301 316	384 422 453	287 301 317	
DECpc XL & U5S/33 (PC+256K)				
-/- 433DX (PC+0K)	281 296 312	387 421 455	282 297 313	283 298 315
-/- 433DX (PC+256K)	255 277 293	367 392 426	255 277 293	257 278 294
Compaq 486/66m	138 147 155		136 144 152	
DECpc XL 466D2 (0+0K)	476 501 552	473 499 550	475 500 553	478 504 557
-/- 466D2 (PC+0K)	169 171 179	292 313 349	170 172 179	171 173 181
-/- 466D2 (PC+256K)	135 144 152	269 278 304	136 144 152	138 145 153
-/- & ST486/66 (0+0K)	510 543 632	508 541 630	509 543 633	
Alaris Cougar 486BL3X + 387	850 868 903	871 897 934	849 869 903	
-/- + XC87DLX2	493 507 542	515 537 576	494 507 543	
Toshiba 4800 (DX4/75)	141 144 153	284 304 334	142 143 153	142 144 154
OPTi 895 & Amd486/80 (0+0K)	524 551 597	527 550 593	526 550 598	
-/- & Amd486/80 (256K)	123 127 134	254 257 280	123 127 134	
OPTi 586 PCI (66MHz, no SC)	93 101 114	247 265 302		
-/- (66MHz, 1024K)	69 78 89	177 189 224		
NexGen Nx586 (60MHz, 256K)	3054 3149 3167	3057 3145 3164	3277 3371 3386	
-/- (75MHz, 256K)	3170 3322 3336			
ref.time = DAT100				
DECpc XL 466D2 (128K)	516 543 571	997 977 1064	510 540 572	
-/- & Amd486/66 (256K)	500 535 564	996 1020 1113	502 536 565	
-/- & ST486/66 (256K)	564 ab. ab.	1076 ab. ab.	567 ab. ab.	
ALI-VIP DX4/100 (PC+256K)	366 381 406	665 718 790	368 379 404	
DECpc XL 4100 (0+0K)	1669 1760 1945	1661 1758 1939	1664 1759 1948	1679 1775 1964
-/- 4100 (PC+0K)	388 401 429	889 967 1058	391 401 428	397 402 431
-/- 4100 (PC+256K)	335 355 375	862 866 952	337 356 377	
Compaq XE 560 (no SC)	264 366 415	697 994 1139	264 367 418	
DECpc XL 590 (0+0K)		1392 1905 2110	1380 1890 2121	1396 1911 2142
-/- 590 (PC+0K)	216 289 325	688 930 1050	216 290 328	221 294 330
-/- 590 (PC+256K)	171 239 272	498 681 766	171 239 274	175 240 276
Tadpole P1000 (256K)	155 215 247	**514 724 807**	158 218 249	155 217 248
DEC Celebris 5120 (0+0K)		1375 1886 2068	1368 1864 2081	1383 1882 2100
-/- (PC+256K)	130 180 206	**553 752 854**	127 178 204	130 179 205
DEC Celebris 5133 (0+0K)	1247 1703 1871	1224 1689 1858	1228 1674 1870	1242 1691 1886
-/- (PC+256K)	132 170 196	482 612 693	123 169 193	126 171 195
Intel UTS P6/133	79 133 174	**979 1358 1431**	79 134 176	79 135 177
Intel UTS P6/200	57 92 120	**861 1187 1241**	57 94 121	53 118 123
ref.time = DAT999				
Compaq XE 560	3567 4207 4773	9317 11330 12919	3561 4206 4817	3696 4311 4927
-/- & PODP/120		7954 9637 10931		2201 2488 2817

compiler	(Dos32) FTN77/486								(Win32) FTN77/NT		
compiler version	1.40	1.60	2.40	3.11	1.40	1.60	2.40	3.11	2.05	y.xx	x.yy
library version	DBOS 2.76				DBOS 3.16						
ref.time = DAT50											
Compaq 386/25											
-/- Cx486DRx^2											
-/– DRx^2 + 387DX											
-/– DRx^2 + XC87DLX2											
-/– DRx^2 + 83D87									659		
-/– DRx^2 + Cx387$^+$									718		
-/– DRx^2 + US83C87									712		
DECpc XL 466S2									2227		
ref.time = DAT100											
Alaris Cougar 486BL3X											
-/- + US83C87									2888		
DECpc 425SLC/e									1579		
ref.time = DAT999											
ALI-VIP DX4/100											
DECpc XL 4100											
-/- & Ti486/66	ab.	ab.	8106	8036	ab.	ab.	8129	8066			
-/- & Am5x86/100									4818		
Compaq XE 560	4927	4311	3696	3697	4946	4307	3664	3672			
-/- & PODP/120	2817	2488	2201	2231	2823	2455	2155	2167	2369		
DECpc XL 590	3176	2779	2369	2340	3165	2763	2338	2304			
OPTi PB586 (100MHz)	3081	2715	2362	2355	3078	2687	2319	2301	2489		
Tadpole P1000	2859	2503	2131	2108	2848	2487	2103	2075			
DEC Celebris 5120	2372	2053	1759	1716	2350	2055	1734	1702			
DEC Celebris 5133	2249	1962	1698	1682	2250	1957	1691	1664			
DEC Celebris 5150	2105	1859	1634	1619	2110	1836	1599	1580	1792		

(Dos32) Lahey F77L/EM-32 compiler switch	1.0	3.01	4.0	5.0 /0	5.0 /2	5.0 /4	5.1 /2	5.1 /4	5.2 /2	5.2 /3	5.2 /4
ref.time = DAT50											
Donatec 386SX/16 + 387SX	ab.	3331	3324	3196	3196	3314	3198	3316	3162	3162	3294
-/- + 3C87SX		3125		2983	2983	3100	2984	3102	2948	2947	3073
-/- + 487SLX	ab.	2914	2905	2775	2775	2887	2776	2889	2725	2725	2842
Compaq 386-s/16 + 3C87SX		2046	2044	1979	1979	2033	1979	2033	1949	1948	
-/- + 487SLX	2143	1836	1831	1789	1789	1841	1789	1842	**2789**	**2789**	**2915**
Compaq 386/16 + 287	9978	7706	7710	7657	7656	7692			7648	7649	7688
-/- + 2C87	4165				a b e n d						
Compaq 386/25 + 387	1216	1138	1144	1124	1124	1141	1124	1142	1128	1127	1146
-/- + 3C87	1068				a b e n d						
-/- + 83D87	943	867	872	839	849	866	848	867	854	854	871
-/- + 38700	963	887	893	869	869	886	869	887	874	874	890
-/- + XC87DLX2	901	825	830	806	806	822	806	823	811	811	827
-/- + US83C87	1058	927	934	912	912	929	912	930	1089	1089	1118
-/- 38600 + US83C87	1173	1047	1053	1059	1059	1070	995				
-/- Ti486DLC + 387DX	1205	1078	1082	1071	1071	1086	1071	1088	1262	1262	1291
-/- DLC + 3C87	1005				a b e n d						
-/- DLC + 4C87DLC	1038	903	905	899	899	915	899	915	1087	1087	1116
-/- DLC + XC87DLX2	874	741	744	735	735	751	735	751	928	928	956
-/- DLC + EMC87	938	802	805	789	789	804	789	806	988	988	1017
-/- DLC + Cx387+	968	830	832	825	825	842					
-/- DLC + 38700	954	824	828	812	812	827	812	829	1011	1011	1039
-/- DLC + US83C87	977	840	844	838	838	854	838	854	1030	1030	1058
-/- Cx486DRx^2 + 3C87	760				a b e n d						
-/- 486DRx^2 + 4C87DLC		780	782	769	769	783	768	784	769	769	786
-/- 486DRx^2 + 83D87	690	631	634	638	638	652	637	652	641	640	656
Compaq 386/33L + 387DX	764	715	717	698	698	708	698	709	699	699	708
-/- + 4C87DLC	771	715	719	693	693	704	693	704	694	694	704
-/- + Cx387+	723	664	667	640	640	652	640	652	642	642	651
-/- + CT38700	715	661	665	638	638	649	638	648	639	639	648
-/- + US83C87	746	686	690	666	677	667	667	680			
-/- 38600 + 3C87	767				a b e n d						
-/- 38600 + EMC87	797	742	747	737	737	740					
-/- 38600 + Cx387+	804	749	753	743	743	746					
-/- 38600 + Cx387+ + EMC87	805	749	754	744	744	747					
-/- 38600 + 4C87DLC + EMC87	763	711	714	703	703	708	703	708	704	704	704
-/- 38600 + US83C87	820	775	779	769	769	773	769	774	770	770	770
-/- Ti486DLC + EMC87	629	573	575	558	558	566	558	567	558	558	567
-/- DLC + 387DX	707	655	656	644	644	652	644	652	644	644	652
-/- DLC + 387DX + EMC87											
-/- DLC + 3C87	676				a b e n d						
-/- DLC + 4C87DLC	704	650	651	636	635	644					
-/- DLC + 4C87DLC + EMC87	705	649	652	636	636	644			636	636	645
-/- DLC + Cx387+	649	595	596	581	581	590	581	590	581	581	589
-/- DLC + Cx387+ + EMC87	656				a b e n d						
-/- DLC + 38700	649	598	600	583	583	592	584	593	584	584	593
-/- DLC + US83C87	657	603	605	589	589	599	590	599	590	590	599
-/- Cx486DRx^2 + 387DX		589	589								
-/- DRx^2 + 387DX + EMC87	502	458	460	450					450	450	460
-/- DRx^2 + 4C87DLC	580	537	538	533	533	542	533	543	535	535	545
-/- DRx^2 + 4C87DLC + EMC87	611	571	573							553	
-/- DRx^2 + Cx387+ + EMC87	532	485	486	477	477	484	477	487	478	478	488
-/- DRx^2 + 38700	546	511	511	493	493	500	493	504	491	491	503
-/- DRx^2 + 38700 + EMC87	503	459	460	450	450	459	449	459	451	451	461
-/- DRx^2 + US83C87	552	511	512	495	506						
Alaris Cougar 486BL3X + 387	911	860	864								
-/- + 3C87	712				a b e n d						
-/- + 4C87DLC	666	606	608								
-/- + XC87DLX2 (0+0K)	1193	1172	1174								
-/- + XC87DLX2 (PC+0K)	716	666	672								
-/- + XC87DLX2 (PC+256K)	554	503	506	496	503				501	501	500
-/- + US83C87	666	603	609								
UMC 4913 (25MHz, 256K)	387	378	385	376	376	363	376	365	380	380	365
DECpc 425SLC/e	435	428	438	420	420	409	419	408	425	425	413
IBM 8570 R21 (25MHz)											

(...continued...)											
-/- Overdrive (25/50MHz)	328	269	272			a b e n d					
Compaq 486/33	327	314	320	308	309	303	308	303	312	312	308
Compaq 486/66m	153	149	151	149	149	145	149	145	150	150	147
DECpc XL 466D2 (0+0K)	604	583	589	548	548	561	549	566	541	541	547
-/- 466D2 (PC+0K)	200	191	194	186	186	186	187	186	189	189	192
-/- 466D2 (PC+128K)	161	155	157	153	153	159	153	151	154	154	151
-/- 466D2 (PC+256K)	155	148	151	146	146	142	146	142	148	148	144
-/- & Amd486/66 (256K)	155	150	153	148	148	145		146	149	149	146
-/- & ST486/66 (256K)	179	ab.	174	164	ab.	ab.	164				
-/- & Cx486/66 (256K)		ab.	224	ab.	204	ab.	ab.	ab.	ab.	209	ab.
OPTi 895 & Amd486/80 (0+0K)	711	665	671	622	622	648	623	648	614	614	624
-/- & Amd486/80 (256K)	145	138	140	138	138	133	137	134	138	138	135
ALI-VIP DX4/100 (PC+0K)	160	154	157	150	150	154	150	154	155	154	157
-/- DX4/100 (PC+256K)	118	115	118	115	115	113	114	114	118	118	115
Compaq Prolinea 4/100	118	114	116	111	111	110	111	111	114	114	112
DECpc XL 4100 (0+0K)	582	559	564	524	524	544	525	544	515	515	525
-/- 4100 (PC+0K)	128	123	126	120	120	122	120	122	123	123	123
-/- 4100 (PC+128K)	111	107	109	106	106	105	106	106	106	106	105
-/- 4100 (PC+256K)	106	103	105	103	103	102	103	103	103	103	101
Compaq XE 560 (no SC)	91	87	91	87	87	82	86	82	95	95	94
ref.time = DAT100											
Toshiba 3200SX (16MHz)		8553	8536		9928	10194	9931	10197	9832		10142
ALI-VIP DX4/100 (PC+256K)	429	451	488	496	496	489	494	494	510	510	498
Asus 486SP3 & Am5x86/160		289	314		310	302	308	305	315		306
DECpc XL 4100 (PC+128K)	412	427	458	466	466	461	466	464	466	466	460
DECpc XL 4100 (PC+256K)		393	424	429	429	457	467	460	471	471	463
-/- & AmdDX4 (8+256K)		427	458	466	466	417	428	419	435	435	420
-/- & Cx5x86/100 (16+256K)	353	ab.									
-/- & Am5x86/100 (16+256K)	380	394	425	429	429	417	429				
Compaq XE 560 (no SC)	387	326	331	310	311	292	309	290	337	337	297
DECpc XL 590 (0+0K)	2144	1937	1967	1797	1797	1728	1796	1727	1779	1779	1690
-/- 590 (PC+0K)		267	269	249	249	241	248	242	266	266	240
-/- 590 (PC+256K)	256	217	220	201	201	189	201	191	215	215	188
OPTi PB586 (100MHz, 256K)		226	229	210	210	201	210	202	228	227	204
Tadpole P1000 (256K)	227	197	200	183	183	172	182	173	193	193	169
xxx (120MHz, 256K)		215	219	202	202	189	201	191	216	216	189
DEC Celebris 5120 (PC+256K)		162	164	152	152	142	151	144	160	160	140
DEC Celebris 5133 (0+0K)	1961		1751	1605	1605	1545	1605	1545	1582	1582	1514
-/- (PC+256K)	188		158	145	145	137	144	139	154	154	136
Intel UTS P6/133	140	137	158		136	108	135	108	159		110
ref.time = DAT999											
Compaq XE 560 & PODP/120					2489	2395	2480	2399	2700		2396
Tadpole P1000						2415	2285	2584		2586	2258
DECpc XL 590											
UMC 8890 (120MHz)	2382	2411	2530		2242	2136	2228	2160	2399		2124
Asus P55T2P4 & P54/120	2016	2095	2211		1980	1846	1978	1846	2115		1842
DEC Celebris 5150		1942	2042		1837	1752	2001	1777	2001		1777
Intel UTS P6/133		2410			2208						
Intel UTS P6/200	1105	1241	1464	1226	1226	986	1224	986	1451	1451	1005

(Dos32) Lahey F90; version =	1.0		1.0j				
source version		original	FOREST	KAP	SPAG	STRUCT	KAP
compiler switches	o1 t4	o1 tp	o1 t4				o1 tp
ref.time = DAT50							
Donatec 386SX/16 + 387SX	3368	3507	3340	3320	3245	3361	3267
-/- + 487SLX	2922	3023			2791			
Compaq 386-s/16 + 387SX			3402	3380	3141		3415	3320
-/- + 3C87SX	3320	3361						
-/- + 487SLX	3025	3127	2987	2981	2727	2894	3020	2857
Amstrad 7386SX + 387SX	1565	1676		1520			1573	1604
-/- + 3C87SX (25 MHz)				1345			1403	1430
-/- + 487SLX	1242	1329		1208	1247		1265	1246
Compaq 386/16 + ...		287 or 2C87 : not applicable						
-/- + 287XL	4320	4568						
-/- + 387DX			1676	1670	1613	1619	1689	1784
-/- + 3C87	1694	1825	1648	1656	1573	1589	1688	1749
-/- + 4C87DLC	1741	1880		1627				
-/- + XC87DLX2	1475	1577	1455	1450	1383	1395	1478	1496
-/- + Cx387$^+$	1609	1708	1577	1553	1495	1500	1580	1623
-/- + US83C87			1609	1601	1533	1556	1631	1658
-/- + CT38700			1550	1541	1467	1487	1564	1583
-/- 38600 + 38700			**1826**	**1872**	**1730**	**1746**	**1890**	**2190**
Compaq 386/25 + 387	1385	1475						
-/- + 3C87	1190	1277						
-/- + 4C87DLC	1224	1317						
-/- + XC87DLX2	1065	1129						
-/- + EMC87	1105	1172						
-/- Cx486DRx^2 + 4C87DLC	836	899		797			818	882
-/- DRx^2 + CT38700	739	783						
Compaq 386/33L + 387DX								
-/- CT38600 + US83C87	805	865						
-/- Ti486DLC + US83C87	640	682						
-/- Cx486DRx^2 + EMC87	514	546						
-/- DRx^2 + 387DX	594	645						
-/- DRx^2 + 387DX + EMC87	488	521						
-/- DRx^2 + 3C87	557	610						
-/- DRx^2 + 3C87 + EMC87	609	640						
-/- DRx^2 + 4C87DLC	581	631						
-/- DRx^2 + 4C87DLC + EMC87	607	657						
-/- DRx^2 + 83D87			482	475	469	459	484	504
-/- DRx^2 + Cx387$^+$	521	561						
-/- DRx^2 + Cx387$^+$ + EMC87	527	567						
-/- DRx^2 + 38700	522	563						
-/- DRx^2 + 38700 + EMC87	489	521						
-/- DRx^2 + US83C87	498	531						
-/- DRx^2 + US83C87 + EMC87	530	566						
Alaris 486BL3X + US83C87	652	694						
DECpc XL 433DX (0+0K)	596	624						
-/- 433DX (PC+0K)	286	301						
-/- 433DX (PC+256K)	268	281						
Compaq 486/66m	147	154						
DECpc XL 466D2 (0+0K)	531	551						
-/- 466D2 (PC+0K)	184	193						
-/- 466D2 (PC+128K)	147	154						
-/- 466D2 (PC+256K)	142	149	138	139	136	137	140	147
-/- & Cx486/66 (0+0K)			558	569	498		576	512
-/- & Cx486/66 (PC+0K)	216	230	209	207	202		209	220
-/- & Cx486/66 (256K)	182	194	167	174	162		176	178
OPTi 495 SLC & 486/33 (0+0K)			1022	1040	901	1009	1045	937
-/- & Amd486/66 (PC+256K)	185	195	171	183	179		186	190
-/- & ST486/66 (0+0K)	996	1041						
-/- & ST486/66 (PC+0K)	991	1036						
ref.time = DAT100								
Toshiba 3200SX (16MHz)			2387	8590	8263		10383	8892
... Cx486DRx^2 + Cx387$^+$/33	2102	2350						
... Cx486DRx^2 + XC87DLX2/80	1610	1729						
... RapidCAD/33	1349	1270						

(...continued...)								
... RapidCAD/40	1116	1050						
Compaq XE 450 (PC+256K)				868			857	739
Compaq Prolinea 450 (no SC)				866			1027	908
-/- & 486/25 (PC+0K)			1403	1401	1632		1665	1476
-/- & 486/33 (PC+0K)	1183	1118	1051	1049	1222		1240	1105
-/- & 486/66 (PC+0K)	978	928		649			770	688
-/- & DX4/75 (PC+0K)	636	548	580	556	655		692	573
-/- & DX4/100 (PC+0K)				416			518	429
-/- & PODP/63 (32+0K)	409	415	397	356	347	422	356	321
-/- & PODP/83 (32+0K)	306	311	297	266	260	316	266	240
-/- & Cx5x86/75 (PC+0K)	640	691	555	539	516		681	555
-/- & Cx5x86/100 (PC+0K)	474	514	417	405	398		514	417
Toshiba 4800 (DX4/75)	598	551						
OPTi 895 & Amd486/80 (0+0K)	2442	2265						
-/- & Amd486/80 (256K)	529	497						
ALI-VIP DX4/100 (PC+0K)	587	534						
-/- DX4/100 (PC+256K)	431	400						
Asus 486SP3 & Am5x86/160			244	239	279		293	247
Asus 486SP3 & Cx5x86/120			373	270	257		334	281
DECpc XL & Cx486/66	719	815	610	597	588	573	720	645
-/- & Ti486/66	756	850		564	492		565	504
-/- & DX4 (0+0K)	2088	1932						
-/- & DX4 (PC+0K)	469	430						
-/- & DX4 (PC+128K)	401	370	359	356	415	416	434	364
-/- & DX4 (PC+256K)	387	360	329	324	379	378	388	335
-/- & AmdDX4 (8+256K)			362	364	423	426	427	383
-/- & Cx5x86/100 (16+256K)				298	284		358	312
-/- & Am5x86/100 (16+256K)				325	379		389	336
Compaq XE 560 (no SC)	276	282	290	256	251	303	254	245
DECpc XL 590 (0+0K)	1822	1943						
-/- 590 (PC+0K)	245	261						
-/- 590 (PC+256K)	182		182	162	149	185	161	140
Compaq XL 590 (256K)	166	168						
Compaq XL 5100 (256K)	156	158		134			130	116
NexGen Nx586PF100	192	213						
xxx (90MHz, 256K)				164	161		164	161
Gateway P5-100 (no SC)				159	149		162	145
OPTi PB586 (100MHz, 256K)	189	198	189	169	160		173	159
Tadpole P1000 (256K)	163	166	168	156	147	175	155	142
xxx (Cx6x86/120)	210	236						
DEC Celebris 5120 (0+0K)			1716	1571	1291		1577	1281
-/- (PC+256K)		142						106
xxx (133MHz, 256K)				124	121		123	120
DEC Celebris 5133 (0+0K)		1707	1601	1407	1156		1412	1147
-/- (PC+256K)	148	149	144	121	117	145	114	116
Asus (180MHz)	95	98						
ref.time = DAT999								
DECpc XL & Cx486/66			8177	8067	7926		8242	8714
-/- & Ti486/66	9267	9925						
-/- & DX4/100	4530	4713	4481	4389	4386	4363	4496	4607
-/- & AmdDX4/100			5059	5038	5013	5058	5167	5277
-/- & Cx5x86/100	4625	4838	4601	4469	4287			4629
Compaq XE 560	3390	3370	3463	3490	3420	3491	3461	3459
-/- & PODP/120	2030	2081						
DECpc XL 590				2301	2176		2218	2033
Asus P55T2P4 & P54/100	1796	1751	1721	1736	1613			1551
OPTi PB586 (100MHz)	2345	2332						
Compaq XL 5100	1777	1730		1797		1794	1750	1609
DEC Celebris 5100	2083	2133						
DEC Celebris 5120	1604	1574						
DEC Celebris 5150	1531	1550						
DEC Celebris 5166	1394	1396	1438	1434	1400			1450
Intel UTS P6/133	934		999	1031	1059		935	1042
Intel UTS P6/200			686	694	711	870	625	698

(Dos32) Lahey F90 source version switches : o3 ...	version 2.0b				x.y				y.x			
	original		FOREST		original		FOREST		original		FOREST	
	t4	tp	t4	tp	t4	tp	t4	tp	t4	tp	t4	tp
ref.time = DAT50												
Compaq 386/25												
-/– 486DRx^2 + 387DX	877	976	851	926								
-/– DRx^2 + 4C87DLC	807	890	760	842								
-/– DRx^2 + CT38700	720	776	701	733								
ref.time = DAT100												
DECpc 425SLC/e	1539	1875	1478	1578								
ref.time = DAT999												
DECpc XL 466D2												
-/- & Ti486/66	8771	9613	8241	9000								
-/- & AmdDX4/100	4310		4233									
-/- & Am5x86/100	4564	4931	4480	4685								
-/- & Cx5x86/100	4344	4764	4253	4528								
Compaq XE 560	3246	3121	3077	2978								
-/- & PODP/120	2093	2075	1948	1919								
DECpc XL 590	2169	2074	2101	2017								
Tadpole P1000	1927	1829	1863	1785								
UMC 8890 (120MHz)		1757		1718								
DEC Celebris 5120	1542	1434	1508	1437								
Asus P55T2P4 & P54/120		1379		1330								
DEC Celebris 5133	1653	1612	1584	1550								
DEC Celebris 5150	1556	1496	1492	1455								
Intel UTS P6/200	656	658	643	655								

compiler switches	PowerStation version 1.0					
	g3	g3 oP	g3 oX	g4	g4 oP	g4 oX
ref.time = DAT50						
Donatec 386SX/16 + 387SX	3877	3964	3006	3882	3974	3016
-/- + 3C87SX	3678	3781	2809	3701	3794	2822
-/- + 487SLX	3479	3571	2603	3482	3584	2620
Compaq 386-s/16 + 387SX				3960	4053	3094
-/- + 3C87SX				2331	2399	1912
-/- + 487SLX				**2645**	**2734**	**2729**
Compaq 386-s/20	79231	81123	52133			
Amstrad 7386SX (25MHz)	70491	72128	46419	70373	71679	46348
-/- + 3C87SX	1535	1578		1530	1586	1277
Compaq 386/16						50151
-/- + 287			7775	8292	8460	7786
-/- + 287XL	4378			4384	4488	3998
-/- + 2C87	4133	4250	abend	4162	4287	abend
-/- + 3C87				1815	1864	abend
-/- + 4C87DLC				1843	1897	1564
-/- + XC87DLX2				1634	1690	1350
-/- + Cx387$^+$				1752	1798	1474
-/- + 38700	3707	3794	2797	3700	3799	2819
Compaq 386/20	54111	55360	35367			35428
IBM 8570 (20MHz)	59756			59731	60909	39333
Normerel 386/20 + 387	1869	1901	1541	1867	1912	1543
Compaq 386/25	40549		26555			
-/- 38600	43828	44880	27890	43828	44765	28126
-/- Ti486DLC	53451	54778	32962			
-/- Cx486DRx^2 (0K)	37001	37806	23000	36921	37478	23228
-/- Cx486DRx^2 (1K)	26937		16765			
-/- + 387	1217					1074
-/- + 3C87	948	975	816	946	973	821
-/- + 4C87DLC	1050	1080	916	1047	1078	917
-/- + XC87DLX2	1123	1155	932	1107	1158	940
-/- + 83D87	951	978	819	948	976	822
-/- + Cx387$^+$	1200	1224	1008	1186		1015
-/- + US83C87	1231	1258	1028	1217	1262	1036
-/- 38600 + 387	1199	1225	1039	1194	1226	1039
-/- 38600 + 38700	1086	1113	942	1072	1102	941
-/- 38600 + 3C87	1047	1075	abend	1045	1076	abend
-/- 38600 + 83D87	1069	1094	928	1052	1083	927
-/- 38600 + XC87DLX2	1084	1108	952	1068	1098	948
-/- 38600 + US83C87	1338	1361	1135	1320	1364	1139
-/- Ti486DLC + 387DX	1384	1405	1189	1365	1409	1191
-/- DLC + 3C87	1179	1203	abend	1166	1208	abend
-/- DLC + 4C87DLC				1199	1249	1039
-/- DLC + XC87DLX2	1065	1086	882	1045	1092	889
-/- DLC + EMC87	1119	1137	935	1102	1144	943
-/- DLC + Cx387$^+$	1158	1178	973	1141	1184	982
-/- DLC + 38700	1146	1167	957	1128	1173	966
-/- DLC + US83C87	1166	1185	975	1150	1191	982
-/- Cx486DRx^2 (1K) + 3C87						
-/- DRx^2 (1K) + XC87DLX2	609	623	530	604	622	533
-/- DRx^2 (0K) + EMC87				970	1002	823
-/- DRx^2 (1K) + EMC87	692	705	610	687	705	613
-/- DRx^2 (0K) + 38700	766	778	645	762		648
-/- DRx^2 (1K) + 38700	708	721	632	703		624
Compaq 386/33L (64K)				28437	28924	18839
-/- 38600				31576	32239	20077
-/- Ti486DLC						15339
-/- Cx486DRx^2				21954	22377	14320
-/- + 387DX	764	783	662	762	782	661
-/- + 3C87 + EMC87	746	764	abend	746	761	abend

(...continued...)						
-/- + 4C87DLC	770	793	673	769	792	673
-/- + Cx387$^+$	729	747	628	730	746	631
-/- + CT38700	724	743	620	725	743	622
-/- + US83C87	749	770	643	750	771	645
-/- 38600 + EMC87	774	790	674	764	783	672
-/- 38600 + 387DX	788	808	675	787	808	676
-/- 38600 + 387DX + EMC87	774	790	674	765	783	672
-/- 38600 + 3C87	762	782	abend	765	782	abend
-/- 38600 + 3C87 + EMC87	769	790	abend	769	787	abend
-/- 38600 + Cx387$^+$	782	801	681	774	795	679
-/- 38600 + Cx387$^+$ + EMC87	783	801	680	774	795	680
-/- 38600 + 38700	790	811	689	781	804	687
-/- 38600 + US83C87	808	826	703	808	827	701
-/- Ti486DLC + EMC87	622	637	548	622	639	550
-/- DLC + 387DX	702	718	619	700	718	619
-/- DLC + 387DX + EMC87	622		548	622	638	551
-/- DLC + 3C87	668	687	abend	670	687	abend
-/- DLC + 4C87DLC	701	719	624	699	720	625
-/- DLC + 4C87DLC + EMC87	701	718	622	698	720	625
-/- DLC + Cx387$^+$	652	668	576	652	670	579
-/- DLC + Cx387$^+$ + EMC87	656	672	580	655	673	583
-/- DLC + 38700	652	669	574	652	670	576
-/- DLC + US83C87	658	673	577	658	674	579
-/- Cx486DRx^2 + EMC87	536	549	457	537	550	459
-/- DRx^2 + 387DX	631	644	542	629	643	541
-/- DRx^2 + 3C87 + EMC87	602	615	abend	601	614	abend
-/- DRx^2 + 4C87DLC	581	594	521	589	594	522
-/- DRx^2 + 4C87DLC + EMC87	621	634	533	620	635	534
-/- DRx^2 + 83D87				494	505	441
-/- DRx^2 + Cx387$^+$	527	537	470	527	538	472
-/- DRx^2 + Cx387$^+$ + EMC87	529	539	472	528	540	475
-/- DRx^2 + 38700	559	572	476	559	573	478
-/- DRx^2 + US83C87	563	573	475	563	574	477
Am386/40 (128K) + 3C87	645	662	575	643		573
Datek + RapidCAD (33MHz)	410	419	321	410		319
Datek + RapidCAD (40MHz)	338	344	264	337		263
Compaq 486s/25m	21763	22101	14291	21612	22205	14369
Compaq Prolinea 450 & U5S/33 (no SC)					16834	10671
DECpc LPv+ 433sx (128K)	15326	15616	10113	15256	15624	10135
DECpc XL & U5S/33 (0+0K)				52735	54117	34876
-/- & U5S/33 (PC+0K)	15940	16214	10337	15820	16266	10380
-/- & U5S/33 (PC+256K)						
-/- 466S2 (PC+256K)				8177	8370	5379
Alaris Cougar 486BL3X	9624	9725	6703	9590	9727	6724
-/- + 387	914	929	847	913	931	844
-/- + 3C87	702	718	abend	705	721	abend
-/- + 4C87DLC	744	757	687	742	762	687
-/- + XC87DLX2 (0+0K)	1367	1387	1047	1374	1406	1055
-/- + XC87DLX2 (PC+0K)	752	765	690	754	777	693
-/- + XC87DLX2 (PC+256K)	568	580	525	569	585	525
-/- + Cx387$^+$				674	690	624
-/- + US83C87	667	678	612	670	684	613
ETEQ & 487SX/25	1385	1404	975	1387		974
UMC 4913 (25MHz, 256K)	411	416	344	410	425	342
DECpc 425SLC/e	469	476	379	469	476	377
IBM 8570 R21 (25MHz)	456	462	368	457	463	368
-/- Overdrive (25/50MHz)	299	304	237	301	303	237
Compaq Prolinea 450 (no SC)	259	261	204	259	261	205
OPTi 495 SLC & 486/50 (PC+256K)	214	217	182	214		180
-/- & 487SX/33 (PC+256K)				**1723**	**1719**	**1200**
-/- & Amd486/66 (PC+256K)				219	224	189

(...continued...)						
Compaq 486/33	344	349	275	345	345	275
DECpc XL 433DX (0+0K)	785	795	564	783	792	564
-/- 433DX (PC+0K)	336	341	270	338	342	270
-/- 433DX (PC+128K)	298	302	245	297	303	245
-/- 433DX (PC+256K)	295	299	243	295	300	243
DECpc XL 466D2 (0+0K)	707	716	501	707	712	501
-/- 466D2 (PC+0K)	216	218	167	217	219	168
-/- 466D2 (PC+128K)	165	167	135	165	168	135
-/- 466D2 (PC+256K)	160	162	131	160	162	131
-/- & Amd486/66 (256K)	161	164	133		164	133
-/- & ST486/66 (0+0K)	738	750	541	740	751	545
-/- & Cx486/66 (0+0K)	738	750		740	751	543
-/- & Cx486/66 (PC+0K)	261	260		259	257	198
-/- & Cx486/66 (256K)	190	194		190	195	161
Compaq 486/66m	158	160	128	158	161	128
OPTi 495 SLC & ST486/66 (0+0K)				1323	1328	941
-/- & ST486/66 (0+256K)				588	598	447
-/- & ST486/66 (PC+0K)				485	492	336
-/- & ST486/66 (PC+256K)				310	319	234
Toshiba 4800 (DX4/75)	166	167	137	164	170	139
OPTi 895 & Amd486/80 (0+0K)				814	815	573
-/- & Amd486/80 (256K)	155	157	127	155	158	126
ALI Vi15G & Amd486/80 (256K)	143	145	119	143		118
ALI-VIP DX4/100 (PC+0K)	168	170	134	165	175	137
-/- DX4/100 (PC+256K)	125	126	105	124	128	106
Compaq Prolinea 4/100	122	122	100	120	124	102
DECpc XL 4100 (0+0K)	682	691	480	682	686	483
-/- 4100 (PC+0K)	132	134	107	130	136	110
-/- 4100 (PC+128K)	112	114	93	111	115	94
-/- 4100 (PC+256K)	109	110	91	108	111	91
Compaq XE 560 (no SC)	100	103	81	99		81
DECpc XL 560 (256K)	89	92	74	89	91	73
NexGen Nx586 (60MHz, 256K)				13154	13391	8069
-/- (75MHz, 256K)					13278	7874
-/- (90MHz, 256K)					10966	6550
ref.time = DAT100						
Toshiba 3200SX (16MHz)	9242	11562	7491	11368	11554	7872
... 386 + 38700/16	16279	14079	abend	16366	14095	10411
Compaq 386/25 & 3C87	3697	3697	abend	3495	3598	2999
-/- & 83D87	3705	3612	abend	3498	3607	2999
... $Cx486DRx^2$ + Cx387$^+$/33				1916	1961	1685
... $Cx486DRx^2$ + XC87DLX2/80				1666	1448	1225
... RapidCAD/33				1483	1514	1157
... RapidCAD/40				1227	1253	953
UMC 4913 (25MHz, 256K)	1808	1531	958	1516	1542	1263
Compaq XE 450 (PC+256K)	1016	861		855	861	686
Compaq Prolinea 450 (no SC)	1233	1050		1045	1048	815
-/- & 486/25 (PC+0K)	2001	1693		1686	1698	1345
-/- & 486/33 (PC+0K)	1496	1266		1260	1270	1006
-/- & 486/66 (PC+0K)	922	785		781	784	610
-/- & DX4/75 (PC+0K)	792	668		654	682	548
-/- & DX4/100 (PC+0K)	592	499		489	510	410
-/- & PODP/63 (32+0K)	504	556		528	568	352
-/- & PODP/83 (32+0K)	376	415		394	424	263
-/- & Cx5x86/75 (PC+0K)	677	703		672	717	535
-/- & Cx5x86/100 (PC+0K)	508	526		504	537	400
OPTi 495 SLC (486/50, 256K)	926	786	abend	779		654
DECpc XL 466D2 (128K)	730	617	376	611	618	499
-/- & ST486/66 (256K)	698	712		699	716	595
Toshiba 4800 (DX4/75)	727	612		604	622	509
ALI Vi15G & Amd486/80	613	521	abend	516		424

(...continued...)						
ALI Vi15G & Amd486/120				363	366	292
ALI-VIP DX4/100 (PC+256K)	540	456	abend	450	462	381
DECpc XL OVDR/100 (PC+128K)	493	416	abend	409	419	344
-/- 4100 (PC+128K)	494	416	abend	410	418	344
-/- 4100 (PC+256K)	463	391		386	394	323
-/- & AmdDX4 (8+256K)	519	440		436	440	353
-/- & Am5x86/100 (16+256K)	463	391		387	395	324
-/- & Cx5x86/100 (16+256K)	358	370		360	378	286
Compaq XE 560 (no SC)	404	436	271	419	427	282
DECpc XL 560 (256K)	373	402	256	389	399	266
OPTi 586 PCI (66MHz, no SC)	530	583	344	547	569	359
-/- (66MHz, 1024K)	376	406	256	391	401	265
xxx (90MHz, 256K)	261	282	177	271	279	183
NexGen Nx586PF100				259	232	166
DECpc XL 590 (0+0K)	2589	2765	1512	2730	2816	1590
-/- 590 (PC+0K)	329	357	218	340	350	228
-/- 590 (PC+256K)	260	280	176	270	278	183
Compaq XL 590 (256K)				252	260	170
Compaq XL 5100 (256K)	218	236		227	234	152
Gateway P5-100 (no SC)	255	277	170	265	273	176
OPTi PB586 (100MHz, 256K)	266	288		276	284	189
Tadpole P1000 (256K)	235	253	159	244	251	166
xxx (Cx6x86/120, 256K)				198	215	174
xxx (P54/120MHz, 256K)	253	276		262	271	174
xxx (P54/133MHz, 256K)				197	203	134
DEC Celebris 5120 (0+0K)	2571	2747		2709	2784	1575
-/- (PC+256K)	284	310	188	293	303	196
DEC Celebris 5133 (0+0K)	2306	2464		2430	2497	1411
-/- (PC+256K)	188	203		196	201	133
Asus (180MHz)				138	142	93
-/- (200MHz)				125	129	84

ref.time = DAT999

DECpc XL 4100						
-/- & AmdDX4	6056	6150	abend	6036	6151	4910
-/- & Am5x86/100				5409	5548	4527
-/- & Cx5x86/100				5361	5636	4170
Compaq XE 560 & PODP/120				2811	2891	2196
DECpc XL 590				3096	3177	2444
Tadpole P1000				2781	2855	2196
Compaq XL 5100	2603	2693	abend	2600	2675	2031
DEC Celebris 5133	2241	2326	abend	2242	2298	1777
DEC Celebris 5150				2152	2205	1710
Intel UTS P6/133	1770	1831	abend	1770	1827	1491
Intel UTS P6/200	1183	1224	abend	1183	1223	997

(Win32) PowerStation 32	version 1.0					version 4.0			version x.y	
source ...	orig inal			FOR EST		orig inal		FOR EST	orig inal	FOR EST
compiler switches	oX					oX o2			oX o2	
compiler switch	g3	g4	g5	g4	g5	g4	g5	g5	g5	g5
ref.time = DAT50										
Compaq 386/25										
-/- Cx486DRx^2	6656	6669	7064	6377	6707					
-/− DRx^2 + 387DX	871	871	917	858	894					
-/− DRx^2 + 4C87DLC	835	840	892	802	839					
-/− DRx^2 + XC87DLX2										
-/− DRx^2 + 83D87	594	602	637	578	610	579	635	610		
-/− DRx^2 + 38700	623	617	667	597	627	585	627	605		
-/− DRx^2 + US83C87	651	662	692	645	669	630	691	681		
Compaq 386/33L										
-/− DRx^2 + 83D87	446	450	465	429	452					
DECpc XL 466S2	2171	2160	2299	2092	2204	2266	2400	2324	xxxx	xxxx
AlphaStation 600 5/266	320	187	190	187	194					
ref.time = DAT100										
Alaris Cougar 486BL3X										
-/- + US83C87	2525	2765	2905	3199	2819	3554				
ref.time = DAT999										
DECpc XL 466D2	6631	6673	6785	6326	6631					
-/- & Ti486/66	7807	7669	8099	7271	7824	7585	8111	7745		
-/- & AmdDX4/100	4947	4747	5102	4848	4984					
-/- & Am5x86/100	4075	3945	4036	3833	3998					
ALI-VIP DX4/100		5276	5505	5236	5613					
Compaq XE 560	3466	3109	3066	3028	3030					
-/- & PODP/120	2154	1968	1982	1927	1989	1856	1786	1680		
DECpc XL 590	2190	1969	1971	1942	1916	2387	1827	1734		
Shuttle Hot555 & Cx6x86/100	2481	2424	2570	2297	2476	2468				
Shuttle Hot555 & P54/100	1842	1619	1578	1569	1541					
OPTi PB586 (100MHz)	2183	2038	2023	2011	2048					
Tadpole P1000						1686	1602	1531		
UMC 8890 (120MHz)	1905	1712	1720	1691	1855	1687	1579	1534		
DEC Celebris 5120	1661	1458	1454	1454	1437					
Shuttle Hot555 & Cx6x86/133	1904	1815	1915	1722	1857	1903	1986	1939		
DEC Celebris 5133	1625	1446	1401	1380	1424	1433	1397	1322		
DEC Celebris 5150	1600	1494	1538	1447	1435	1502	1292	1198		
xxx (166MHz)	1166	1034	1048	1025	1015	1007	942	894		
Intel UTS P6/133	1345	898	925	900	941					
Intel UTS P6/200	877	590	610	593	613					

(Dos32) compiler	SVS 2.4	mf77 3.0	
ref.time = DAT50			
Donatec 386SX/16 + 387SX	3053	2991	2982
-/- + 487SLX	2661	2566	2558
Amstrad 7386SX + 387SX	1437	1449	1446
-/- + 487SLX	1163	1159	1157
Compaq 386/16 + 287	8340	7977	7969
-/- + 287XL	3998		
-/- + 2C87	3812	3884	3870
-/- + 3C87	1558	1537	1531
-/- + 4C87DLC	1825	1573	1570
-/- + XC87DLX2		1366	xxxx
-/- + Cx387$^+$	1471	1478	1473
Compaq 386/25 + 387	1008	1039	1037
-/- + 3C87	905	910	908
-/- + XC87DLX2	804	800	798
-/- + Cx387$^+$	859	879	873
-/- + US83C87	890	903	902
-/- Ti486DLC + XC87DLX2	740	723	718
-/− DLC + EMC87	767	779	777
-/− DLC + 38700	781	807	804
-/− DLC + US83C87	807	824	818
-/- Cx486DRx^2 + 4C87DLC	895	746	744
Compaq 386/33L (64K) + 4C87DLC	799	691	690
-/- + Cx387$^+$	634	647	646
-/- + CT38700	625	644	642
-/- 38600 + 387DX + EMC87	681	663	661
-/- 38600 + 4C87DLC + EMC87	774	680	676
-/- 38600 + Cx387$^+$	693	680	678
-/- 38600 + Cx387$^+$ + EMC87	692	681	678
-/- 38600 + US83C87	728	709	707
-/- Ti486DLC + EMC87	549	566	565
-/− DLC + 387DX	652	640	638
-/− DLC + 4C87DLC	**1025**	**882**	**877**
-/− DLC + Cx387$^+$	570	595	593
-/− DLC + Cx387$^+$ + EMC87	573	598	596
-/− DLC + US83C87	577	598	597
-/- Cx486DRx^2 + EMC87	462	469	468
-/− DRx^2 + 387DX	524	540	539
-/− DRx^2 + 387DX + EMC87	437	453	452
-/− DRx^2 + 4C87DLC	636	535	535
-/− DRx^2 + 83D87	437	453	452
-/− DRx^2 + Cx387$^+$	460	484	483
-/− DRx^2 + 38700	471	488	487
-/− DRx^2 + 38700 + EMC87	437	452	451
UMC 4913 (25MHz, 256K)	326	359	365
DECpc 425SLC/e	379	410	421
Compaq 486/33	275	302	306
Alaris Cougar 486BL3X + 387	849	868	901
-/- + XC87DLX2	537	520	519
DECpc XL 433DX (0+0K)			
-/- 433DX (PC+0K)	268	295	300
-/- 433DX (PC+256K)	239	263	268
-/- & ST486/66 (0+0K)	537	517	517
-/- & ST486/66 (PC+0K)	190	206	209
-/- & ST486/66 (PC+256K)	148	163	161
Toshiba 4800 (DX4/75)	133	143	146
OPTi 895 & Amd486/80 (0+0K)	575	534	537
-/- & Amd486/80 (256K)	119	132	134
DECpc XL 4100 (PC+0K)	101	112	114
-/- 4100 (PC+128K)	88	96	97

(...continued...)

ref.time = DAT100		
Toshiba 3200SX (16MHz)	9589	7896 8474
Compaq XE 450 (PC+256K)	676	745 754
Compaq Prolinea 450 (no SC)	780	911 897
-/- & 486/33 (PC+0K)	1000	1102 1114
-/- & PODP/63 (32+0K)	424	362 373
-/- & PODP/83 (32+0K)	317	271 280
-/- & Cx5x86/75 (PC+0K)	489	543 619
-/- & Cx5x86/100 (PC+0K)	366	474 514
DECpc XL & OVDR/100 (PC+128K)	325	350 355
-/- & DX4 (PC+256K)	308	335 340
-/- & AmdDX4 (8+256K)	342	379 383
-/- & Cx5x86/100 (16+256K)	271	349 304
Asus 486SP3 & Am5x86/160	214	245 251
Asus 486SP3 & Cx5x86/120	268	270 315
xxx (90MHz, 256K)	194	187 197
DECpc XL 590 (0+0K)	1857	1483 1592
-/- 590 (PC+0K)	251	231 242
-/- 590 (PC+256K)	193	187 196
-/- 590 (PC+256K)	193	187 196
Compaq XL 5100 (256K)	166	160 168
Gateway P5-100 (no SC)	195	181 181
OPTi PB586 (100MHz, 256K)	198	189 198
Tadpole P1000 (256K)	174	169 177
DEC Celebris 5120 (PC+256K)	142	140 146
xxx (133MHz, 256K)	143	136 142
DEC Celebris 5133 (0+0K)	1651	1316 1409
-/- (PC+256K)	138	133 140
ref.time = DAT999		
DECpc 425SLC/e		20596 30922
DECpc XL 466D2	6355	7138 7187
-/- & Ti486/66	7990	8492 8480
-/- & AmdDX4	4663	5225 5255
-/- & Am 5x86/100	4265	4747 4795
-/- & Cx5x86/100	3819	4334 4375
ALI-VIP DX4/100	4996	5515 5560
Compaq XE 560	3427	3773 3971
-/- & PODP/120	2102	2267 2374
DECpc XL 590	2245	2532 2639
Compaq XL 5100		2157 2265
DEC Celebris 5120	1679	1922 1994
DEC Celebris 5133		1816 1896
DEC Celebris 5150	1525	1705 1779
DEC Celebris 5166	1372	1533 1604
Intel UTS P6/200	881	977 1177

(Dos32) Watcom version	9.01				9.5	10.5			
source	original								FOREST
compiler switch			oT	oT	oT	oT	oX	oX	oX
compiler switches	4	4	3	3	4	4	4 fp3	5 fp5	5 fp5
floating point instruction	no	yes	no	yes					
ref.time = DAT35									
Daewoo (Am386SX/40MHz)	892					4642			
ref.time = DAT50									
Donatec 386SX/16 + 387SX	11094	2787	11113	abend	2705				
-/- + 3C87SX	11049	2747	11068	abend	2705	2335	2145	2309	2246
-/- + 487SLX	10717	2294	10735	abend	2302				
Compaq 386-s/16 + 387SX	6532	2089			2000				
-/- + 3C87SX	6405	2051	6519	abend					
-/- + 487SLX	**10986**	**2394**	**7919**	abend	1563	1601	1471	1614	1563
Compaq 386-s/20	8853	39832	8870	40315					
Amstrad 7386SX (25MHz)	7644	38014	7582	38116					
-/- + 387SX	4300	1394							
-/- + 487SLX	3997	1077	3922	abend		1368	1280	1420	1356
Daewoo (Am386SX/40MHz)	5036								
Toshiba 5100 (16MHz)	9967	46355	9979	46792					
Compaq 386/16	9805	46550	9816	46960					
-/- + 287	13809	7922		abend					
-/- + 287XL	8813	4055	8624	abend					
-/- + 2C87	8551	3724			3675				
-/- + 3C87	5095	1532			1451				
-/- + 4C87DLC	**5248**	**1781**			**1680**				
-/- + XC87DLX2	4846	1323			1284				
-/- + Cx387$^+$	4922	1414			1363				
-/- + 38700	11431	2479	11448	**2395**					
Compaq 386/20	7018	33965	7008	34311					
IBM 8570 (20MHz)	7578	37685	7590	38044					
Compaq 386/25	5659	25815	5643	26266					
-/- 38600	4594	24685	4572	25128					
-/- Ti486DLC	3920	20610							
-/- Cx486DRx^2 (0K)	3207	17437	3180	17539					
-/- Cx486DRx^2 (1K)	2221	14775	2197	15151					
-/- + 3C87	2818		2823	abend					
-/- + 4C87DLC	2984	1075	2991	abend					
-/- + XC87DLX2	2659	774	2665	abend					
-/- + Cx387$^+$	2732	836	2737	abend					
-/- + US83C87	2791	868	2795	abend					
-/- 38600 + 387	2643	1060	2651	abend					
-/- 38600 + 3C87	2493	886	2499	abend					
-/- 38600 + 4C87DLC	2592	1022	2600	abend					
-/- 38600 + XC87DLX2	2362	1005	2370	abend					
-/- 38600 + 83D87	2411	1018	2420	abend					
-/- 38600 + 38700	2392	1029	2400	**1075**					
-/- 38600 + US83C87	2452	974	2460	abend					
-/- Ti486DLC + 387DX	2712	1032	2713	abend					
-/- DLC + 3C87	2554	829	2556	abend					
-/- DLC + XC87DLX2	2355	703	2357	abend					
-/- DLC + EMC87	2405	725	2404	abend					
-/- DLC + Cx387$^+$	2435	761	2437	abend					
-/- DLC + 38700	2396	745	2398	**739**					
-/- DLC + US83C87	2469	770							
-/- Cx486DRx^2 (0K) + 38700	1914	609							
-/- DRx^2 (1K) + XC87DLX2	1476	542	1495	abend					
-/- DRx^2 (1K) + EMC87	1564	581	1583	abend					
-/- DRx^2 (1K) + 38700	1542	589	1559	**582**	614	635	616	664	648
Compaq 386/33L (64K)	4003	18287	4005	18582					
-/- 38600	3270	17553							
-/- Ti486DLC	2493	13726	2490	13860					

(...continued...)									
-/- Cx486DRx^2	2264	11984							
-/- + 387DX	2030	681	2034	abend					
-/- + 3C87 + EMC87	2068	665	2072	**657**					
-/- + 4C87DLC	2206	792	2212	abend					
-/- + Cx387$^+$	2026	616	2032	abend					
-/- + CT38700	1998	614	2004	**604**					
-/- + US83C87	2070	639	2076	**565**					
-/- 38600 + EMC87	1757	751	1763	abend					
-/- 38600 + 387DX	1777	674		abend					
-/- 38600 + 387DX + EMC87	1757	752		abend					
-/- 38600 + 3C87	1820	653	1826	abend					
-/- 38600 + 3C87 + EMC87	1816	653	1823	**645**					
-/- 38600 + Cx387$^+$	1765	731	1774	abend					
-/- 38600 + Cx387$^+$ + EMC87	1777	732	1784	abend					
-/- 38600 + 38700	1744	764		**797**					
-/- 38600 + US83C87	1790	719	1797	abend					
-/- Ti486DLC + EMC87	1599	523	1614	abend					
-/− DLC + 387DX	1662	623	1676	abend					
-/− DLC + 387DX + EMC87		524							
-/− DLC + 3C87	1714	602		abend					
-/− DLC + 3C87 + EMC87	1710	601	1710	**596**					
-/− DLC + 4C87DLC	1798	727	1813	abend					
-/− DLC + 4C87DLC + EMC87	1802	727	1816	abend					
-/− DLC + Cx387$^+$	1623	550	1637	abend					
-/− DLC + Cx387$^+$ + EMC87	1637	555	1652	abend					
-/− DLC + 38700	1596	548	1611	**540**					
-/− DLC + US83C87	1648	558	1662	abend					
-/- Cx486DRx^2 + EMC87	1414	436	1419	abend					
-/− DRx^2 + 387DX	1495	552		abend					
-/− DRx^2 + 387DX + EMC87	1117	418	1132	abend					
-/− DRx^2 + 3C87	1234	500	1248	abend					
-/− DRx^2 + 3C87 + EMC87	1516		1521	**513**					
-/− DRx^2 + 4C87DLC	1321	625	1135	abend					
-/− DRx^2 + 4C87DLC + EMC87	1611	643	1616	abend					
-/− DRx^2 + 83D87	1115	417	1132		413	421	396	443	426
-/− DRx^2 + Cx387$^+$	1132	445	1147	abend					
-/− DRx^2 + Cx387$^+$ + EMC87	1155	650	1171	abend					
-/− DRx^2 + 38700	1390	453	1396	**446**					
-/− DRx^2 + 38700 + EMC87	1244	418	1266	**411**					
-/− DRx^2 + US83C87	1440	459	1446	**406**	444				
Am386/40 (128K) + 3C87	1838	658	1825	abend					
Datek + RapidCAD (40MHz)	1015	249	1016	abend					
Compaq 486s/25m	3123	13044	3155	13292					
DECpc LPv+ 433sx (128K)	2317	9644	2338	9795					
DECpc XL & U5S/33 (PC+0K)	1825	8094	1855	8073	7690				
-/- & U5S/33 (PC+256K)	1707	7517	1749	7588	7458				
-/- 466S2 (PC+256K)	1172	5186			4855	4981	5710	6330	6088
Alaris Cougar 486BL3X	1527	6008	1523	6006					
-/- + 387	1611	880	1611	abend					
-/- + 3C87	1444	678	1445	abend					
-/- + 4C87DLC	1567	845	1567	abend		604	566	631	613
-/- + XC87DLX2 (0+0K)	4154	943	4174	abend					
-/- + XC87DLX2 (PC+0K)	1432	678	1444	abend					
-/- + XC87DLX2 (PC+256K)	1207	534	1207	abend					
-/- + US83C87	1331	538	1331	**602**					
ETEQ & 487SX/25	1141	378							
UMC 4913 (25MHz, 256K)	962	328	946	abend					
DECpc 425SLC/e	1080	364	1069	abend					
IBM 8570 R21 (25MHz)									
-/- Overdrive (25/50MHz)	753	216	747	abend					
Compaq 486/33	794	266	785	abend					

(...continued...)									
DECpc XL 433DX (0+0K)	2776	503	2761	abend					
-/- 433DX (PC+0K)	773	261	765	abend					
-/- 433DX (PC+128K)	708	244	698	abend					
-/- 433DX (PC+256K)	703	242	693	abend					
OPTi 495 SLC & 487SX/33 (PC+256K)	773	255			243				
-/- & 486/50 (PC+256K)	487	168	478	abend					
-/- & Amd486/66 (PC+256K)	457	144	439		139	137	149	143	
-/- & ST486/66 (0+0K)	5315	805			801				
-/- & ST486/66 (0+256K)	1942	340			355				
-/- & ST486/66 (PC+0K)	805	214			212				
-/- & ST486/66 (PC+256K)	453	142			138				
Compaq 486/66m	371	128	368	abend					
DECpc XL 466D2 (0+0K)	2629	431	2635	abend					
-/- 466D2 (PC+0K)	462	151	457	abend					
-/- 466D2 (PC+128K)	381	129	375	abend					
-/- 466D2 (PC+256K)	373	126	367	abend					
-/- & Amd486/66 (256K)	374	127	368	abend					
-/- & ST486/66 (0+0K)	2666	465	2684	abend					
-/- & ST486/66 (256K)	515	143	514	abend					
-/- & Cx486/66 (0+0K)	2666	465	2684						
-/- & Cx486/66 (PC+0K)	611	168	609		161				
-/- & Cx486/66 (256K)	517	145	515		139				
Toshiba 4800 (DX4/75)	450	128	451	abend					
OPTi 895 & Amd486/80 (0+0K)	3167	481							
-/- & Amd486/80 (256K)	343	116	336	abend					
ALI Vi15G & Amd486/80 (256K)	316	112	311	abend					
ALI-VIP DX4/100 (PC+0K)	437	110	445	abend					
-/- DX4/100 (PC+256K)	301	94	296	abend					
Compaq Prolinea 4/100	298	91	285	abend					
DECpc XL 4100 (0+0K)	2565	408	2556	abend					
-/- 4100 (PC+0K)	318	96	319	abend					
-/- 4100 (PC+128K)	257	87	253	abend					
-/- 4100 (PC+256K)	252	85	249	abend					
Compaq XE 560 (no SC)	235	69	234	abend					
NexGen Nx586 (60MHz, 256K)	915	4992							
-/- (75MHz, 256K)	774	4504							
-/- (90MHz, 256K)	652	3917							
ref.time = DAT100									
Toshiba 3200SX (16MHz)	25610	7735	25632	7246					
... Cx486DRx^2 + Cx387^{+}/33	4028	1909			1763				
... Cx486DRx^2 + XC87DLX2/80	3350	1325			1438				
... RapidCAD/33	4492	1102			1270				
... RapidCAD/33	3728	915			1054				
Compaq XE 450 (PC+256K)	1934	655	1916						
Compaq Prolinea 450 (no SC)	2125	744	2107	abend					
-/- & 486/25 (PC+0K)		1290							
-/- & 486/33 (PC+0K)	2853	966	2824						
-/- & 486/66 (PC+0K)	1591	558							
-/- & DX4/75 (PC+0K)	1609	476	1621						
-/- & DX4/100 (PC+0K)	1203	357							
-/- & PODP/63 (32+0K)	1366	311	1389						
-/- & PODP/83 (32+0K)	1020	233	1037						
-/- & Cx5x86/75 (PC+0K)	1740	548	1718		517				
-/- & Cx5x86/100 (PC+0K)	1301	410	1285						
OPTi 495 SLC (486/50, 256K)	1793	602	1757	abend					
Toshiba 4800 (DX4/75)	1658	467	1658	abend					
ALI Vi15G & Amd486/80 (256K)	1160	394	1141	abend					
ALI-VIP DX4/100 (PC+256K)	1104	338	1085	abend					
Asus 486SP3 & Am5x86/100 (100MHz=25x4)		352	303		354	375	356		
Asus 486SP3 & Am5x86/100 (100MHz=33x3)		343	300		343	364	346		
Asus 486SP3 & Am5x86/133					265	232	266	282	268

(...continued...)

	A	B	C	D	E	F	G	H	I
Asus 486SP3 & Am5x86/160						210	243	255	243
Asus 486SP3 & Cx5x86/100						308	291	320	300
Asus 486SP3 & Cx5x86/120	897				250	275	262	285	268
Asus 486SP3 & PODP/83						190	153	147	141
Asus 486SP3 & PODP/100						173	142	137	132
DECpc XL OVDR/100 (PC+128K)	944	318	928	abend	354				
-/- 4100 (PC+128K)	949	320	932	abend					
-/- 4100 (PC+256K)	912	306	898	abend	341				
-/- & AmdDX4 (8+256K)	983	328	965	abend	369				
-/- & Cx5x86/100 (16+256K)	1009	318	988		276	305	287	319	297
-/- & Am5x86/100 (16+256K)	914	309	900	abend		301	344	367	348
ALI Vi15G & Amd486/120 (256K)	818	274			308				
Compaq XE 560 (no SC)	860	244	853	abend	235	274	228	214	205
OPTi 586 PCI (66MHz, no SC)	962	306		abend					
-/- (66MHz, 1024K)	791	242	597	abend					
DECpc XL 590 (0+0K)	2541		2517						
-/- 590 (PC+0K)	634	198	624	abend					
-/- 590 (PC+256K)	571	160	564	abend					
Compaq XL 590 (256K)	552	154			144				
xxx (90MHz, 256K)	570	163	565		151				
NexGen Nx586PF100	788	170			160				
Compaq XL 5100 (256K)	498	139	495						
Gateway P5-100 (no SC)	534	159	528		146				
OPTi PB586 (100MHz, 256K)	546	163	539		149				
Tadpole P1000 (256K)	513	145	508	abend	136				
xxx (Cx6x86/120, 256K)	644	209			172				
xxx (P54/120MHz, 256K)	492	153	484						
xxx (P54/133MHz, 256K)	396	115							
DEC Celebris 5120 (0+0K)	9300	1225	9185	abend	1226	1477	1135	1180	1131
-/- (PC+256K)	515	167	504	abend	112				
DEC Celebris 5133 (0+0K)	8354	1100	8250		1101	1327	1020	1060	1017
-/- (PC+256K)	396	115	391	abend	106	125	104	98	95
Asus (180MHz)	290	85			78				
-/- (200MHz)	261	77			70				

ref.time = DAT999									
IBM 8570 R21 & P23T/50							**10161**	10896	10513
DECpc XL 466D2							6044		6267
-/- & Ti486/66						7686	**7305**	8266	7914
ALI-VIP DX4/100						4680	4634	4936	4721
DECpc XL 4100						4027	3931	4193	
-/- & AmdDX4	13209	4406	12973	abend		4314	4211	4519	4330
-/- & Am5x86/100	12475	4224	12307	abend			4010	4278	4090
-/- & Cx5x86/100	13966	3821				3457	3382	3764	3530
Asus 486SP3 & Am5x86/160						2827	2782	2932	2801

Asus 486SP3 & Cx5x86/120									
Asus 486SP3 & PODP/100						2052	1908	1851	1782
Compaq XE 560	11680	3361	11600	abend	3064	3155	2962	2788	2671
-/- & PODP/120	6517	2014			1788	1841	1793	1697	1652
DECpc XL 590	7739	2209				2081	1939	1837	1755
Asus P55T2P4 & P54/100						1795	1663	1569	1502
Shuttle Hot555 & Amd K5/100						2632	2628	2580	2560
Shuttle Hot555 & Cx6x86/100						2568	2553		
Shuttle Hot555 & P54/100	6761					1791	1646	1558	**1482**
Tadpole P1000	6953	1991	6899	abend	1814	1873	1747	1653	1579
Compaq Prolinea 5100E							2320	2186	2134
Compaq XL 5100	6757	1909	6741	abend					
DEC Hinote VP (100MHz)						2059	1993	1883	1823
DEC Celebris 5100						1874	1746	1656	1581
yyy (Cx6x86/120, 256K)						2523	2837	2683	
UMC 8890 (120MHz)						1705	1620	1550	1496
DEC Celebris 5120					1509	1559	1437	1370	1308

(...continued...)								
Asus P55T2P4 & P54/120	5685	1628		1477		1416	1332	**1269**
Shuttle Hot555 & Cx6x86/133					1920	**1909**	2147	**2031**
DEC Celebris 5133	5391	1577	5329	1475		1393	1327	**1275**
DEC Celebris 5150	4981	1494		1342	1384	1324	1268	**1223**
DEC Celebris 5166					1246	1191	1142	**1101**
Shuttle Hot555 & P54/166					1140	1061	1010	**967**
xxx (180MHz)						1005	949	**911**
Intel UTS P6/133	5493	1167	5525		1210	1095	1053	**961**
Intel UTS P6/200	3607	769	3630	abend	807	730	702	**641**

4. 32 bits Fortran compilers with Weitek x167.

- MicroWay version 1.4e ;

- FTN77/486 version 2.40 from Polyhedron Software - Salford University ;

- Lahey F77L/EM-32 versions 3.01, 4.00 and 5.01, 5.10, 5.20 .

- See also note (3) chapter 4-; Abacus 4167 results measured on Nov.1990 .

(Dos32) compiler version	Wei-tek	mf77 1.4e	FTN77 2.40	Lahey F77L/EM-32				
				3.01	4.00	5.0	5.1	5.2
ref.time = DAT50								
Compaq 386/20	1167	857						
Compaq 386/20	3167	809	1311	856	837	907	908	
Compaq 386/25	3167	668	1312			751	750	763
-/- 38600	3167	645	1407			721	721	
-/- Cx486DRx^2 (0K)	3167	606	1300	-na-	-na-	688	688	
-/- Cx486DRx^2 (1K)	3167	abend	1104	-na-	-na-	abend	abend	
Compaq 386/33L (64K) + 387DX	3167	462	531				503	500
-/- Cx486DRx^2 (0K)	3167	405	469	-na-	-na-		459	455
-/- Cx486DRx^2 (1K)	3167	abend	424	-na-	-na-		abend	abend
Compaq 486/33	4167	289	275					
ref.time = DAT100								
Compaq 386/20	3167					3944	3944	
Compaq 386/25	3167	2480	5843			3277	3275	3326
-/- Cx486DRx^2 (0K)	3167	2242	5778	-na-	-na-	2998	2997	
-/- 486DRx^2 (1K)	3167	abend	4907	-na-	-na-	abend	abend	
Compaq 386/33L (64K)	3167	1701	2342				2174	2165
-/- & 38700	3167	1701	2357				2174	2165
-/- Cx486DRx^2 (0K)	3167	1492	2069	-na-	-na-		1986	1969
-/- Cx486DRx^2 (1K)	3167	abend	1876	-na-	-na-		abend	abend
ref.time = DAT999								
Compaq 386/25	3167	33635				38267	38265	38920
-/- 38600	3167	32520	115473			36752	36759	
-/- Cx486DRx^2 (0K)	3167	30512	66813	-na-	-na-	35061	35065	
-/- Cx486DRx^2 (1K)	3167	abend	56926	-na-	-na-	abend	abend	
Compaq 386/33L (64K)	3167	26885	22893				25248	25187

5. C compilers, 16- and 32 bits .

- Microsoft C compiler, versions 5.1, 6.0, 7.0, 8.0 (1993) (Visual C/C++ 1.0 and 1.5), 9.00 and 9.10 (Visual C/C++ 2.0, 2.1 (1994) and 2.2 (1995)), 10.00, 10.10 and 10.20 (Visual C/C++ 4.0 (1995), 4.1, 4.2 (1996)) ;

- Borland C/C++ compiler versions 4.0 (1993) and 4.5 (1994), 4.52 (1995), 5.0 (1996) ;

- Symantec C/C++ version 6.1 (1993) ;

- Watcom C compiler version 10.0a (1994), 10.5 (1995) .

Microsoft C version	5.1	6.0		7.0	
switches : fpc87, g0 or g2	g0	(fpa)	g0	(fpa)	g0 g2
floating point unit		none		none	
ref.time = DAT35					
IBM PC/XT			6849		3374 -na-
-/- V20	6625		6497		
Zenith 181 (4.77MHz)	7194		7047		3436 -na-
Zenith 181 (7.16MHz)	4839		4747		2230 -na-
Compaq (4.77MHz)	6900	38485	6750	39097	3384 -na-
-/- KR1810WM86 (4.77MHz)	6900	38485	6749	39096	3384 -na-
-/- V30 (4.77MHz)	6461	30146	6325	30894	3243 -na-
Goupil G4		13334		13555	
Compaq 286/6				12192	
Compaq 286/8		8869	3533	8993	xxxx 2358
Compaq 286/12	2583	5931	2508	6052	1710 1716
-/- + 287XL	1921	5943	1883	6051	1114 1115
-/- + 2C87	1834		1804		xxxx 1034
Donatec 386SX/16 + 387SX		7944	1523	8041	xxx 605
-/- + 3C87SX			1484		xxx 559
-/- + 487SLX			1446		xxx 523
Compaq 386-s/16 + 387SX	1055		1039		476 461
-/- + 3C87SX	1016		986	4363	xxx 403
-/- + 487SLX	965		940		386 368
Amstrad 7386SX + 387SX	700	2720	680	2819	310 301
-/- + 3C87SX (25MHz)	670		667		273 265
-/- + 487SLX	647		639		254 253
Daewoo (Am386SX/40MHz)		2029		2022	
Intel SYP 301 + 3C87	979	4144	945	4247	415 384
Compaq 386/16 + 287	2055	3772	1997	3820	xxxx 1423
-/- + 287XL	1374		1344		xxx 786
-/- + 2C87	1330		1302		740 732
-/- + 3C87	904		873		384 355
-/- + 4C87DLC	923		882		380 353
-/- + XC87DLX2	876		842		349 322
-/- + Cx387$^+$	894		858		367 343
Compaq 386/20		3123		3182	
Compaq 386/25		2135		2163	
-/- + 3C87	534	2143	509	2142	227 210
-/- + 4C87DLC	531		508		227 210
-/- + XC87DLX2	499	2134	479	2163	205 189
-/- + 83D87	507	2144	488	2173	211 194
-/- + EMC87	504	2135	484	2163	210 194
-/- + Cx387$^+$	511		491		215 198
-/- + US83C87	517		498		220 204
-/- 38600 + 387	541		529		248 239
-/- 38600 + 3C87	502		492		xxx 211
-/- 38600 + 4C87DLC	513		497		220 210
-/- 38600 + XC87DLX2	535		522		xxx 275
-/- 38600 + 83D87	516		504		xxx 253
-/- 38600 + 38700		1867	497	1881	xxx 255
-/- 38600 + US83C87	511		500		266 255
-/- Ti486DLC + 387DX	460	1625	449	1647	xxx 224
-/− DLC + 3C87	419		411		xxx 188
-/− DLC + 4C87DLC	430		416		xxx 188
-/− DLC + XC87DLX2	409		378		187 178
-/− DLC + EMC87	407		397		182 174
-/− DLC + Cx387$^+$	414		402		xxx 179
-/− DLC + 38700	409		398		187 178
-/− DLC + US83C87	413	1026	405	1031	191 183
-/- Cx486DRx^2 (0K) + 38700	326		316		152 144
-/− DRx^2 (1K) + 38700	277		266		140 134
-/− DRx^2 (0K) + EMC87	327	1296	317	1305	xxx 141

(...continued...)						
-/- DRx^2 (1K) + EMC87	272	1008	269	999	139	133
-/- DRx^2 (0K) + XC87DLX2	312		303		135	127
-/- DRx^2 (1K) + XC87DLX2	256		252		124	117
Compaq 386/33L (64K)	381	1563	365	1582	169	158
-/- + 3C87 + EMC87	390		375		166	153
-/- + 4C87DLC	396		376		166	154
-/- + EMC87			361		xxx	143
-/- + Cx387$^+$	382		365		158	146
-/- + CT38700	381		364		160	146
-/- 38600 + EMC87	358		349		196	187
-/- 38600 + 387DX	346		337		167	161
-/- 38600 + 387DX + EMC87	358		349		196	188
-/- 38600 + 3C87	348		340		164	156
-/- 38600 + 3C87 + EMC87	349		341		165	158
-/- 38600 + 4C87DLC	358		343		xxx	154
-/- 38600 + 4C87DLC + EMC87			343		xxx	155
-/- 38600 + Cx387$^+$	351		340		194	186
-/- 38600 + Cx387$^+$ + EMC87	351		341		194	186
-/- 38600 + 38700	359	1353	343	1364	199	190
-/- Ti486DLC + EMC87	275		265		127	122
-/- DLC + 387DX + EMC87	275		265		127	122
-/- DLC + 387DX	279		270		144	140
-/- DLC + 3C87	284		276		139	133
-/- DLC + 3C87 + EMC87	284		277		139	134
-/- DLC + 4C87DLC	292		280		139	133
-/- DLC + 4C87DLC + EMC87	291		280		139	133
-/- DLC + Cx387$^+$	279		269		131	126
-/- DLC + Cx387$^+$ + EMC87	281		271		132	127
-/- DLC + 38700	277	1024	267	1031	132	126
-/- DLC + US83C87	279		271		134	129
-/- Cx486DRx^2 + EMC87	228		220		106	101
-/- DRx^2 + 387DX	235		226		127	122
-/- DRx^2 + 387DX + EMC87	187		181		97	94
-/- DRx^2 + 3C87			231		111	114
-/- DRx^2 + 3C87 + EMC87	239		232		120	116
-/- DRx^2 + 4C87DLC	203	696	196	694	112	108
-/- DRx^2 + 4C87DLC + EMC87	246		234		121	115
-/- DRx^2 + 83D87	228		220		98	101
-/- DRx^2 + Cx387$^+$	192		184		101	98
-/- DRx^2 + Cx387$^+$ + EMC87	194		186		102	99
-/- DRx^2 + 38700	231	917	221	926	109	104
-/- DRx^2 + 38700 + EMC87	187		179		97	93
OPTi 495 SLC + US83C87/40 (0K)	652		626		265	235
-/- + US83C87/40 (256K)	329		319		148	139
-/- & Amd486/66 (PC+256K)	116		114		48	44
Compaq 486s/16m				3324		
DECpc LPv+ 433sx (0+128K)		2061		2070		
DECpc LPv+ 433sx (PC+0K)		971		985		
DECpc LPv+ 433sx (PC+128K)		950		965		
DECpc XL & U5S/33 (0+0K)		2277		2342		
-/- & U5S/33 (PC+0K)		673		682		
-/- & U5S/33 (PC+256K)		642		652		
-/- 466S2 (PC+256K)		479		486		
Alaris Cougar 486BL3X + 387			254		xxx	175
-/- + 3C87	220		216		143	137
-/- + 4C87DLC	230		222		145	139
-/- + XC87DLX2 (0+0K)	731	3500	713	3524	264	245
-/- + XC87DLX2 (PC+0K)	260		245		144	133
-/- + XC87DLX2 (PC+256K)	190	553	184	558	110	105
-/- + Cx387$^+$		553		558		
-/- + US83C87	209		205		xxx	126

(...continued...)

ETEQ & 487SX/25	328	1354	318	1379	120 115
UMC 4913 (25MHz, 256K)	277	1270	264	1289	xx 84
DECpc 425SLC/e	299	1298	283	1320	103 91
IBM 8570 R21 (25MHz)		1298	275	1317	xx 91
-/- Overdrive (25/50MHz)	167	784	162	783	xx 59
Compaq Prolinea 450 (no SC)	147	662	141	670	xx 48
-/- & 486/33 (PC+0K)	212		204		70 66
Arche 486/33 (PC+0K)		967	204	980	xx 66
-/- (PC+256K)		949	198	962	66 63
Compaq 486/33	213	975	204	990	72 67
DECpc XL 433DX (0+0K)	526	2649	498	2685	148 138
-/- 433DX (PC+0K)	212	969	203	983	70 65
-/- 433DX (PC+128K)	206	949	197	963	65 62
-/- 433DX (PC+256K)	207		197		65 61
Compaq 486/66m	105	486	100	493	xx 32
DECpc XL 466D2 (0+0K)	473		446		131 122
-/- 466D2 (PC+0K)	114	515	111	521	43 40
-/- 466D2 (PC+128K)	105	482	101	489	35 33
-/- 466D2 (PC+256K)	105	480	101	487	35 33
-/- & ST486/66 (0+0K)	463	2311	433	2340	139 124
-/- & ST486/66 (256K)	98	480	96	471	38 37
-/- & Cx486/66 (0+0K)	463		433		xxx 125
-/- & Cx486/66 (8+0K)	116	523	114	510	47 45
-/- & Cx486/66 (8+256K)	98		95		xx 37
Toshiba 4800 (DX4/75)	102	438	100	435	38 35
ALI-VIP DX4/100 (PC+0K)	91		92		37 33
-/- DX4/100 (PC+256K)	76	306	75	300	28 26
Compaq Prolinea 4/100	74	298	71	293	26 24
DECpc XL 4100 (0+0K)	459	2340	432	2394	126 117
-/- 4100 (PC+0K)	77	331	77	326	29 26
-/- 4100 (PC+128K)	72	300	60	298	27 23
-/- 4100 (PC+256K)	71		68		24 23
Compaq XE 560 (no SC)	57	337	56	342	22 20
DECpc XL 560 (256K)	56	337	54	341	xx 20
OPTi 586 PCI (66MHz, 1024K)		321		326	
NexGen Nx586 (60MHz, 256K)		353		366	
-/- (75MHz, 256K)		305		293	
-/- (90MHz, 256K)		244		248	
AS600 5/266, WNT 3.51		667		679	

ref.time = DAT50

AS600 5/266, WNT 3.51					xxx 493
Toshiba 3200SX (16MHz)	6031		5892		2631 2536
Compaq XE 450 (PC+256K)	818		793		283 262
Compaq Prolinea 450 (no SC)	783		767		309 288
-/- & 486/25 (PC+0K)	1608		1557		534 498
-/- & 486/33 (PC+0K)	1206	5622	1168	5705	400 374
-/- & 486/66 (PC+0K)	587		575		232 216
-/- & DX4/75 (PC+0K)	585	2563	585	2530	219 201
-/- & DX4/100 (PC+0K)	439	1919	438	1945	164 151
-/- & PODP/63 (32+0K)	412	2625	419	2687	xxx 145
-/- & PODP/83 (32+0K)	308		313		120 108
-/- & Cx5x86/75 (PC+0K)	528	2894	548	3104	219 217
-/- & Cx5x86/100 (PC+0K)	395	2600	409	2425	164 162
Toshiba 4800 (DX4/75)	578		569		214 193
ALI-VIP DX4/100 (PC+256K)	424	1764	420	1728	157 143
Asus 486SP3 & Am5x86/133	300		292		xxx 96
Asus 486SP3 & Am5x86/160	258		253		105 88
Asus 486SP3 & Cx5x86/100	315		304		117 113
Asus 486SP3 & Cx5x86/120					
Asus 486SP3 & PODP/83	230		223		88 81
Asus 486SP3 & PODP/100	197		193		74 81

(...continued...)

DECpc XL 4100 (PC+256K)		1583		1604	
-/- & AmdDX4 (8+256K)		2015		2021	
-/- & Cx5x86/100 (16+256K)	315	1747	319	1624	**122 133**
-/- & Am5x86/100 (16+256K)	395	2049	383	1996	**131 122**
DECpc XL 560 (256K)	319		308		xxx 113
Compaq XE 560 (no SC)	325	1954	316	1983	124 114
Compaq XL 566 (256K)	288		279		108 101
OPTi 586 PCI (66MHz, no SC)	334		348		150 137
-/- (66MHz, 1024K)	293		289		119 109
DECpc XL 590 (0+0K)	2948	13711	2848	13884	676 619
-/- 590 (PC+0K)	228		229		97 89
-/- 590 (PC+256K)	212	1295	208	1319	83 76
xxx (90MHz, 256K)	212		207		83 76
Asus P55T2P4 & P54/100		1150			
Compaq XL 5100 (256K)	188	1151	182	1168	71 65
Gateway P5-100 (no SC)	195		192		78 72
OPTi PB586 (100MHz, no SC)		1295	211	1313	xx 83
-/- (100MHz, 256K)	199	1240	196	1258	82 75
Tadpole P1000 (256K)	191	1169	187	1195	75 69
xxx (120MHz, 256K)	175	1085	177	1112	75 67
xxx (133MHz, 256K)	145	899	143	912	59 54
DEC Celebris 5120 (0+0K)		13615	2844	13856	xxx 625
-/- (PC+256K)	159	970	156	988	63 58
DEC Celebris 5133 (0+0K)		12231	2556	12399	xxx 562
-/- (PC+256K)	146	901	144	914	59 55
DEC Celebris 5166		744		768	

ref.time = DAT100					
DECpc XL 590	783		764		344 333
DEC Celebris 5120	593		579		270 257
DEC Celebris 5133			530		xxx 239
DEC Celebris 5150				3158	
Intel UTS P6/133	1202		1171		286 278
Intel UTS P6/200	802	2557	781	2588	190 185

ref.time = DAT999					
DECpc XL 4100 (128K)			19728		xxxx 6570
-/- (256K)			19209		xxxx 6169
-/- & AmdDX4 (256K)	21013		20176		7533 6908
-/- & Am5x86/100	20495		19588		xxxx 6463
-/- & Cx5x86/100	16590		16985		xxxx 6637
Compaq XE 560	15967		15664		6142 5674
-/- & PODP/120	8614		8769		3633 3396
DECpc XL 590	10555		10322		4142 3809
Asus P55T2P4 & P54/100	9365		9074		3480 3232
Tadpole P1000	9497		9290		3698 3422
DEC Celebris 5100	9749		9143		3825 3499
UMC 8890 (120MHz)	8180		8130		xxxx 3191
DEC Celebris 5120	8084		7936		3195 2970
Asus P55T2P4 & P54/120	7858		7657		2992 2777
DEC Celebris 5133	7268		7194		2966 2755
DEC Celebris 5150	6612		6582		2821 2579
DEC Celebris 5166	5953		5935		2550 2338
Intel UTS P6/133	16405		16036		3496 3225
Intel UTS P6/200	10876		10635		2295 2129

| Microsoft C version | 8.00 (Visual 1.00) | | | | | | 8.000c (Visual 1.5) | | | |
| compiler switch | fpa | | | fpi87 | | | fpi87 o2 | | | |
compiler switch	g0	g2	g3	g2 o2	g3 o2	g3	g0	g1	g2	g3
ref.time = DAT35										
Zenith 181	29582	-na-	-na-	-na-	-na-	-na-				
Golden Star (8MHz)							2110			
Compaq & KR1810WM86	39241	-na-	-na-	-na-	-na-	-na-				
Normerel & V40	25864	25838	-na-							
Goupil G4	13566	13554	-na-							
Compaq 286/8	9004	8998	-na-	2319	-na-	-na-				
Compaq 286/12			-na-	1686	-na-	-na-				
-/- + 287XL	6058	6055	-na-	1090	-na-	-na-				
-/- + 2C87				1011	-na-	-na-	1193	1109	1103	-na-
Donatec 386SX/16 + 387SX	8093	8087	8036	585	566	616				
-/- + 3C87SX				544	524	579				
-/- + 487SLX				499	479	541				
Compaq 386-s/16 + 387SX				446	430	456	533	470	466	445
-/- + 3C87SX				392	376	409				
-/- + 487SLX				347	331	370	434	383	379	357
Compaq 386-s/20	2939	2937	2913							
Amstrad 7386SX + 387SX	2908	2890	2869	291	285	302				
-/- + 3C87SX (25MHz)				259	253	273	320	278	275	264
-/- + 487SLX				291	285	302	285	254	251	240
Daewoo (Am386SX/40MHz)	2056	2063	2036							
Compaq 386/16 + 287	3842	3839	3804	1398	1379	1391				
-/- + 287XL				772	753	771				
-/- + 2C87				722	704	728				
-/- + 3C87				351	333	369				
-/- + 4C87DLC				350	331	374				
-/- + XC87DLX2				308	288	336				
-/- + Cx387$^+$				331	310	357				
-/- Cx486DRx^2 (1K)			2096							
IBM 8570 (20MHz)	3200	3190	3160							
Compaq 386/25		2161	2140		232					
-/- + 3C87				205	197	220				
-/- + 4C87DLC				208	198	223				
-/- + XC87DLX2	2166	2161	2140	179	170	200				
-/- + 83D87	2177	2173	2149	188	178					
-/- + EMC87	2177	2173	2150	186	177					
-/- + Cx387$^+$				192	183	212				
-/- + US83C87				198	189	218				
-/- 38600 + 387				230	222	231				
-/- 38600 + 3C87				202	194					
-/- 38600 + 4C87DLC				200	192	204				
-/- 38600 + XC87DLX2				263	256					
-/- 38600 + 83D87				242	234					
-/- 38600 + 38700	1885	1883	1863	245	237	226				
-/- 38600 + US83C87				244	236	228				
-/- Ti486DLC + 387DX	1654	1650	1629	220	212	224				
-/- DLC + 3C87				184	176	188				
-/- DLC + 4C87DLC				185	177	192				
-/- DLC + XC87DLX2				156	148	165				
-/- DLC + EMC87				166	158	176				
-/- DLC + Cx387$^+$				171	162	180				
-/- DLC + 38700				170	162	180				
-/- DLC + US83C87				174	166	183				
-/- Cx486DRx^2 (0K) + 38700				141	133	150				
-/- DRx^2 (1K) + 38700				134	125	136				
-/- DRx^2 (0K) + EMC87				138	130	148				
-/- DRx^2 (1K) + EMC87	1014	1007	999	128	123	135				
-/- DRx^2 (0K) + XC87DLX2				125	117	135				
-/- DRx^2 (1K) + XC87DLX2				115	109	120				

(...continued...)										
Compaq 386/33L (64K)	1581		1564	151	146	163				
-/- + 3C87 + EMC87				152	144	161				
-/- + 4C87DLC				152	146	164				
-/- + EMC87				136	130	151				
-/- + Cx387$^+$				141	135	156				
-/- + CT38700				140	134	155				
-/- 38600 + EMC87				179	173	161				
-/- 38600 + 387DX				152	146	152				
-/- 38600 + 387DX + EMC87				179	173	161				
-/- 38600 + 3C87				149	143	149				
-/- 38600 + 3C87 + EMC87				149	143	150				
-/- 38600 + 4C87DLC				147	141	148				
-/- 38600 + 4C87DLC + EMC87				147	142	149				
-/- 38600 + Cx387$^+$				177	172	162				
-/- 38600 + Cx387$^+$ + EMC87				177	172	162				
-/- 38600 + 38700	1365	1367	1353	181	176	165				
-/- 38600 + US83C87	1365			180	174	166				
-/- Ti486DLC + EMC87				115	112	120				
-/– DLC + 387DX				133	130	135				
-/– DLC + 387DX + EMC87				116	112	121				
-/– DLC + 3C87				130	126	130				
-/– DLC + 3C87 + EMC87				130	126	131				
-/– DLC + 4C87DLC				130	126	133				
-/– DLC + 4C87DLC + EMC87				132	127	133				
-/– DLC + Cx387$^+$				119	116	124				
-/– DLC + Cx387$^+$ + EMC87				121	117	125				
-/– DLC + 38700	1039	1035	1024	120	117	125				
-/– DLC + US83C87	1040	1036	1024	122	118	126				
-/- Cx486DRx^2 + EMC87				99	94	104				
-/– DRx^2 + 387DX				119	115	121				
-/– DRx^2 + 387DX + EMC87				91	88	94				
-/– DRx^2 + 3C87				114	109	114				
-/– DRx^2 + 3C87 + EMC87				114	109	115				
-/– DRx^2 + 4C87DLC + EMC87				114	109	117				
-/– DRx^2 + 83D87				99	94	104	109	97	96	93
-/– DRx^2 + Cx387$^+$				94	92	97				
-/– DRx^2 + Cx387$^+$ + EMC87				96	93	99				
-/– DRx^2 + 38700	926		914							
-/– DRx^2 + 38700 + EMC87				91	89	94				
Am386/40 (128K) + 3C87				125	120	134				
OPTi 495 SLC + US83C87/40 (0K)				228	211	251				
-/- + US83C87/40 (256K)				130	124	139				
-/- & 487SX/33 (PC+256K)			969	60	57	68	68	63	63	59
-/- & ST486/66 (0+0K)	4570	4615	4522	215	194	255				
-/- & ST486/66 (0+256K)	1623	1647	1632	88	80	107				
-/- & ST486/66 (PC+0K)	617	618	603	55	52	60				
-/- & ST486/66 (PC+256K)	506	510	504	34	32	38				
-/- & Cx486/66 (8+256K)				33	31	37				
-/- & Amd486/66 (PC+256K)				35	33	39	41	37	37	35
-/- & AmdDX4 (8+256K)			401	28	26	31	32	29	29	27
Headland 486SX/33	978	987	977							
DECpc LPv+ 433sx (0+128K)			2112							
DECpc LPv+ 433sx (PC+0K)	978	986	976							
DECpc LPv+ 433sx (PC+128K)	961	968	960							
DECpc XL & U5S/33 (0+0K)	2296	2344	2324							
-/- & U5S/33 (PC+0K)	678	678	671							
-/- & U5S/33 (PC+256K)	652	652	647							
-/- 466S2 (PC+256K)	486	489	485							
Alaris Cougar 486BL3X + 387				173	171	170				
-/- + 3C87				136	134	134				
-/- + 4C87DLC				136	134	137				

(...continued...)

-/- + XC87DLX2 (0+0K)	3567	3578	3536	240	220	260				
-/- + XC87DLX2 (PC+0K)				134	133	145				
-/- + XC87DLX2 (PC+256K)	567	566	561	102	100	105				
-/- + Cx387$^+$	566	566	561	119	117					
-/- + US83C87				122	121	124				
ETEQ & 487SX/25	1325	1336	1314	87	83					
UMC 4913 (25MHz, 256K)	1284	1293	1283	78	73	89				
DECpc 425SLC/e	1311	1317	1304	86	81	98				
IBM 8570 R21 (25MHz)	1302	1312	1298	84	79					
-/- Overdrive (25/50MHz)	779	786	770	55	50	60				
Compaq Prolinea 450 (no SC)	666	671	663	45	43	50				
-/- & U5S/33 (PC+0K)	680	680	672							
Arche 486/33 (PC+0K)	974	981	972	63	59	70				
-/- (PC+256K)	956	963	955	59	55	66				
Compaq 486/33	983	991	980	63	59					
DECpc XL 433DX (0+0K)	2968	2762	2740	135	122	155				
-/- 433DX (PC+0K)	977	984	975	62	58	69				
-/- 433DX (PC+128K)	962	969	962	58	54	66				
-/- 433DX (PC+256K)	961	968	961	58	54	66				
Compaq 486/66m	490	494	489	30	28	34				
DECpc XL 466D2 (0+0K)	2429	2498	2468	119	106	136				
-/- 466D2 (PC+0K)	518	522	515	36	35	40				
-/- 466D2 (PC+128K)	491	494	487	31	29	34	34	32	32	30
-/- 466D2 (PC+256K)	490	494	491	30	28	34				
-/- & Amd486/66 (256K)	490	494	492	30	28	34				
-/- & ST486/66 (0+0K)	2383	2385	2355	125	113	148				
-/- & ST486/66 (256K)	455	462	456	33	31	36				
-/- & Cx486/66 (0+0K)	2372	2383	2358	125	113	145	147	141	139	124
-/- & Cx486/66 (PC+0K)	497	505	501	40	38	45	51	44	44	41
-/- & Cx486/66 (256K)	456	463	457	33	31	37	43	36	36	34
Toshiba 4800 (DX4/75)	432	434	427	33	30	36				
ALI-VIP DX4/100 (PC+0K)				31	28	33				
-/- DX4/100 (PC+256K)	297	298	294	23	21	25				
Compaq Prolinea 4/100	294	295	293	23	21	25				
DECpc XL 4100 (0+0K)	2354	2409	2377	114	102	131				
-/- 4100 (PC+0K)	324	324	320	25	23	27				
-/- 4100 (PC+128K)	308	309	306							
-/- 4100 (PC+256K)				21	20	23				
-/- & PODP/83 (0+0K)	3136	3191	3147	131	116	150				
Compaq XE 560 (no SC)	343	343	340	18	17	22				
DECpc XL 560 (256K)	342	347	344	18	16					
NexGen Nx586 (60MHz, 256K)	364	359	356							
-/- (75MHz, 256K)	302	299	295							
-/- (90MHz, 256K)	248	252	246							
AS600 5/266, WNT 3.51	710	681	**-na-**							

ref.time = DAT50

AS600 5/266, WNT 3.51				501	**-na-**	**-na-**				
Toshiba 3200SX (16MHz)				2485	2430	2577	3000	2622	2589	2507
... 386DX + 387DX/33	9090	9082	9000	865	839	919				
... Cx486DRx^2 + Cx387$^+$/33	3888	3867	3838	520	505	536				
... Cx486DRx^2 + XC87DLX2/80	3239	3221	3197	394	382	405				
... RapidCAD/33	7682	7682	7601	425	392	489				
... RapidCAD/40	6380	6380	6312	353	325	406				
Compaq XE 450 (PC+256K)				249	234	275	278	262	262	245
Compaq Prolinea 450 (no SC)				267	254	294	300	276	277	261
-/- & 486/25 (PC+0K)				470	446	530	528	496	493	465
-/- & 486/33 (PC+0K)	5659	5703	5648	352	334	397	396	372	370	349
-/- & 486/66 (PC+0K)				200	190	221	225	207	208	196
-/- & DX4/75 (PC+0K)	2503	2507	2476	189	176	205	213	196	196	184
-/- & DX4/100 (PC+0K)	1878	1878	1854	142	132	154	159	147	147	138
-/- & PODP/63 (32+0K)	2681	2681	2644	136	123	151	158	154		

(...continued...)										
-/- & PODP/83 (32+0K)				102	92	113	118	115	109	98
-/- & Cx5x86/75 (PC+0K)	2672	2669	2689	184	168	204	245	200	201	187
-/- & Cx5x86/100 (PC+0K)	2257	2200	2227		126	152	185	153	154	145
Toshiba 4800 (DX4/75)	2496	2506		184	168	204				
OPTi 895 & Amd486/80	2385	2452	2380	151	143	170				
ALI-VIP DX4/100	1715	1723	1699	129	119	142				
ALI Vi15G & Amd486/120	1590	1601	1586	100	95	112				
Asus 486SP3 & Am5x86/133				87	82	98	98	91	91	86
Asus 486SP3 & Am5x86/160				79	74	87				
Asus 486SP3 & Cx5x86/100				106	97	105	137	106	106	97
Asus 486SP3 & Cx5x86/120				93	86	92	120	93	93	86
Asus 486SP3 & PODP/83				70	66	85	83	75	75	70
Asus 486SP3 & PODP/100				63	59	74	74	68	67	62
DECpc XL 4100 (PC+256K)	1606	1619	1604							
-/- & AmdDX4 (8+256K)	2073	2138	2065							
-/- & PODP/83 (0+0K)	18157	15264		752	667	861				
-/- & Cx5x86/100 (16+256K)	1448	1463	1438	102	95	104	148	106	106	97
-/- & Am5x86/100 (16+256K)	1911	1927	1907	114	107	129	128	120	119	113
DECpc XL 560 (256K)				102	94	121				
Compaq XE 560 (no SC)	1984	1988	1967	104	98	123	120	110	108	102
-/- & PODP/120	1096	1093	1073							
OPTi 586 PCI (66MHz, no SC)				126	117	138				
-/- (66MHz, 1024K)				100	93	115				
DECpc XL 590 (0+0K)	13812	14059	13762	593	522	693	689	668	656	568
-/- 590 (PC+0K)	1437	1453	1429	83	77	93				
-/- 590 (PC+256K)	1319	1324	1308	68	63	81	79	72	71	66
Compaq XL 590 (256K)	1307	1294	1281	66	61	79				
Compaq XL 5100 (256K)	1169	1164	1153	59	55	71	69	63	62	58
NexGen Nx586PF100	1318	1319	1305	63	58	68				
xxx (90MHz, 256K)				69	64	82	80	73	72	66
Asus P55T2P4 & P54/100	1169	1164	1154							
Gateway P5-100 (no SC)				66	62	77	75	68	68	63
OPTi PB586 (100MHz, no SC)	1323	1315	1296	77	70	87	78	71	71	65
-/- (100MHz, 256K)	1265	1256	1240	69	63	79				
Tadpole P1000 (256K)	1206	1195	1182	62	58	73				
xxx (Cx6x86/120)	1013	1019	1012	65	61	65				
xxx (120MHz, 256K)	1113	1103	1101	63	58	72	69	63	63	58
xxx (133MHz, 256K)	915	910	899	49	44	57	56	51	51	46
DEC Celebris 5120 (0+0K)	13712	13900	13714	585	516	681				
-/- (PC+256K)	988	987	977	51	47	60	59	54	53	49
DEC Celebris 5133 (0+0K)	12315	12507	12322	526	463	612				
-/- (PC+256K)	918	913	901	49	45	56	56	51	50	46
DEC Celebris 5166	758	753	743							
Asus (180MHz)	688	684	677	36	33	42				
-/- (200MHz)	621	618	611	33	30	38				
ref.time = DAT100										
DECpc XL 4100 & AmdDX4				532	503	500	592	554	552	519
-/- & Am5x86/100				534	495	498	588	563	555	519
DECpc XL 590 (256K)				252	234	298	291	265	263	243
DEC Celebris 5120 (256K)				191	177	230	222	202	200	184
DEC Celebris 5133 (256K)				180	164	210				
DEC Celebris 5150	3098	3079	3037							
Intel UTS P6/133				224	214	282	247	242	239	228
Intel UTS P6/200	2578	2575	2557	149	143	188	165	162	159	152
ref.time = DAT999										
IBM 8570 R21 & P23T/50					14327					
DECpc XL 4100 (128K)				6228	5818	6707				
-/- (256K)				5746	5401	6295				
-/- & AmdDX4 (256K)				6364	5956	6997	7945	6781	6724	6281
-/- & Am5x86/100				6088	5660	6693	6808	6488	6533	6012
-/- & Cx5x86/100					4679		7611		6223	5695

(...continued...)										
Asus 486SP3 & Am5x86/160					3736					
Asus 486SP3 & Cx5x86/120										
Asus 486SP3 & PODP/100					2939					
Compaq XE 560				5142	4817	6145	5916	5394	5372	5020
-/- & PODP/120				3051	2798	3385		3077	2862	
DECpc XL 590				3377	3132	4023	3919		3544	3277
Asus P55T2P4 & P54/100				2907	2733	3529	3406	3098	3078	2883
Shuttle Hot555 & Amd K5/100					3345					
Shuttle Hot555 & Cx6x86/100					3644					
Shuttle Hot555 & P54/100					2725					
OPTi PB586 (100MHz)					3214					
Tadpole P1000				3044	2824	3624	3533	3218	3197	2955
DEC Hinote VP (100MHz)					3113					
DEC Celebris 5100				3167	2911		3642		3307	3042
yyy (Cx6x86/120, 256K)					3607					
UMC 8890 (120MHz)				2808	2538					
DEC Celebris 5120				2584	2391	3035	2988	2722	2699	2511
Asus P55T2P4 & P54/120				2493	2329	2977	2892	2639	2615	2445
Shuttle Hot555 & Cx6x86/133					2725					
DEC Celebris 5133				2426	2231	2797	2765	2527	2503	2295
DEC Celebris 5150	42019	41769	41200	2285	2069		2581		2343	2130
OPTi PB586 (166MHz)					2190					
DEC Celebris 5166				3063	1867	2361	2322	2131	2107	1915
Shuttle Hot555 & P54/166					1732					
xxx (180MHz)					1629					
Intel UTS P6/133				3051	2933	3830	3371	3317	3263	3122
Intel UTS P6/200				2009	1928	2468	2227	2190	2152	2067

| (Win32) Microsoft C version | 0.00.3043d (beta) | | | | 8.00.3180 (Visual 1.00) | | | |
| switch | oX | | oP | | oX | | oP | |
switch	g3	g4	g3	g4	g4	g5	g4	g5
ref.time = DAT50								
Compaq 386/25								
-/- Cx486DRx^2	7092	6992	7487	7525	6747	7109	7507	7704
-/− DRx^2 + 387DX					960	925	1582	1044
-/− DRx^2 + 4C87DLC	881	917	926	985	904		984	
-/− DRx^2 + XC87DLX2								
-/− DRx^2 + 83D87					643	648	**1412**	733
-/− DRx^2 + 38700					680	652	920	814
-/− DRx^2 + US83C87					669	664	**1467**	733
Compaq 386/33L								
-/- Cx486DRx^2 + 83D87	833	903	855	991				
ETEQ & 487SX/25	488	539	497	578	459	431	494	483
DECpc XL 466S2	2282	2292	2388	2408	2201	2322	2418	2512
AlphaStation 600 5/266	361	133			159	**-na-**		
ref.time = DAT100								
Alaris Cougar 486BL3X								
-/- + US83C87								
OPTi 495 SLC + 487SX/33					4258	5198	5227	5145
DECpc 425SLC/e					1254	1542	1507	1260
Compaq Prolinea 450	885	840	1157	1106	786	960	936	954
-/- & 486/25	1373	1313	1818	1736	1254	1537	1479	1507
-/- & 486/66	659	626	862	823	585	715	696	710
-/- & PODP/63	435	415	490	469	325	328	392	389
-/- & PODP/83	322	308	365	347	241	243	290	288
-/- & Cx5x86/100	664	572	702	617	369	447	551	535
ref.time = DAT999								
DECpc XL 466D2	6756	6365	7655	7114	5932	6203	6993	7119
-/- & Cx486/66	9094	8415	9323	9087	7582	8032	8845	9341
-/- & Ti486/66		8840		9384	7879	8538	9084	9803
-/- & DX4/100	4195	4389	4762	4977				
-/- & AmdDX4/100	5592	5977	6075	6942	4740	4938	5566	5795
-/- & Am5x86/100		4469		5004	4148	4427	4919	5069
Compaq XE 560					3355	3262	4409	4116
-/- & PODP/120	2967	2657	3103	2969	2322	2315	3068	2866
DECpc XL 590	2687	2429	3066	2734	2190	2151	2786	2627
Asus P55T2P4 & P54/100					1795	1663	1569	1502
Tadpole P1000		2152		2434	1873	1747	1654	1580
DEC Celebris 5100		2148		2457	1986	1861	2454	2359
DEC Celebris 5120	2143	1859	2267	1999	1575	1602	2044	1938
DEC Celebris 5133	2005	1734	2176	1994	1658	1589	2064	1995
DEC Celebris 5150	1980	1747	2157	1983	1542	1572	2118	1976
Intel UTS P6/133	1536	988	1747	1125	861	885	1239	1215
Intel UTS P6/200	1024	658	1167	750	574	587	809	824

| (Win32) Microsoft C | 9.00 (Visual 2.0) | | | | 9.10 (Visual 2.2) | | | |
| switches | oD | oX o2 | | | oD | oX o2 | | |
switch	gB	g3	g4	g5	gB	g3	g4	g5
ref.time = DAT50								
Compaq 386/25								
-/- Cx486DRx^2	7827	7550	7491	7641	8269	6899	6900	7292
-/– DRx^2 + 387DX	833	780	783	803	837	701	697	749
-/– DRx^2 + 4C87DLC					983	889	841	839
-/– DRx^2 + XC87DLX2								
-/– DRx^2 + 83D87		693	679	701		593	587	637
-/– DRx^2 + 38700	917		816	968			598	646
-/– DRx^2 + US83C87			704	713			643	684
Compaq 386/33L								
-/- Cx486DRx^2 + 83D87	993	510	515	881	1037	700	445	526
DECpc XL 466S2	2509	2406	2406	2458	2614	2232	2236	2374
AlphaStation 600 5/266		142	142	139				
ref.time = DAT100								
Alaris Cougar 486BL3X								
-/- + US83C87		3192				2588		
OPTi 495 SLC + 487SX/33	7676	7040	6311					
DECpc 425SLC/e	1928	1488	1495	1772				
Compaq Prolinea 450	1232	934	934	1111				
-/- & 486/25	1913	1473	1473	1752				
-/- & 486/66	917	696	696	827				
-/- & PODP/63	407	381	391	446				
-/- & PODP/83	302	282	282	330				
-/- & Cx5x86/100	616	573	573	585				
ref.time = DAT999								
DECpc 425SLC/e	23276	21021	21039	21481				
ALI-VIP DX4/100	6488	6134	6129	6375	7328	5656	5676	5760
DECpc XL 466D2		7252	7055	7178		6225	6229	6370
-/- & Cx486/66	10091	9326	9250	9072				
-/- & Ti486/66		9517	9389	9628		7735	7771	8437
-/- & DX4/100	5278	4774	4709	4889	5495	4378	4341	4246
-/- & AmdDX4/100		5844	5888	5785		5436	5161	5217
-/- & Am5x86/100			4686	4826			4019	4157
Compaq XE 560	4504	4036	4039	4098	4689	3435	3435	3352
-/- & PODP/120		2753	2747	2811		2327	2311	2301
DECpc XL 590	2815	2501	2494	2558	3940	2837	2793	2765
Shuttle Hot555 & Cx6x86/100							2592	2782
Shuttle Hot555 & P54/100							1716	1649
OPTi PB586 (100MHz)	3014	2743			3179	2352		
Tadpole P1000			2278	2336			1946	1900
DEC Celebris 5100			2274	2392				
UMC 8890 (120MHz)		2355		2379		1971	1965	1964
DEC Celebris 5120	2158	1879	1890	1981	2249	1607	1585	1585
Shuttle Hot555 & Cx6x86/133							1982	2134
DEC Celebris 5133	2078	1841	1838	1997	2371	1572	1587	1526
DEC Celebris 5150		1889	1922	2004		1606	1648	1614
xxx (166MHz)							1148	1116
Intel UTS P6/133	1216	1097	1098	1118	1462	1019	1020	1068
Intel UTS P6/200	808	731	731	755	974	680	680	710

(Win32) Microsoft C	10.00.5270 (Visual 4.0)					10.10.6038		10.20.6166	
source version	original		FOREST			original			
switches	oD	oX o2				oX o2			
switch	gB	g3	g4	g4	g5	g4	g5	g4	g5
ref.time = DAT50									
Compaq 386/25									
-/- Cx486DRx^2	6931	6935	7146	6662	7370	9691	10583		
-/– DRx^2 + 387DX	691	700	698		750				
-/– DRx^2 + 4C87DLC	832	839	843	794	896				
-/– DRx^2 + XC87DLX2									
-/– DRx^2 + 83D87		587	588	584	642	593	638		
-/– DRx^2 + Cx387$^+$						680	715		
-/– DRx^2 + 38700		598	597	586	640	592	644		
-/– DRx^2 + US83C87		639	644	633	683	643	697		
DECpc XL 466S2	2233	2233	2230	2183	2375				
AlphaStation 600 5/266		118	118	108	132				
ref.time = DAT100									
Alaris Cougar 486BL3X									
-/- + US83C87		2189					2744		
ref.time = DAT999									
DECpc 425SLC/e						17465	18225		
ALI-VIP DX4/100	5760	5671	5824	5660	6055				
DECpc XL 466D2		6129	6185	5959	6551				
-/- & Ti486/66		7579	7599	7447	8336	8108	8781	8052	8634
-/- & DX4/100	4383	4384	4346		4714				
-/- & AmdDX4/100		5077	5134	6119	5318				
-/- & Am5x86/100		4019	3984	3856	4232	3986	4161		
Compaq XE 560	3413	3437	3407	3388	3400				
-/- & PODP/120			2348	2333	2383	2340	2291		
DECpc XL 590	2801	2820	2747	2650	2799	2157	2089	2179	2102
Shuttle Hot555 & Cx6x86/100						2466	2653		
Shuttle Hot555 & P54/100						1692	1612		
OPTi PB586 (100MHz)	2380	2395				2464	2385		
Tadpole P1000			1893	1903	1941	1882	1886		
UMC 8890 (120MHz)		2003	1994	1944	2031	1985	2013		
DEC Celebris 5120	1584	1563	1604	1561	1575				
Shuttle Hot555 & Cx6x86/133						1889	2043		
DEC Celebris 5133	1563	1699	1637		1631	1656	1556	1599	1556
DEC Celebris 5150			1574	1580	1660	1606	1576	1602	1636
xxx (166MHz)						1106	1099		
Intel UTS P6/133	1219	1140	1163		1123				
Intel UTS P6/200	577	576	578	583	636				

(Win32) source version switches switch	Borland C/C++ 4.0 original none			FOREST -G -Oxt -3		Borland C/C++ 4.5 original none			FOREST -G -Oxt -3	
	-3	-4	-5			-3	-4	-5		
ref.time = DAT50										
Compaq 386/25										
-/- Cx486DRx^2	8622	8741	8783	7951	7927	7477	7459	8710	7419	7141
-/– DRx^2 + 387DX	1241	1175	992	893	943	818	822	985	819	805
-/– DRx^2 + 4C87DLC	901	921	922	820	850	770	767	922	772	757
-/– DRx^2 + XC87DLX2										
-/– DRx^2 + 83D87	776	796	807	717	726	675	665	781	674	643
-/– DRx^2 + CT38700	840	841	849	768	777	709	715	848	711	681
-/– DRx^2 + US83C87	796	821	822	738	772	693	683	821	687	664
Compaq 386/33L										
-/– DRx^2 + 83D87	586	598	602	652	953	782	909	1177	859	960
DECpc XL 466S2	2789	2878	2889	2582	2707	2484	2487	2879	2475	2375
ref.time = DAT100										
Alaris Cougar 486BL3X										
-/- + US83C87	4176	4352	4362	3366	3481	3041	3054	3714	3012	2935
DECpc 425SLC/e	1693	1542	1779	1515	1451	1474				
Compaq Prolinea 450	1107	1108	1109	955	997	876	876	1092	869	833
-/- & 486/25	1767	1772	1772	1572	1608	1489	1488	1733	1453	1397
-/- & 486/66	825	826	826	710	744				649	621
-/- & PODP/63	518	494	493	398	404	495	495	458	483	450
-/- & PODP/83	384	366	366	295	300	367	367	340	358	334
-/- & Cx5x86/100	484	478	478	484	475	437	437	450	420	
ref.time = DAT999										
ALI-VIP DX4/100	6644	6754	6668	6344	6638	5734	5840	6660	5698	5537
DECpc XL 466D2	8519	8637	8611	7640	8060	7275	7363	8460	7173	6912
-/- & Cx486/66	9772	10212	10411	8854	9329	8788	8786	10174	8791	8050
-/- & DX4/100	5588	5666	5669	5214	5454	4871	4898	5626	4835	4617
-/- & AmdDX4/100	6703	6782			6901	6127	5972		5814	5503
-/- & Am5x86/100	5714	5763	5785	5205	5329	4826	4833	5626	4742	4526
Compaq XE 560	5141	4849	4839	4402	4538	4536	4556	4443	4300	4015
-/- & PODP/120	3112	3002	3036	2701	2826	2714	2730	2746	2563	2378
DECpc XL 590	3338	3102	3077	2788	2875	2915				
OPTi PB586 (100MHz)	2988	2991	3036	2839	2625	2799	3436			
Tadpole P1000	3025	2826	2808	2534	2596	2614	2648	2585	2491	2299
DEC Celebris 5100	2946	2832	2841	2563	2628					
UMC 8890 (120MHz)	2894	2780	2777	2532	2619	2483	2464	2559	2362	2209
DEC Celebris 5120	2476	2338	2383	2074	2220	2192	2173	2187	2172	1933
DEC Celebris 5133	2366	2272	2256	1997	2083	2116	2069	2055	2357	1968
DEC Celebris 5150	2318	2331	2237	2005	2051	1993	2017	2080	1915	1730
Intel UTS P6/133	2035	1996	1993	1842	1829	1703	1702	1518	1675	1362
Intel UTS P6/200	1375	1342	1354	1251	1223	1146	1143	1022	1130	918

Borland C/C++ (Win32)

(Win32) source version / switches / switch	Borland C/C++ 5.0 original none			FOREST -G -Oxt		Borland C/C++ 5.x original none			FOREST -G -Oxt	
	-3	-4	-6	-5		-3	-4	-6	-5	
ref.time = DAT50										
Compaq 386/25										
-/– DRx^2 + 387DX	937	971	956	966						
-/– DRx^2 + 4C87DLC										
-/– DRx^2 + XC87DLX2										
-/– DRx^2 + 83D87	647	661	670	666	652					
-/– DRx^2 + CT38700	729	750	747	755	727					
-/– DRx^2 + US83C87	697	709	720	715	702					
DECpc XL 466S2	2407	2488	2452	2452	2357	xxxx	xxxx	xxxx	xxxx	xxxx
ref.time = DAT100										
Alaris Cougar 486BL3X										
-/- + US83C87	2337	2435	3042	3056	2950					
ref.time = DAT999										
DECpc XL 466D2	7659	8000	7991	8649						
-/- & Ti486/66	8793	9209	9047	9168	10969					
-/- & AmdDX4/100	5760	5958	5994	5876	5703					
-/- & Am5x86/100	4584	4760	4784	4822	4599					
Compaq XE 560										
-/- & PODP/120		2667	2670	2663	2444					
DECpc XL 590	2818	2808	2920	2924	2661					
OPTi PB586 (100MHz)										
Tadpole P1000	2280	2489	2531	2525	2331					
DEC Celebris 5100	2322	2558	2579	2571	2354					
DEC Celebris 5120										
DEC Celebris 5133	1940	2104	2091	2141						
DEC Celebris 5150	1831	1979	2001	2041						

Symantec (Win32)

(Win32) Symantec / switches	6.10 none	time f ff	s	x.y	
ref.time = DAT50					
Compaq 386/25					
-/- Cx486DRx^2	8780	8504	8486		
-/– DRx^2 + 4C87DLC	1070	1027	1038		
DECpc XL 466S2	2785	2702	2699		
ref.time = DAT100					
DECpc 425SLC/e	1656	1597			
Compaq Prolinea 450					
-/- & 486/25	1590	1537	1818		
-/- & 486/66	706	676	794		
-/- & PODP/63	386	377	368		
-/- & PODP/83	286	279	273		
ref.time = DAT999					
DECpc XL 466D2	7851	7537	7653		
-/- & Ti486/66	**ab.**	9381	9653		
-/- & DX4/100	5235	5008	5196		
-/- & AmdDX4/100	6028	5848	5719		
-/- & Am5x86/100	5202	5021	5149		
Compaq XE 560 & PODP/120	2578	2443	2397		
DECpc XL 590	2832	2646			
OPTi PB586 (100MHz)	2831	2667			
Tadpole P1000	2603	2476			
DEC Celebris 5120	2125	1982	1985		
DEC Celebris 5133	2035	1969	1926		
DEC Celebris 5150	1955	1820	1836		
Intel UTS P6/133	1425	1380	1386		
Intel UTS P6/200	950	919	925		

(Dos32) Watcom		10.0a				10.5	
source version		original					FOREST
compiler switch		fpi87		fpc		fpi87	
compiler switch		3r	5r	3r		5r	
compiler switches : otexan zp4 ...		fp2	fp5	fp2	fp5		
ref.time = DAT35							
Daewoo (Am386SX/40MHz)	4701						
ref.time = DAT50							
Donatec 386SX/16 + 387SX	3046	2813	3050	11477	11494	xxxx	xxxx
-/- + 3C87SX	3045	2808	3029	11538	11468		
-/- + 487SLX	2617	2353	2547	11239	11292		
Compaq 386-s/16 + 387SX	2262	2187	2412	8278	8148		
-/- + 3C87SX	2249	2166	2386	8117	8252		
-/- + 487SLX	1787	1694	1855	7871	7748		
Amstrad 7386SX (25MHz)	38046	-na-	-na-	7797	7766		
-/- + 387SX			1554				
-/- + 487SLX	1164	1108	1210	4067	3999		
Compaq 386/16 + 287	8562	8440	9095	13734	13768		
-/- + 287XL	4030	4124	4465	8437	8470		
-/- + 2C87	3847	3812	4233	8268	8293		
-/- + 3C87	1574	1554	1764	4947	4986		
-/- + 4C87DLC	1831	1803	2014	5055	5095		
-/- + XC87DLX2	1370	1334	1483	4683	4730		
-/- + Cx387$^+$	1466	1429	1589	4709	4755		
Compaq 386/33L (64K)							
-/- Ti486DLC + 387DX	635	646	723		1625		
-/- DLC + 4C87DLC	755	756	836	1708	1705		
-/- DLC + US83C87	587	584	640	1579	1571		
-/- Cx486DRx^2 + 83D87	467	454	497	1381	1381		
-/- Cx486DRx^2 + US83C87	489	479	525	1419	1420		
Alaris Cougar 486BL3X							
-/- + US83C87	618	625	694				
Compaq Prolinea 4/25S	13095	-na-	-na-	3173	3172		
Compaq Prolinea 450 & U5S/33	8319	-na-	-na		1888		
DECpc XL & U5S/33 (PC+0K)	8000	9556	10405	1894	1889		
-/- & U5S/33 (PC+256K)	7389	-na-	-na-	1769	1768		
-/- 466S2 (PC+256K)	4999	6171	6614	1194	1192		
-/- 466D2 (PC+256K)	130	124	132	378	376		
-/- & ST486/66 (0+0K)	549	475	496	2694	2740		
-/- & ST486/66 (256K)	155	147	166	486	484		
-/- & Cx486/66 (0+0K)	549	475	496	2694	2740		
-/- & Cx486/66 (PC+0K)	495	483	538	1401	1402		
-/- & Cx486/66 (256K)	157	150	167	485	484		
OPTi 495 SLC & 487SX/33 (PC+256K)	273	255	270		782		
-/- & ST486/66 (0+0K)	954	825	859	5350	5437		
-/- & ST486/66 (0+256K)	399	346	366	2034	1978		
-/- & ST486/66 (PC+0K)	272	245	267	869	861		
-/- & ST486/66 (PC+256K)	160	148	157	488	472		
-/- & Amd486/66 (PC+256K)	165	155	163				
OPTi 895 & Amd486/80 (0+0K)	574	500	515	3212			
-/- & Amd486/80 (256K)	123	117	124	353	348		
DECpc XL 4100 (0+0K)	484	421	433	2595	2591		
-/- 4100 (PC+128K)	90	87	94	274	273		
NexGen Nx586 (90MHz, 256K)	3805	-na-	-na-	651	642		
ref.time = DAT100							
Toshiba 3200SX (16MHz)	8163	**7820**	8636	25900	25470		
... 386DX + 387DX/33	2522	**2522**	2916	7522	7511		
... Ti486DLC + US83C87/33	2165	**2157**	2365	6881	6916		
... Cx486DRx^2 + Cx387$^+$/33	2001	1918	**1878**		4576		
... 486DRx^2 + XC87DLX2/80	**1410**	1410	1572	3246	3215		
... RapidCAD/33	1153	1287	**1148**	4580	4607		
... RapidCAD/40	958	1067	**952**	3802	3823		

(...continued...)							
Compaq XE 450 (PC+256K)	**676**	779	696	2000	1987		
Compaq Prolinea 450 (no SC)	**790**	919	801	2222	2200		
-/- & 486/25 (PC+0K)	**1327**	1532	1352	3876	3847		
-/- & 486/33 (PC+0K)	**994**	1147	1012	2903	2881		
-/- & 486/66 (PC+0K)	**591**	688	600	1663	1647		
-/- & DX4/75 (PC+0K)	**504**	602	537	1797	1769		
-/- & DX4/100 (PC+0K)	**378**	451	402	1343	1321		
-/- & PODP/63 (32+0K)	395	347	**315**	1647	1623		
-/- & PODP/83 (32+0K)	298	260	**236**	1235	1212		
-/- & Cx5x86/75 (PC+0K)	603	556	**533**	2125	2110		
-/- & Cx5x86/100 (PC+0K)	451	416	**400**	1588	1577		
DECpc XL 466D2 (PC+256K)	474	545	486	1391	1383		
-/- OVDR/100 (PC+128K)	328	380	347	1009	1006		
-/- 4100 (PC+128K)	330	384	350	1008	1006		
-/- 4100 (PC+256K)	310	359	322	929	922		
-/- & AmdDX4 (8+256K)	339	390	346	999	992		
-/- & Cx5x86/100 (16+256K)	329	311	311	1117	1108		
-/- & Am5x86/100 (16+256K)	311	361	323	930	923		
ALI Vi15G & Amd486/120 (256K)	283	326	289	834	826		
Asus 486SP3 & Am5x86/100	323	378	337	(100MHz=25x4)			
Asus 486SP3 & Am5x86/100	313	364	325	(100MHz=33x3)			
Asus 486SP3 & Am5x86/133	244	285	254				
Asus 486SP3 & Am5x86/160	221	264	234				
Asus 486SP3 & Cx5x86/100	331	315	301				
Asus 486SP3 & Cx5x86/120	301	290	275				
Asus 486SP3 & PODP/83	216	184	157				
Asus 486SP3 & PODP/100	201	173	150				
Compaq XE 560 (no SC)	316	274	231	920	915		
Compaq XL 566 (256K)	274	234	199	799	799		
DECpc XL 590 (0+0K)	1796	1457	1318	9699	9659		
-/- 590 (PC+0K)	250	220	193	670	663		
-/- 590 (PC+256K)	200	171	146	585	587		
Compaq XL 590 (256K)	192	163	139	570	570		
xxx (P54/90MHz)	202	173	147	590	588		
NexGen Nx586PF100	201	152	186	791	754		
Compaq XL 5100	173	147	125	513	514		
Gateway P5-100 (no SC)	196	171	147	558	555		
OPTi PB586 (100MHz)	204	178	154	572	568		
Tadpole P1000	181	154	132	530	528		
xxx (Cx6x86/120)	201	193	190	750	745		
xxx (P54/120MHz)	191	170	149	523	517		
xxx (P54/133MHz)	144	127	107				
DEC Celebris 5120 (0+0K)	1779	1446	1310	9676	9595		
-/- (PC+256K)	150	127		441	440		
DEC Celebris 5133 (0+0K)	1597	1298	1176	8690	8617		
-/- (PC+256K)	144	123	106	413	410		
Asus (180MHz)	104	89	77	301	300		
-/- (200MHz)	94	81	69	272	271		
Intel UTS P6/133	121		84	402	401		
Intel UTS P6/200	80	66	56	268	267		
ref.time = DAT999							
IBM 8570 R21 & P23T/50		11048	10896				
DECpc XL 466D2			6832				
-/- & Ti486/66	8308	7980	9004	24829	24688		
ALI-VIP DX4/100		5019	5353				
DECpc XL 4100	4218	3448		12445			
-/- & AmdDX4	4696	4579	4779	13777	13723	4705	4367
-/- & Am5x86/100	4334	4204	4459	13079	13001		
-/- & Cx5x86/100	3725	3657	4164	13728	13665		
Asus 486SP3 & Am5x86/160	**3030**	3037	3182				
Asus 486SP3 & PODP/100	2301	2060	**2000**				

Compaq XE 560	3476	3096	2934	12063	12021		
-/- & PODP/120	2087	1895	1856	6865	6814	1889	1798
DECpc XL 590	2299	2032	1940	7998	7964	2060	1960
Asus P55T2P4 & P54/100	1943	1753	**1661**				
Shuttle Hot555 & Amd K5/100		**2501**	2521			2557	2478
Shuttle Hot555 & Cx6x86/100		**2661**	2989			2636	2466
Shuttle Hot555 & P54/100	1950	1717	**1615**				
OPTi PB586 (100MHz)	2386	2195	2156				
Tadpole P1000	2069	1830	1747	7183	7156	1788	1705
Compaq Prolinea 5100E		2468	2434				
Compaq XL 5100	1990	1778	1752				
DEC Hinote VP (100MHz)		2099	2036				
DEC Celebris 5100	2237	1832	1750	7749	7556		
yyy (Cx6x86/120, 256K)		2630	2957			2592	2425
UMC 8890 (120MHz)	1929	1724	1682			1811	1723
DEC Celebris 5120	1710	1523	1449	5952	5959	1698	1597
Asus P55T2P4 & P54/120	1667	1471	1392	5845	5840		
Shuttle Hot555 & Cx6x86/133		**1990**	2236			1973	1844
DEC Celebris 5133	1652	1470	1420	5609	5564	1591	1503
DEC Celebris 5150		1406	1374	5222	5171		
DEC Celebris 5166	1415	1266	2236				
OPTi PB586 (166MHz)						1689	1579
Shuttle Hot555 & P54/166		1115	**1068**				
Intel UTS P6/133	1396	1178	1113	5467	5430		
Intel UTS P6/200	930	786	743	3646	3620		

(Win32) Watcom	10.5		x.y	
source version	original	FOREST	original	FOREST
switches	otexan fpi87 5r		xx yy zz	
ref.time = DAT50				
Compaq 386/25				
-/- Cx486DRx^2				
-/- DRx^2 + 4C87DLC				
ref.time = DAT100				
Alaris Cougar 486BL3X				
-/- + US83C87	3600			
DECpc 425SLC/e				
ref.time = DAT999				
DECpc XL 466D2				
-/- & Ti486/66				
-/- & DX4/100				
-/- & AmdDX4/100	4405	4410	‖	
Compaq XE 560 & PODP/120				
DECpc XL 590	1962	1874	‖	
OPTi PB586 (100MHz)				
UMC 8890 (120MHz)	1776	1670	‖	
DEC Celebris 5120	1503	1390		
Asus P55T2P4 & P54/120	1891	1802	‖	
DEC Celebris 5133	1521	1431	‖	
DEC Celebris 5150				
OPTi PB586 (166MHz)	1584	1506	‖	
xxx (180MHz)	1050	1009	‖	

- **R** values are given in **bold** value when coming (thru f2c) from the C source.

- Most of the times compare to the DAT50 data set reference time, *except* when indicated.

- On Unix machines, measured CPU time means the sum of *user* and *system* times. The later value is normally negligible, but occasionally, the two may be displayed separatedly.

1. Apple machines .

   - MacOS, MicroSoft fortran v2.2, (ref.time = DAT35, timing precision = +/- 5seconds) :
     - native execution: SE & Plus = 14548, Classic = 12600, SE/30 = 3120, II = 3061, IIcx = 3241, IIsi = 2618, IIfx = 1140 and
     - emulation execution: 6100/66 = 1523; 6200/75 = 2180; 7100/80 = 1360; 8500 & 9500/120 = 960 .

   - Mac OS, Macf2c 1.3 + MetroWerk CodeWarrior 1.3 :

	5200	6100 /60	6100 /66	6100 /66(†)	6200 /75	6300	7100 /80	7200 /90	8100 /100	8500 /120
ref.time = DAT50										
O1	89	130		113	105	54	58	60	73	37
O1 Peep601	76	124	104	107	93	52	54	57	70	35
O1 Peep603						52		57	70	
ref.time = DAT100										
O1										
O1 Peep601										

   (†) : with Speed Doubler

   - A/UX, gf77 1.8.2h and NKR FTN 2.0.3, (ref.time = DAT50) :

compiler opt	gf77 O	NKR none	NKR O	NKR O2
Mac II	2791.1			
Mac II x	2092.3	3259.0	2191.	2172.8
Mac II ci		2221.3		1444.5

2. ix86-based machines, (ref.time = DAT50) :

   - g77 and gcc :

source version switch	original original -g	KA P	VA ST	SP AG	FOR EST	STR UCT	orig inal	KA P	VA ST	SP AG	FOR EST	STR UCT
		gcc 2.6.3 and g77 0.5.14 (05/1995); Linux 1.2.1 #2 and 1.2.8 (sl 2.3)										
		no switch					-O					
ref.time = DAT100												
Compaq XE 450	1474	1509	1008	1348	1462	1455	1441	769	646	763	739	752 633*
xxx, Pentium/90	366	379	303	405	367	362	360	207	195	198	201	201 197*
PK5, Pentium/90	364	337	281	434	328	325	314	164	159	161	163	199 165*
Gateway P5-100	334	340	274	419	335	333	321	150	153	149	152	181 157*
ref.time = DAT999												
Intel UTS P6/200	1764	1757	1774	1754	1531	1750	1750					

source switch		O0	O1	O2	O3	O4	O5	O6	FOREST O6	original O4	FOREST O4
				gcc 2.7.0 original						gcc 2.7.2	
ref.time = DAT999											
PK5, Pentium/90		4521	2720	2889	2729	2717	2748	2748	2702	2742	2733

   - GreenHills, (gf77) :
     - DX2 chip, 50MHz = 161.9, 66MHz = 120.7, 100MHz = xxx.x versus
     - DX chip, 25MHz = xxx.x, 33MHz = 230.2, 50MHz = 153.2

version	1.8.2.G	1.8.2.H			1.8.3.A
switch	f387x	f387x	f387	no switch	f387
Compaq 386/20 & emul.dflt		52044.0			
Compaq 386/25 & emul.dflt		42568.0			
-/-	1387.0	1118.9			
Compaq 386/33	894.7	727.3		827.7	
ESD SDX 3400		399.9		366.8	
Intel SYP 301Z		1981.0	2238.9	2411.4	
Intel SYP 302	1405.9	1132.7	1257.6	1358.4	
Siemens WX 200 & SCO fp emul.	32194.4				

- MicroWay NDP, (mf77) :

switches	n0	n1	n2	n0 n3	n1 n3	n2 n3
mf77 1.4:						
Compaq 386/20 (1)	50410.6	57700.1				
Compaq 386/25 (2)	110570.6					
-/- (1)	49521.9					
-/-	1407.1	1331.8	1232.1			1399.1
Compaq 386/33	864.9	828.9	763.1			865.0
Compaq 486/25	419.9	400.6	386.6			350.2
HP Vectra RS/20C	1970.3	1895.6	1742.8			1971.9
(80387 at 24MHz)	1621.4	1562.4	1441.4			1620.9
Intel SYP 302	1372.6	1320.4	1222.5			1378.0
Siemens WX 200 (3)	32308.4	31131.5	28874.4			
mf 77 1.4e :						
Compaq 386/25 (2)	95963.3					
Compaq 486/25	396.3	378.5	367.6	376.1		348.4
Intel SYP 301Z	2262	2179	2043	2179	2108	1950
Siemens WX 200 (3)	30555.0	29249.0	26843.1	31672.3	30298.8	27992.7

  - Kaypro 386, mf77 1.4 n0, /etc/emul.rel1 = 212400
  - (1) IX's emul.dflt, (2) IX's emul.rel1 and (3) SCO floating point emulation

- IBM VSFortran 1.1 (PS/2 8570-121 (20 MHz) AIX 2.0) : O / o1+ / o2+ / o3+ / o4+ = 1713 / 1750 / 1743 / 1762 / 1731

- Absoft "best" = version 3.1.4, -f -s -O -N1 -H4 -h4 -N20 -N55

- Silicon Valley Software vs Ryan Mc Farland vs GreenHills vs MicroWay NDP vs Edimburg Portable Compiler vs LPI, (i387 required —(†) = no i387 eg. floating point emulation—) :

compiler	SVS	RMF	GHs	MWay	EPC	LPI
version	2.7	2.11	1.8.x	1.4e	2.4	3.0.0
Alcatel APX 1000		abend	1421.1	1436.5		1483.1
Alcatel APX 2000	1163.1	abend	1161.2	1153.7	1301.8	1180.5
Alcatel APX 3000	761.8	abend	744.0	736.2	864.1	745.8
Bull Micral 600	1518.7	abend	1482.6	1424.0	1793.1	1705.4
Bull DPS 6000/622	262.9	abend	270.8	259.1	317.6	274.1
Compaq 386/25	1129.6	1622.6	1118.9	1106.4	1262.9	
Compaq 386/33			727.3	677.4		
Compaq 486/25	338.7	abend	335.6	350.2	415.5	354.7
Compaq 486/33		abend	248.8	258.0	302.5	264.5
Compaq 486/50	163.9	abend	163.1	163.5	195.3	167.2
DEC MP 486/33	274.7	abend	267.3	268.4	348.6	290.4
ESD SDX 2000	1140.1	abend	1152.2	1149.4	1256.5	1144.7
ESD SDX 3400	395.6	abend	366.8	386.1	494.7	
Goupil G50-33	822.2	abend	775.3	746.2	950.6	
Goupil G60-33	287.8	abend	265.4	277.4	332.6	
HP Vectra 486	361.5		353.4	364.1	440.2	373.0
Olivetti CP 486	356.1	abend	347.5	362.0	436.1	371.5
Siemens MX 300i	423.4	abend	399.1	411.0	516.6	
Siemens WX 200 (†)	28129.6	abend	27918.1	27992.7	abend	abend
Soemtron 386/25	1152.2		1205.4	1033.9	1362.4	1132.1

- Sun Intel-based machines:

Sun 386 f77 1.1	i150 i387	i150 Am386 i387	i150 3C87	i150 Am386 3C87	i150 Cx83D87	i150 US83C87	i150 CT38700	i250
O0	2138.2	2186.4	2160.9	1864.3	1845.8	1848.7	1810.7	2603.9
O1	2111.9	2032.8	2293.8	1805.3	1782.6	1799.3	1784.5	2266.1
O2	2058.0	2035.7	1719.2	1729.2	1692.0	1777.6	1688.6	2198.0
O3	2071.0	2013.1	1738.5	1738.2	1716.9	1696.3	1661.5	2103.6
O4	2029.4	2024.0	1739.5	1738.6	1670.1	1697.5	1665.3	2171.4

- UnixWare's cc and (Solaris) SunPro's cc :

compiler source version optimization	UnixWare's cc 2.0.3 original		FOREST		SunPro's cc x.y original	FOREST
	o0	o3	o0	o3		
ref.time = DAT100						
Compaq Proliant 4500	124	124	125	125		
ref.time = DAT999						
Compaq Proliant 4500	1434	1435	1449	1447		
ref.time = DAT999						
Compaq Proliant 4500	13034	13039		13546		

3. ix86-based machines and compilers with Weitek Abacus floating-point coprocessor -See also note (4) chapter 3 - . Abacus 4167 times measured on SDX 3400 on Mar.1990 and on CP 486 on Oct.1990.

ref.time = DAT100	compiler switch	mf77 1.4e n4	gf77 1.8.2.h f1167	gf77 1.8.4 f1167
Compaq 386/25	W3167	652.7	698.3	
Compaq 386/33	W3167	438.4	446.8	
Intel SYP 302	W3167 25MHz		677.0	
ESD SDX 3400	W4167 25MHz	507.6	505.5	
Olivetti CP 486	W4167 25MHz	375.5		

4. i860-based machines :

- Telmat Concerto, f77apx (gf77 1.8.5),

ref.time = DAT50	no opt	OLMA
1.proc	177.94	123.00
2.proc	347.16	237.86

- Stardent Vistra, pgf77, O0 = 148.93, O1 = 114.15, O2 = 112.92, O3 = 112.55, O4 = 112.50 (->R = 432), O4 -Mvect = 122.3 (ref.time = DAT50).

- Intel Paragon, PGFTN/Paragon Paragon Rel 4.1.1

ref.time = DAT100 OS version	no switch	O1	O2	O3	O4	Knoieee Mnoperfmon	O4 Knoieee Mvect Mnoperfmon
OSF/1 1.0.4 R1.1.2	689.2	689.4	662.0	662.1	661.4	289.7	282.3
OSF/1 1.0.4 R1.1.3	684.1	682.7	656.1	654.8	654.7	289.6	279.5 (->R = 735)

- See also note (41): Alliant.

5. Sun Sparc and Sparc-compatible machines :

ref.time= DAT50	4/110				4/260			
	f77 *1.05*	**no fpu**	W1164	TI8847	f77 *1.05*	**no fpu**	W1164	TI8847
f77 1.1:								
no switch	823				594			
O	667				510			
O0		4085+168363	828.5	617.8		3387+127972	663.1	464.8
O1	799	3997+165585	979.9	794.8	605	3301+123183	682.1	486.1
O2	698		756.2	578.7	524	2470+113998	574.7	386.3
O3	653		712.7	547.7	514	2450+108724	556.8	364.8
O4		3043+212050	739.4	506.7		2473+111692	556.8	367.2
f77 1.2:								
O			901.3+3.8	489.2		2576+110839	552.8+1.3	
'best'			791.0+964.9	431.1		2459+102432	512.1+730.6	
f77 1.4:								
no switch		4160+184476	941.5	588.2		3015+117006	624.6	
'best'		2352+120420	-na-	295.9		1637+84021	-na-	

ref.time= DAT50	20	40 (1)	40 (2)	60	65	3x0	4x0	75	6x0	25	50 (3)	50 (4)	75 (5)
f77 1.1 O0	568	464	439	509	428	340	219	209	196	271	216	217	145
-/- O1	588	480	443	529	437	364	227	222	214	287	228	229	152
-/- O2	490	401	363	430	360	283	182	179	168	224	186	186	127
-/- O3		400	361	435	361	265	173	178	162	223	185	187	129
-/- O4		400		435	369	263		192	163	223	185	187	129
'best'	474	388		408	346			183					
f77 1.2 O	498		367	481	403	270	170	148	162	196	190	191	132
-/- 'best'	443		321	407	321	220	145	152	134	251	157	157	106
f77 1.3 O3 fast					309	208							
f77 1.4 no switch	589		448	546	456			213	215	310	248	244	164
-/- O4 fast	339		237	292	243	156	108	103	98	147	115	116	78

(1) = W3170; (2) = W3172; (3) = W8601; (4) = MB86903; (5) = Weitek SparcPower-μP

no fpu ref.time= DAT50	4/20	4/40	4/4x0	4/75	4/25	4/50 86903	4/50 W8601
f77 1.1:							
O0		1833+88099	1964+55983	1743+48865	2667+61420	2045+48783	
O1	1500+107509	1603+94280	1937+55852	1731+48583	2601+61516	1999+48591	
O2	1300+100189	1337+82713	1425+52202	1285+44957	2018+55251	1483+45324	
O3		1293+81538	1475+51574	1283+44464	1970+53708	1591+45295	
O4		1295+81348	1478+51616	1288+44459	1969+53714	1621+46075	
f77 1.2:							
O		1357+89601	1574+52904	1389+44762	2094+57160	1657+45848	
'best'	1217+96530	1046+77788	1454+49406	1354+49272	1957+54136	1636+43072	1414+43650
f77 1.4:							
no switch		2211+80575	1722+51680	1529+45722	2353+56537	1783+44824	1619+44753
'best'	802+81380	698+66630	921+42572	858+36507	1280+46198	958+36864	980+36605

ref.time= DAT50	Tadpole S'Book	Tadpole S'Book 2	CCL Sta. M10	Hyundai WS210	Solair 2	Unisys S2000	FPS 500 (†)	Star 910 (‡)
f77 1.1 O0	333.0	214.4	207.3	213.5	211.8	252.0		239.0
-/- O1	347.9	231.5	221.6	223.1	226.7			249.7
-/- O2	281.8	185.3	171.0	179.5	179.3			198.1
-/- O3	283.1	185.0	171.8	186.5	183.0			199.3
-/- O4	283.2	185.0	171.8	178.7	183.2			190.0
f77 1.2 O	286.1	193.2	173.8	185.9	183.1	192.3		199.3
-/- 'best'	237.2	152.4	144.9	150.8	151.1	170.7	85.0	166.2
f77 1.4 no switch	362.5	269.9	225.1	242.1	240.2	244.0	112.3	258.2
-/- O4 fast	176.1	112.9	113.8	110.0	110.0	125.6	61.7	121.5

- (†) : *Not* all executables saved from Sun's compilations (eg. created with Sun f77 on Sun hardwares running Sun OS) do run.

- (‡) : All executables saved from Sun's compilations do run.

Solbourne	4/xx0	5/602	5/E	5E/702	S4000	S4000DX
ref.time = DAT50						
f77 1.1 O0	740.0	266.0	215.4	201.9	350.0	252.2
-/- O1	747.8	242.0	198.6	194.7	347.1	250.3
-/- O2	624.3	197.4	178.4	158.2	263.8	187.4
-/- O3	623.0	210.4	160.6	147.2		177.2
-/- O4		191.7		154.5		179.1
f77 1.2 O	682.01	195.3	162.4	167.8	270.1	201.3
-/- 'best'	580+805	173.2	156.6	131.2	243+320	166+14
f77 1.4 no switch		242.0		205.9		249.1
-/- O4 fast		138.5		104.9		120+14

	4/50	4/15	10/20	10/30	10/40	10/40	**10/40**	10/50	1000	5/70	5/85	5/110	4/110			LX
Sun OS	5.2				4.1	5.2	5.4	5.3	5.3	5.3	5.4	5.4	5.4			5.4
ref.time = DAT100																
f77 1.1:																
O0	970	1124	468	429	346	380	297	270	352	427	425	346				1101
O1	1035	1123	461	426	349	361	294	294	347	438	433	354				1097
O2	825	898	358	333	282	273	228	244	273	340	340	274				874
O3	835	889	351	326	288	280	224	206	266	346	344	279				869
O4	836	883	352	322	269	269	224	221	265	346	344	279				868
f77 1.2:																
O	845	909	845	327	289	273	227	216	265	339	156	277				883
'best'	694	770	694	278	226	223	193	176	231		289	229	232			746
f77 1.4:																
no switch			410	376	306		259				381	308				892
O4 fast			192	176	140		123				191	151	151			473
f77 2.0:																
no switch	916					316	268		311	375	377	305				898
O1	863					301	254		302	407		307				883
O2	520					185	156		197	238	238	194				578
O3	508					170	145		171	221	221	179	181			558
O4	485					167	142		169	219	218	179	181			556
f77 3.0:																
'best' cg87	450					139	122		142	182	189	148	149			484
'best' cg89	450					146	122		141	181	189	149	148			484
'best' cg92	447					125	108		125	180	178	143	143			484

	Sat urn m30	240	Axil 320 /61	320 HS/11		60	SS 20/ 612	71	1000 E-85	SS 20 HS/ 11	22	151	Ultra 1/ 140	170
ref.time = DAT100														
f77 1.1:														
O0	423	675	226			235	243	219		226	183	138	116	103
O1	418	537	223			235	235	214		230		138	120	101
O2	324	416	175			199	181	186		158	130	97	83	72
O3	319	416	187			177	174	180		153	124	95	84	72
O4	319	416	173			173	177	168		153	124	94	84	74
f77 1.2:														
O	324	411	174			186	180	174		170	136	101	86	78
'best'	274	349	148				156	144		75	102	77	87	75
f77 1.4:														
no switch	370	463	188			222	193	195		193	157	118	114	98
O4 fast	174	230	92			93	104	90		75	61	46	54	46
f77 2.0:														
no switch			196			205	203	183		215	177	146	120	103
O1			401			214		173		194	157	126	121	105
O2			116			117	122	116		111	90	72	68	58
O3			109			126	112	111		100	79	63	61	52
O4			106			134	112	139		105	84	67	65	56
f77 3.0:														
'best' cg87			91			105	91	96		73	59	46	48	41
'best' cg89			91			92	100	90		73	59	46	49	41
'best' cg92			80			81	89	87		70	56	45	50	44

	SS/ 10/ 40	240	Axil 320 /61	320 HS/11	4/ 110	60	SS 20/ 612	71	1000 E-85	SS 20 HS/ 11	22	151	Ultra 1/ 140	170
ref.time = DAT999														
f77 1.1:														
O4	2587		2015	2383					1748	2137		1096	1157	958
f77 1.2:														
'best'	2228		1703	1886	2677					1681		891	986	853
f77 1.4:														
O4 fast	1650		1239	1294	2058					1021		626	729	659
f77 2.0:														
O3	1957		1471		2437							858	895	775
O4	1918		1439	1957	2421				1265			914	816	698
f77 3.0:														
'best' cg87	1646		1239		1997				1394			622	650	558
'best' cg89	1644		1232		1995							622	651	558
'best' cg92	1452		1075		1932							604	699	607

f77 4.0 alpha -xchip

-xchip	cg89 generic g	cg92 super -O1	-O2	-O3	-O4	cg89 old -O5	cg92 super -O5	micro -O5	hyper -O5	ultra -O5
ref.time = DAT100										
4/20	2906.0	2148.7	1401.4	1593.3	1578.9	1468.3	1583.5	1585.6	1586.5	1579.7
4/25	1450.6	944.1	587.2	628.6	632.6	631.3	651.0	652.7	652.8	681.7
4/50	1197.8	781.8	488.2	526.8	526.9	525.9	539.6	540.2	540.0	569.3
4/110	434.1	249.8	155.1	153.8	152.5	159.2	159.2	158.1	159.3	170.2
5/110	438.6	250.1	156.5	154.7	151.3	161.8	159.5	159.4	159.4	173.1
10/40	369.9	212.9	132.1	122.0	109.9	110.7	110.7	110.7	110.8	126.4
20 HS22	237.1	118.0	70.7	62.6	56.0	61.3	60.6	60.5	60.5	62.8
Axil 320/61	282.5	165.9	101.3	92.1	80.8	83.6	86.9	83.1	82.5	94.8
ref.time = DAT999										
		2909.2	2035.2	1975.3	1628.6	2023.2	1834.0	2087.9	1665.1	2002.8
10/40	4388.2	2501.7	1781.2	1645.2	1476.0	1487.3	1490.1	1492.0	1491.7	1704.9
4/110		2911.5	2089.8	2038.8	2009.6	2136.6	2122.5	2153.0	2132.6	2290.2
1000 E-85		2620.2	1423.2	1249.8		940.8	1153.0	992.0	940.8	1083.1
		1725.1	1307.0	1052.9	1126.7	1229.9	1044.2	1221.4	1194.2	1198.0
Axil 320/61	3242.4	1925.1	1346.2	1243.2	1089.8	1105.1	1103.6	1174.3	1106.3	1337.7
Ultra 1/170	1678.6	1079.1	764.0	678.1	577.6	565.4	596.3	599.9	615.1	593.8
Ultra 2/200	1314.5	910.3	546.4	525.8	449.8	458.6	461.7	464.7	450.1	481.7

source Sun_f90 1.0

source	-g	original -O 1	-O 2	-O 3	-O 4	FOREST	KAP	SPAG	STRUCT	VAST
ref.time = DAT100										
4/15	978.4	840.7	838.4	838.4	838.1	817.3	740.3	966.7	994.5	1081.2
4/25	1208.6	1033.7	1020.4	1020.1	1022.9	977.1	880.1	1171.0	1062.2	1305.3
4/50	1019.6	863.8	850.2	851.4	852.2		731.0	987.0		
4/110	347.1	296.0	299.6	315.5	313.6	289.2	262.6	361.0	342.4	394.9
5/110	352.2	297.6	315.7	305.5	315.6	288.4	264.2	356.1	342.6	393.0
10/40	297.8	209.4	210.4	201.5	210.5	204.4	187.8	243.1	241.0	270.0
Axil 320/61	229.4	157.5	158.1	164.8	158.8	161.6	151.2			
20 HS22	177.0	134.4	223.5	223.7	224.0	145.1	128.8	156.2	170.6	206.7
ref.time = DAT999										
4/110		3816.2	4155.9	4104.5	4234.0	3778.6	3468.0	4060.9	3796.4	4365.7
		3213.9	3962.5	3523.4	3264.1	3113.2	2922.2	3180.9	3143.0	3465.1
10/40	3966.2	2812.1	2832.5	2832.8	2833.2	2749.5	2532.8	2788.5	2761.3	3079.1
Axil 320/61	3049.5	2111.0	2153.3	2133.7	2136.2	2051.6	1922.2	2084.5	2081.7	2291.0
		2030.4	2437.2	1861.6	1804.7	2330.2	1728.7	2286.0	1825.6	1969.6
Ultra 1/170	1541.1	951.7	960.0	937.5	938.3	1070.9	840.4	947.3	944.6	1047.9
Ultra 2/200	1249.8	757.2	850.0	772.4	768.2	745.3	725.1	805.2	743.5	816.2

source cf90 1.0

source	original -O 0	-O 1	-O 2	-O 3	FOREST	KAP	SPAG	STRUCT	VAST
ref.time = DAT100									
4/15	867.7	761.8	755.5	773.0	757.4	650.0	758.8	768.9	false
4/25	987.5	883.6	872.3	828.3	806.9	726.2	792.1	878.8	false
4/20	2201.0	1892.0	1884.6	1850.8	1812.4	1637.7	1795.9	1880.7	false
4/50	834.5	732.6	723.8	684.2	662.2	609.7	660.9	727.6	false
4/110	300.8	272.8	263.4	279.9	273.1	214.0	271.5	274.5	false
5/110	301.9	270.3	266.3	280.2	272.5	212.3	271.3	280.3	
10/40	250.0	204.2	203.4	205.9	199.7	171.7	201.0	200.5	false
20 HS22	141.5	112.6	115.4	123.5	114.2	94.6	121.1	150.0	
Axil 320/61	195.8	159.5	163.0	153.1	151.8	131.7	151.5	146.5	
ref.time = DAT999									
10/40	3354.6	2754.0	2771.5	2802.7	2702.5	2316.3	2706.7	2703.2	false
Axil 320/61	2597.0	2022.1	2035.3	2089.7	2101.5	1761.0	1995.7	1971.9	false
1000 E-85	2190.9	1689.6	1687.7	1728.5	1650.1	1552.7	1724.1	1680.9	false
Ultra 1/170	1273.4	947.1	897.2	930.7	947.0	864.0	1090.3	960.1	false
Ultra 2/200	1051.2	764.6	730.6	741.0	726.2	708.0	707.2	728.8	false

Apogee 2.3 / O Xcg XT — ref.time = DAT100

Apogee 2.3 O Xcg XT	10/40	4/50	4/25	4/20	5/85	20/61	20/612	20/71	HS/11	HS/22	Axil 320/61
3 92 cs6400	103	400+24	481+27	1128+41	158	69	76	70	57	46	72
5 92 cs6400	103	390+26	477+26	1124+42	144	69	72	68	58	47	74
0 92 ss10/41	232	788+24	944+30	2023+45	295	155	153	142	156	128	160
1 92 ss10/41	196	666+24	798+33	1172+41	251	125	126	131	114	92	131
2 92 ss10/41	174	1210+30	1449+36	2915+58	214	117	116	110	248	199	117
3 92 ss10/41	113	401+23	483+25	1129+40	162	69	68	72	57	46	70
4 92 ss10/41	110	395+23	473+26	1119+42	150	69	80	68	57	46	70
5 92 ss10/41	126	392+25	479+25	1122+43	141	69	75	68	58	47	69
3 92 sslc	123	416+22	497+26	1147+39	169	80	75	73	60	49	81
5 92 sslc	115	395+23	479+25	1128+37	147	79	74	78	58	49	101
3 92 ss10h	121	384+30	465+27	1122+42	160	72	72	75	58	47	73
5 92 ss10h	119	389+17	459+25	1113+41	149	72	72	74	61	50	73
3 89 ssipx	109	391+0	468+0	1110+0	163	72	81	71	60	48	72
5 89 ssipx	109	370+0	447+0	1080+0	147	73	72	76	58	47	73
3 89 ssslc	107	391+0	468+0	1110+0	168	72	72	70		48	73
5 89 ssslc	109	370+0	448+0	1080+0	147	76	72	71		47	79
3 89 sun4/370	134	391+0	468+0	1111+0	169	75	79	70	60	48	72
5 89 sun4/370	114	370+0	447+0	1080+0	147	73	72	73	58	47	73
3 89 solb5	111	391+0	468+0	1111+0	168	76	74	71	60	48	72
5 89 solb5	122	370+0	448+0	1081+0	147	74	72	70	58	47	74
3 87 sun4/110	141		545+0	1233+0	188	102	97	88	85	70	99
5 87 sun4/110	152	410+0	494+0	1180+0	178	95	95	88	81	65	104

Apogee 2.3 / O Xcg XT — ref.time = DAT999

Apogee 2.3 O Xcg XT	240	Axil 320/61	320 HS11	10/40	4/50	4/25	4/110	5/85	20/61	71	1000 E-85	HS/11	22	151	Ultra 170	200
3 92 ss10/41		928	788	1256		6596	1774				805			486	510	428
4 92 ss10/41		927	791	1257		6547	1634				1002			488	587	426
5 92 ss10/41		930	811	1262		6476	1556				805			498	509	380
3 92 ss10h		980	814	1321		6417	1757				842			501	498	379
5 92 ss10h		976	865	1319		6316	1656				842			509	496	376

Apogee 3.1 / O5 Xcg92 Xpipe= — ref.time = DAT999

Apogee 3.1 O5 Xcg92 Xpipe=	240	Axil 320/61	320 HS11	10/40	4/50	4/25	4/20	5/85	20/61	71	1000 E-85	HS/11	22	151	Ultra 170	200
ss10/41		925				6125								470		
ss10/61		931				6121								466		
ss20/hs21		962				6212								460		
ultra1/140		954				6220								487		

source ACE x.y	original -g	original -O	FOREST -g	FOREST -O	SPAG -g	SPAG -O
ref.time = DAT100						
4/25	1212.6	1228.3	1140.8	1177.9	1142.2	1164.5
4/50	1016.6	1004.2	946.0		946.2	964.7
4/110	361.3	367.5	369.7		350.3	350.7
Axil 320/61	219.7	218.6	213.9	216.2	210.0	213.4
ref.time = DAT999						
1000 E-85	2448.6	2459.5	2460.4		2363.4	2424.1
Ultra 1/170	1690.5	1481.5	1506.0		1693.8	1433.5

	4/60	4/75	4/470	5/602	4/20	4/40	4/25	4/50	4/15	10/40	10/51	5/85	5/110
ref.time = DAT100													
NAG F90 1.1													
no switch		810	807	919	2096	1565	995	827	844	311	224	341	278
O		571	587		1680	1203	719	597	673	231	174	247	205
O Bstatic		579	597	670	1694	1214	731	605	675	232	175	249	208
EPC F90 x.y													
no switch	1608	629	666		1848	1310	801	660	695	252	186		219
O	1572	626	641		1775	1275	780	639	675	227	165		209
O1	1564	622	643		1782	1280	779	646	688	226	165		209
Bstatic	1660	659	688	721	1887	1354	826	688	697	253	191		222
O Bstatic	1590	624	639	680	1779	1277	773	643	673	227	175		209
O1 Bstatic	1579	629	638	692	1782	1279	776	645	687	226	184		209

	Tad. Book	Ax. 240	.il 320	1000 E-85	20/61	20/71			HS/11	HS/22
ref.time = DAT100										
NAG F90 1.1										
no switch	1258	415		260	183	175			186	151
O	907	307		196	156	151			159	106
O Bstatic	920	312		186	147	138			140	104
EPC F90 x.y										
no switch	1014	332		220	165	142			165	108
O	970	312		215	144	126			144	90
O1	973	328		193	145	126			145	91
Bstatic	1052	336		211	156	146			156	114
O Bstatic	964	317		186	138	138			138	92
O1 Bstatic	974	331		204	147	127			147	93

	10/40	1000 E-85	HS/151	Ul. 170
ref.time = DAT999				
NAG F90 1.1				
no switch	3309	2054	1484	1344
O	2454	1700	1070	963
O Bstatic	2447	1643	1072	964
EPC F90 x.y				
no switch	2645	1650	1075	1006
O	2163	1704	843	772
O1	2159	1358	850	777
Bstatic	2648	1723	1076	1017
O Bstatic	2162	1342	843	791
O1 Bstatic	2159	1685	850	801

					gcc 2.6.3 and g77 0.5.10 (03/1995); Solaris 2.3							
source	original	KA	VA	SP	FOR	STR	orig	KA	VA	SP	FOR	STR
version	original	P	ST	AG	EST	UCT	inal	P	ST	AG	EST	UCT
switch	-g			no switch						-O		
ref.time = DAT100												
4/15	946	886		973			858	556		549			542
4/20	2424	2324		2437	2166	2136		1476		1517	1441	1430	
4/25	1171	1075	false	1152	1010		993	590	false	639	568		625
4/50	1007	882	false	940	839	813	820	488	false	534	474	469	517
4/110	284	277	false	334	273		278	171	false	188	163		176
5/110	293	282		333	274		277	170		187	162		172
10/40	256	248	false	275	240		237	151	false	144	146		145
20 HS22	160	161		167	148		147	75		73	72		72
20 HS151	123	116	false	130	112		112	60	false	58	58		58
Axil 320/61	220	195	false	229	198		186	119	false	126	113		112
ref.time = DAT999												
10/40	3417	3304	false	3642			3172	2027	false	1952			1949
20 HS151	1652	1549	false	1721			1509	807	false	784			
Ultra 1/170	1362	1350		1434		1248	1288	764		766		776	770

6. Sun Motorola-based machines (ref.time = DAT50) :

- Sun 2/xx: fsoft = 55768, fswitch = 22980, fsky = 13894

- Sun 3/280: fsoft = 11465, fswitch = 2656, f68881 = 2012, ffpa = 812

- Sun f77 1.x, ('best' = highest O + libm.il + Bstatic + lm + ...) :

f77 Rev3.2	3/50	3/160	3/110	3/60	3/260	3/80	3/470
O fsoft	26911.1	18278.9	18081.6	14541.0	10651.3	16082.9	
O fswitch	7463.0	6779.6		5517.0	5014.7		
O f68881	3348.0	3551.1	2937.3	2188.3	2225.1	1914.0	1016.8
O ffpa	-na-	1380.0	1350.5	-na-	906.9	-na-	726.9
no opt fswitch	23302.0	21916.8		17400.0	12203.9	19089.1	
no opt ffpa	-na-	1929.8	1883.2	-na-	1119.9	-na-	887.0

	3/50	3/160	3/110	3/60	3/260	3/80	3/470
f77 1.1 O					2603.9	2140.3	
f77 1.1 O4					2266.1	1910.8	
f77 1.1 'best'		2530.2	2572.5	1992.1	1991.4	1684.9	
f77 1.2 O	3018.1	2879.1		2296.3	2603.9	2140.3	1029.2
f77 1.2 O4					2309.1	1953.7	
f77 1.2 'best'	2646.1	2561.2	2626.4	2020.5	2016.9	1670.0	917.3

- Oasis/GreenHills gf77 1.8.3A:

	3/50	3/160	3/110	3/60	3/260	3/80	3/470
"68020", no opt	29575.7 9885.3	8952.7	**5632.2**	7291.5	6325.1	6357.6	
"68020", OLM	29440.0 9713.2	8754.7	**5485.4**	7160.4	6376.4	6237.8	
"68881", no opt	-na- 2883.4	2712.7	2701.3	2194.7	2295.6	1972.9	1003.1
"68881", OLM	-na- 2978.8	2639.1	2696.1	2143.3	2188.5	1843.4	959.1

3/50 : without and with 68881; 3/110 and 3/470 : **with** FPA

- LPI fortran 3.00.03, nof387 & f387:

	3/50	3/160	3/110	3/60	3/260	3/80
no opt	28359 3431	22985 3138	22896 3121	18027 2537	13095 2531	19842 1987
Opt 1	28346 3423	22976 3130	22878 3117	18018 2532	13076 2527	xxxxx 1989
Opt 2	25558 3248	20789 2970	20700 2959	16315 2409	11721 2396	xxxxx 1918
Opt 3	abend 3002	abend 2743	abend 2731	abend 2227	abend 2240	xxxxx 1790

- Nkr fortran (needs 68881):

	3/50	3/160	3/110	3/60	3/260	3/80	3/470
no opt/Opt	4195 3065	3751 2804	3745 2754	3055 2252	3150 2311		

7. Sun and Sun-compatible machines:

compiler	Sun cc 1.0					gcc 1.35	gcc 1.40
switch	none	O1	O2	O3	O4	none	none
ref.time = DAT50							
3/50		28162+22	28153+16	28151+14	28154+21		
3/160		28942+15	28601+23	28478+15	28682+14		
3/260		14720+22	14732+33	14749+50	14720+22		
3/80		23281+11	23281+11	23288+31	23288+7		
4/110	1002.0	993.0	965.5	799.2	791.4		
4/110 & FPU2	764.3	779.7	748.3	611.5	576.4	774.8	
4/260	742+107	694+38	700+36	603+31	584+15	800+101	
4/20	625.0	590.8	557.5	523.4	521.1	655.3	
4/25	292.2	275.6	253.1	230.0	226.6	308.2	
4/40	468.8	445.1	413.7	381.0	378.0	486.6	
4/50	242.3	229.9	211.6	190.5	188.2	256.1	
4/60	558.3	526.6	492.6	452.7	456.9		
4/65	472.7	458.9	412.9	379.8	373.1	513.7	
4/75	237.4	223.8	204.9	184.7	181.5	256.4	
4/370	374.0	354.9	335.2	296.7	301.8	412.9	
4/470	244.0	230.4	217.2	183.7	186.0	273.2	
10/20	115.7	103.7	99.9	83.3	83.6	119.0	
10/40	84.1	78.2	75.6	64.8	63.7	86.0	
5/85	388	338	309	279	268	390	
ITRI-CCL	227.7	213.9	198.0	175.7	173.2	240.6	
Hyundai	236.5	223.8	204.4	183.7	181.4	248.9	
Sol 4/	805.2	780.6	738.6	637.3	637.4	868.8	
Sol 5/xxx	271.8	251.5	250.9	206.7	209.3	299.8	
Sol 5E	235.9	216.9	200.6	169.9	176.4	270.1	
Sol 5E/702	211.1	201.5	188.9	152.8	168.6	230.7	
Sol S4000DX	270.5	248.1	227.8	191.6	201.4	246.2	
Star 910	269.1	249.8	232.2	254.0	201.6	285.5	
SparcBook	372.1	348.7	321.1	290.2	284.4	394.4	
SparcBook 2	243.9	230.2	206.6	187.4	184.1	257.2	
ref.time = DAT100							
4/15	961.2	880.6	845.7	759.0	764.2	1030.6	
5/110	322.2	278.2	250.4	235.3	225.8	319.3	
10/40	272.5	244.2	235.4	195.8	195.8	268.9	
20/61	210.8	193.2	184.8		167.2	208.1	
20/71	194.5	186.2	176.1	164.5	152.5	198.3	
20 HS11	203.0	189.1	172.8		134.1	203.1	
20 HS22	164.1	153.7	140.4	109.6	107.6	165.2	
20 HS151	126.9	112.4	105.4	82.2	82.0	125.3	
Axil 240	480.5	427.7	388.0	347.9	336.0	469.5	
Axil 320/61	205.6	206.8	180.0	155.1	155.7	222.9	
ref.time = DAT999							
20 HS151	1724.5	1541.6	1438.8	1133.5	1127.7	1687.2	
10/40	3687.3	3311.3	3195.1	2676.5	2677.3	3601.4	
Ultra 1/170	1530.0	1347.2	1273.8	1033.8	996.7	1544.0	1490.7

compiler	gcc 2.6.3							FOREST
source version	original							
optimization	O0	O1	O2	O3	O4	O5	O6	O6
ref.time = DAT999								
4/15	16346	10185	9709	9693	9699	9690	9701	9488
4/25	18123	10587	10094	10117	10109	10103	10110	9639
Axil 320/HS11	6162	3028	2803	2843	2870	2848	2840	2742
Axil 320/61	3334	1943	1685	1668	1760	1662	1718	1602
Ultra 1/170	2050	1028	979	950	970	985	1045	899

compiler -xtarget optimization	SunPro CC 4.1								
	ultra					hyper	super	old	micro
	O1	O2	O3	O4	O5	O5	O5	O5	O5
ref.time = DAT999									
4/15	11709	11377	9748	9668	9465	9471	9410	9484	9481
4/25	13724	13176	11961	11964	11718	10184	10194	10203	10200
4/110	3844	3755	3219	3466	3186	2941	2913	2918	2973
	2277	2184	1581	1408	1407	1567	1392	1391	1358
Axil 320/61	2563	2447	1881	1695	1682	1558	1558	1556	1565
Axil 320/HS11	2566	2516	1726	1668	1625	1675	1674	1674	1675
Ultra 1/170	1213	1163	829	796	744	777	754	787	770

8. Apollo machines:

- DN 10000 :
  - on beta-machine (15 MHz) : 167.00
  - on delivery machine (18.2 MHz), ftn 10.5(15)(fcs+) natural Opt 4: 105.80
  - -idem-, ftn 10.6(105)(1989.1) or 10.7(21) : 80.30

fortran	opt	-cpu	9000/400t	580	3000	4000	3500	4500	2500
8.40			1400.7		6955	3387	3086		
9.66					7001		3056		4051
8.34	all	any		4415					
8.40	all	any	1419.2		6777	3439	3079		3989
9.80	4	any	1291.9		6242		2826		3683
8.40		3000	602.2			1624	1304		1612
8.40	all	3000	632.4	3089	3665	1700	1353		1691
8.76	all	3000	609.4		3580		1289		1639
9.35	4	3000	629.6		3474			939	1678
9.66	4	3000			abend		abend		
9.95	3	3000						869	
9.95	4	3000			3078	1522	1219	859	
10.00	4	3000						850	
10.6	3	3000			2948				
10.6	4	3000			2959	1461		839	1480
8.34	all	580		1439					
9.95		fpa					1021		
9.95	4	fpa1				969	890	625	
10.6	4	fpa1				905			

9. HP machines :

- HP 9000/320, HP/UX 6.2 : opt/no opt = 3998/4409
- HP 9000/340, HP/UX 6.5 : opt/no opt = 2002.6/2080.7
- HP 9000/350, HP/UX 5.15 : opt/no opt = 2372/2445
- HP 9000/425, f77 7.0 = 300.14 and f77 8.0 = 256.20
- HP 9000/825: opt/no opt = 881/1211 = 73 %
- HP 9000/835, f77 O, HP/UX 2.1 versus HP/UX 3.0 = 227 versus 214
- HP 9000/720, f77 8.01 O -Wl,-a,archive = 40.69 versus 8.05 O3 OP4 -Wl,-a,archive = 39.37

compiler		f77		cc		f77			cc		
HP/UX	7.0	8.07				8.5					
DA & DS	none	1.0	1.1	none		1.0	1.1	1.1a	1.0	1.1	1.1a
opt.	none	-O	-O	none	none	+O3 +OP3					
ref.time = DAT999											
712/60		2324	2062			2113	1911	1863	2794	2449	2450
712/64	1937	1927	1617	3322	3683	1736	1517	1498	2228	2053	2021
712/80i	1588					1393	1220	1219	1788	1635	1632
715/80	1581	1578	1354	2732	2953	1400	1212	1213	1796	1618	1616
715/100	1261	1295	1102	2217	2451	1122	970	974	1444	1303	1319
715/100	1276					1129	984	980	1141	1315	1308
720 (?)	2457	2485	2029	4912	4486	2200	1867	1870	2852	2522	2510
720 (?)	2492	2229	1935	4256	4686	2079	1831	1832	2787	2550	2517
735/99	1103	1048	869	1975	2124	952	826	802	1217	1089	1070
735/125	901					753	633	644	962	858	855
ref.time = DAT10K											
712/60	22778					20111	17373	17454			
712/80i											
715/80											
715/100	11824					10376	8844	8876	13509	12391	12095
735/99	10141	8784	7396	11183	7308	8700	7294	7293	11228	9938	9811

f77 source version DA & DS	HPUX 9.05 +Oall						HPUX 10.01 +Oall					
	orig inal	FOR EST	KAP	SP AG	STR UCT	VA ST	orig inal	FOR EST	orig inal	FOR EST	orig inal	FOR EST
	715						715		1.0		1.1	
ref.time = DAT999												
712/60	1738	1738	1693	1839	1694	1720	1712	1621	1872	1901	1624	1591
712/64	1416	1372	1379	1373	1447	1368	1316	1351	1444	1455		1268
712/80i	1111	1070	1122	1112	1094	1100						
715/80	1141	1106	1088	1116	1103	1117	1071	1047	1167	1153		959
715/100	925	887	901	887	947	895						
735/99	704	690	680	676	728	675	716	713	733	730	592	587
ref.time = DAT10K												
715/80	10531	10285	9906	10373	10192	10382						
735/99	6410	6203	6702	6215	6243	6273	6894	6556	6754	6746	5672	5419

cc source source opt.	HPUX 9.05 DA1.1 DS1.1						10.01 DA1.1 DS1.1				10.01 DA1.0 DS1.0	
	orig inal					FOR EST	orig inal	FOR EST	orig inal	FOR EST	orig inal	FOR EST
	O0	O1	O2	O3	O4	O4	O4	O4	Oall	Oall	Oall	Oall
ref.time = DAT999												
712/60	4060	2911	2099	1979	1907	1895	1991	1958	2061	1948	1913	2000
712/64	3482	2466	1731	1625	1619	1540	1492	1609	1464	1506	1456	1507
712/80i	2788	1964	1412	1284	1263	1217	1183	1171				
715/80	2832	1962	1421	1282	1234	1211	1204	1200	1214	1174	1207	1166
715/100	2286	1587	1119	1002	982	971	990	935	951	964	977	1038
735/99	2048	1343	900	776	770	770	795	768	799	774	794	768
ref.time = DAT10K												
715/100	20826	14497	10223	9177	8998							
735/99	18610	12314	8069	7171	7023	6807	7321	7535				

10. MIPS and Rx00-based machines:

- Dan[A]rdent & St[ell]ar[dent] machines :
  - P2: O0 = 515.3, O1 = 502.7(->R=97), O2 = 546.6, O3 = 1179.1 (*but elapsed time on 2-proc. machine* = 669.0).
  - P3: O0 = 140.5, O1 = 110.6(->R=440), O2 = 138.4, O3 = 276.0 (*but elapsed time on 2-proc. machine* = 141.2).
- MIPS 500 & R2360 board (eg. Weitek parts): opt/no opt = 1396/1669 = 84 %
- MIPS 800 & R2010: opt/no opt = 311/434 = 72 %

- Sony News 3260, O1 = 243.8, O2 = 200.0, O3 = 186.0, O4 = 188.5
- Sony News 3860, f77 2.0: noopt/O1/O2/O3 = 172.5/178.7/135.8/133.8
- WhiteChapel MG 1: opt/no opt = 2904.0/2954.1 = 98 %,

MIPS f77	500 O2 O3	800 O2 O3	1000 O2 O3	Hitech10 O2 O3	120 O1 O2 O3 O4	2000 O1 O2 O3 O4
1.1	655 527	358 334				
1.21	553 488	273 256	223 213	257 229		
1.31(i)					301.1 218.3 213.6 216.1	153.8 110.6 109.5 105.0
2.0(b)					252.8 183.3 174.3 xxx.x	

ref.time = DAT50 Risc/OS	MIPS					CDC			IN2		Prime
	6280	2000 4.0	2030 4.10	3230 4.50	120-5 3.10	4680-312	4680 4.0	4360	6130	6230	6330 4.50
1.31(r):											
no switch	77.3	150.9	286.1	154.2	259.9	54.9	80.5	151.6	154.4		
O1	76.9	156.0	287.6	157.8	262.5	55.1	79.4	153.5	155.6		
O4		125.0	231.5	125.1	201.5	46.6	67.5	122.5			
2.0(b):											
O	57.6	111.3	201.0	113.4	192.8	42.2	57.8	114.0	181.0	130.9	113.8
O1	75.5	148.0	277.5	156.1	265.6	54.2	77.0	149.6	255.3	182.8	155.2
O2	57.2	111.8	195.3	115.9	182.0	42.2	60.7	112.1	190.0	137.1	114.3
O3	55.3	108.3	187.8	111.1	178.2	41.1	58.5	108.7	175.7	124.0	109.4
2.10(b):											
O1	77.7		304.2	156.7		55.9	80.4	170.7	274.2	208.6	
O2	57.8		199.3	113.0		42.5	60.5	110.8	185.6	129.0	117.7
O3	56.9		190.3	110.6		41.7	57.6	110.3	184.6	129.1	110.0
O4	56.8		192.4	111.9		42.3	57.8	109.5	180.2	121.1	112.6

ref.time = DAT100	CDC 4460
f77 1.31(r):	
no switch	291
O1	294
O4	278
f77 2.0(b):	
O	214
O1	278
O2	207
O3	207
f77 2.10(b):	
O1	355
O2	266
O3	259
O4	261
f77 2.2:	
mips1 O	484
mips1 O4	265
mips2 O	481
mips2 O4	231
cc x.y:	
mips1 O	352
mips2 O4	241

DEC Systems	2100	3100	5000/200
f77 1.31 no switch		310.2	
f77 1.31 O1	371.7	298.7	
f77 1.31 O2	277.1	217.5	
f77 1.31 O3	263.3	201.5	
f77 1.31 O4	255.7	196.8	
f77 2.02 O2			118.10
f77 2.02 O4			110.23

ref.time = DAT100 cache	RM 400-530 16K+16K+4M	RM 400-330 16K+16K+1M	RM 200-120 16K+16K+0
f77 1.00.04 none	191	373	347
f77 1.00.04 -O1	192	338	348
f77 1.00.04 -O3 -Knopic -r4000	129	247	240
f77 1.00.04 -O4 -Knopic -r4000	123	221	225

11. SGI machines :

- 4D/50, f77 1.31: opt = O/O1 = 776.4/678.9
- 4D/70, f77 1.31: opt = O/O1/O2/O3 = 495.7/406.7/350.9/291.8

4D/xx IPxx xxMHz	25 — 20	35 12 36	220 7 —	340 — —	420 7 40	RDP 12 —
ref.time = DAT50						
f77 1.31 O4	179.7	75.7	117.5		72.6	87.8
f77 2.0 O1	304.5	113.9	168.5		127.4	135.7
f77 2.0 O2	191.0	79.8	127.5	96.8	79.5	96.3
f77 2.0 O3	181.9	75.8	111.4	91.4	75.6	88.3
f77 2.0 O4	184.5	78.9	116.5	91.1	75.1	90.3
cc 2.0 O1	301.2	114.6				136.8
cc 2.0 O2	231.3	87.7				109.9
ref.time = DAT999						
f77 1.31 O4		3825			3656	4411
f77 2.0 O1		5906			6286	6840
f77 2.0 O2		4045			4027	4837
f77 2.0 O3		4026			3821	4439
f77 2.0 O4		3919			3846	4539
cc 2.0 O1		5870			5947	6920
cc 2.0 O2		4545			4671	5544

Rxx00 IPxx xxMHz PC+SC	4000 22 100 16+1	3000 12 33 64+0	4000 20 50 16+1	4000 22 100 16+1	4400 19 150 32+1	4400 22 175 32+1	4400 22 200 32+1	4400 22 250 32+2	8000 21 75 32+4	8000 21 90 32+4
ref.time = DAT100										
f77 1.31 O4	332	180	179		124		139			
f77 2.0 O1	508	260	258		155		186	119		
f77 2.0 O2	355	193	192		123		144	93		
f77 2.0 O3	329	192	188		115		140	101		
f77 2.0 O4	348	183	194		121		144	92		
f77 3.4.1 O0	740	400	401		233		210	196		
f77 3.4.1 O1	622	302	305		179		174	141		
f77 3.4.1 O2	440	227	229		137		136	104		
f77 3.4.1 O3	415	234	222		135		132	101		
f77 3.4.1 O4	402	221	222		146		132	104		
cc 2.0 O1	505	272	271							
cc 2.0 O2	408	216	216							
ref.time = DAT999										
f77 1.31 O4	4449	2449	2444		1551	1687	1225	985	1742	1447
f77 2.0 O1	6967	3543	3532	3608	2081	1843	1625	1289	2324	1960
f77 2.0 O2	4894	2593	2610	2744	1624	1425	1324	1014	1755	1260
f77 2.0 O3	4601	2555	2554	2673	1535	1341	1207	980	1805	1199
f77 2.0 O4	4600	2492	2499	2661	1695	1442	1267	1074	2357	1420
f77 3.4.1 O0	8596	4672	4630	4897	2686	2275	2030	1641	2827	2045
f77 3.4.1 O1	7248	3792	3527	3761	2082	1758	1598	1261	2339	1563
f77 3.4.1 O2	5128	2676	2656	3004	1594			977	1826	1379
f77 3.4.1 O3	4756	2533	2553	2945	1536	1539	1162	932	1772	1163
f77 3.4.1 O4	4624	2517	2546	2531	1666	1327	1352	934	1773	1239
cc 2.0 O1	7011	4018	3673		2034	1838	1550	1240	1923	
cc 2.0 O2	5681	2902	2946		1759	1464	2288	1034	1742	

| f77 4.0.2 | | mips1 sopt O3 | | | | | | mips2 sopt O3 | | | | | |
source	MHz	original	KAP	FOREST	SPAG	STRUCT	VAST	original	KAP	FOREST	SPAG	STRUCT	VAST
ref.time = DAT999													
IP25	190	462	439	432	455	429	439			328	327		
ref.time = DAT10K													
IP25	190	3978	4173	3948	3960	3938	4130			2992	2999		

| f77 6.1 | | mips1 | mips2 | mips3 | mips4 |
opt.	MHz	0 1 2	0 1 2	0 1 2 3	0 1 2 3
ref.time = DAT999					
IP20	100	5922 3978 2418	**not applicable**		
IP21	90	2705 2028 1339	2229 1814 1194	1916 1185 897 834	1628 1011 769 748
IP22	100	5916 4127 2429	**not applicable**		
IP22	175	2988 2088 1278	**not applicable**		
IP22	200	2634 1744 1128	**not applicable**		
IP22	250	2141 1420 914	**not applicable**		
IP25	190	982 867 535	686 593 378	620 420 314 322	601 407 **306** 333
ref.time = DAT10K					
IP25	190	8934 7982 4878	6271 5435 3484	5686 3839 2877 2917	5422 3730 **2878** 3024

| compiler source | | f77 6.2 | | | cc 6.2 | | | F90 x.y |
opt.	MHz	original n32 O3	64 O3	FOREST 64 O3	original none	32 O2	FOREST 64 O3	FOREST 64 O3
ref.time = DAT999								
IP25	190	309	309	305	638	424		**293**
ref.time = DAT10K								
IP25	190	2785	2795	2781	5827	3912	xxxx	**2674**

12. Pyramid 9810: O = 888, OG = 939.

13. Ridge 32 & Bull SPS 9 :

- Ridge 32 : no floating point: opt/no opt = 3746/3807 = 98%. With the 1983's RidgeOS, we get 3907 instead of 3746 seconds.
- SPS 9/67, ROS, f77 no cache = 1982, f77 &16K-cache = 1697; gf77 &16K-cache = 1542.
- SPS 9/400, Spix, f77 1.3 no opt/O/O-F7 = 1610.3/1541.7/1655.2
- SPS 9/830, ROS, gf77&16K-cache = 778.

14. ATT 3B2-600, f77-XLA+ X/OS 1.0 (gf77), O/no opt = 3442(->R=14)/3834

15. Olivetti LSX 30xx, Fortran X/OS 4.04 (gf77 1.8.3A (1987)):

- LSX 3020, OLM/no switch = 2862.2/2890.8 = 99%
- LSX 3035, OLM/no switch = 1277.1/1337.7 = 95%

16. Nixdorf Targon, Fortran 4.0 (1989), TOS 4.0.01 :

- Targon 31 m5, O(GPE)/no switch = 2084.0/2314.7 = 90%
- Targon 35 m15, O(GPE)/no switch = 1309.9/1439.1 = 91%

17. MacIntosh A/UX, gf77 1.8.2h and NKR FTN 2.0.3:

compiler opt	gf77 O	NKR none	NKR O	NKR O2
Mac II	2791.1			
Mac II x	2092.3	3259.0	2191.	2172.8
Mac II ci		2221.3		1444.5

18. Sony News, 17xx/18xx, NKR FTN 1.7.2, O/no opt = 1222.8/1799.6

	gf77 1.8.5b	NKR 1.7.2	bsd 2.0
1750	1422.1		1503.9
1850		1222.8	

19. Next machines :

- D-F77 1.00a: Diab 1136 = 197, Diab DS90/45 (64K cache) = 184, Next = 185 (->R=263).
- Absoft 3.1.3 :
  - at 25MHz, O = 257.6+358.9, O+N40 = 269.5+2.6, O+N53 = 269.8+1.6
  - at 33MHz, O = 197.7+275.8, O+N40 = 205.8+0.7, O+N53 = 206.1+0.8

20. Harris Night Hawk 3800, O0 = 1972, O1 = 727(->R=67), O2 =

21. Atari 1040 ST, Prospero Fortran for GEM/TOS, version mmg 2.103

22. Mercury machines :

- MC 3200: *32-bits precision*, no opt/O1/O2 = 444/418/381
- MC 6400: af77, Fortran XL3 M2.02.1 (gf77 1.8.3A), OLM/no switch = 305/313

23. CCI Power 6/32: opt/no opt = 536.9/733.8 = 73 %

24. Clipper-based Intergraph machines:

Inter ... ref.time =	..View 32C	..Pro 245 DAT50	..Act C370	2430	6430 DAT100
gf77 1.8.4.2i :					
no switch	1387	1250	716	735.0	696.6
O	1285	1210	676	704.2	694.2
OL				664.3	650.7
af77 6.3.1.50 :					
no switch				573.9	578.0
O1				571.9	572.1
O2				459.9	461.1
O3				352.2	359.7

25. Motorola 88100- and 88110-based systems:

- BBN TC-2000: OLM/O/no opt = 284.9(->R=171)/303.4/332.1

Dolphin systems	100/125	500/525E	300/320
ghcc 1.8.5 OLM	268.4	335.9	237.9
ghcc 1.8.5 OL	305.7	381.5	268.0
ghcc 1.8.5 OM	281.0	350.8	244.3
ghcc 1.8.5 OA	316.9	393.3	273.3
ghcc 1.8.5 O	317.1	393.7	273.3

88100 all at 25MHz	Dol.. 125	phin 525E	Mod- Comp	AID 310C	AViiON 5200	TR 5000	NH 4400
gf77 1.8.3A:							
no opt	231.9	210.2	214.3	207.4			220.5
O	216.4	196.3	213.8	204.3	243.5	214.94	205.8
O1	213.3	192.5	203.5	196.2	224.5	212.02	202.5
O2	204.7	185.3		201.9	218.8	203.24	193.5
O3	210.5	190.4		222.1	211.6	209.41	199.4
gf77 1.8.5:							
no opt							290.3
O	253.5	219.8					
OA	253.9	221.1					
OL	237.3	210.1					
OM	220.7	197.8					
OLM	212.7	190.8					
OLMA							209.8

881?0 any frequency ref.time =	XD 88/30	AV .. 200	... 310C	.. iiON 532	Uniline 88	Night 4400	... 4800	Hawk 5800	TR 7000
				DAT50				DAT100	
gf77 1.8.3A:									
no opt	268.8	370.8		173.6	291.8	220.5			
O	248.6	345.5	286.1	165.6	275.9	205.8			
O1	244.1	341.0	282.6	161.8	274.3	202.5			
O2	235.2	326.3	270.6	154.9	259.2	193.5			
O3	241.7	335.5	278.0	158.2	265.5	199.4			
gf77 1.8.4.09:									
no opt		328.1	270.3	155.5					
OLM		368.5	306.7	173.7					
gf77 1.8.5beta:									
no opt		434.8	360.8						
OLM		372+202	307+165	194+111					
OI		388+205	322+169	202+111					
gf77 1.8.5:									
no opt		483.0		205.0	367.8	290.3			
OLMA		341.0		159.4		209.8			
gf77 1.8.6:									
no opt				260.8					
OLM				203.2					
lpi:				202.9					
hf77 5.2:									
O1				177.9		237.0			
O2				139.6		186.4			
O3				137.1		181.1			
O3 'best'						170.4			
hf77 5.3:									
O1							209.0	254	
O2							164.2	214	179
O3							160.5	215	166
O4							157.5		
hf77 6.3:									
O1								269	
O2								171	153
O3								181	
O3 'best'								160	145

26. IBM PC/RT, (ref.time = DAT50) :

- f77 1.0.0: 6150/25: no fpa = 161660(->R=0.30), FPA = 8209(->R=6);

- f77 1.0.0: 6151/115: 68881 = 4320, FPA = 6704, AFPA = 3279

- f77 1.1.1: 6151/115: FPA = 7139

- f77 1.1.1: 6151/115 with AFPA: no opt = 1609, fO = 1957, f2O = 1531

27. IBM RS/6000 systems and Power-based machines :

xlf 1.0 ...	ref.time = DAT50	no switch	O NOMAF	O	NOMAF	MAF/NOMAF
9005S1	6000/320	166.4	87.2	90.0	167.4	103%
	6000/520	180.1	93.6	97.1	178.8	104%
	6000/530	131.0	68.2	70.2	132.1	103%
	6000/540	112.1	58.9	59.9	111.0	102%
	6000/550	78.7	42.3	41.0	79.4	
	6000/560	66.7	35.6	34.6	67.1	
	6000/590	33.9	20.3	19.4	34.8	
	Bull DPX 460	50.2	28.0	26.2	51.3	
9013S1	6000/520	178.2	93.3	99.5	182.0	107%
	6000/730	131.8	68.0	71.7	133.6	105%
	6000/540	110.0	57.1	60.2	111.5	105%
	6000/590	33.8	20.3	19.4	34.7	
	Bull DPX 460	49.5	27.2	26.5	50.2	
9021	6000/540	111.0	57.3			
	6000/560	66.2	33.9			
	6000/590	33.8		19.3	34.6	
	Bull DPX 460	49.6		26.0	50.2	

	IBM		Bull			Escala	IBM	Bull	IBM	IBM
	320	460	470	150	690	M401	43P	250	390	590
ref.time = DAT100										
xlf 1.0 9005:										
no switch	693.1				124.9	223.7	119.9		127.6	124.6
O	360.1				71.2	132.1	70.4		72.8	71.1
xlf 2.1 :										
O	329.4	89.2			65.6	123.9	66.2	153	67.4	65.4
O Pv	304.2	88.9			65.8	123.6	67.9	153	67.6	65.6
xlf 2.2 :										
O2 Pv	281.3				59.0	119.2	75.4	148	60.5	58.8
O2 Pk	279.0				61.3	122.1	72.0	144	62.7	61.1
O3 Pv	282.0				58.9	128.0	75.1	148	60.7	59.0
O3 Pk	279.6				61.3	117.4	74.5	144	62.5	61.2
xlf 3.1 :										
ppc			-na-	238.3	-na-	214.8	104.5			
ppc O2			-na-	141.7	-na-	123.5	61.2			
ppc O3			-na-	131.4	-na-	120.7	56.9			
ppc "best"			-na-	**125.6**	-na-	**116.8**	**55.4**			
pwrx			-na-	-na-	138.8	-na-	-na-		141.4	137.9
pwrx O2			-na-	-na-	73.9	-na-	-na-		75.0	72.4
pwrx O3			-na-	-na-	**49.5**	-na-	-na-		**52.6**	**49.6**
pwrx "best"			-na-	-na-	57.0	-na-	-na-		59.7	56.4
com			204.6	286.9	140.8	242.6	130.7		142.2	139.2
com O2			102.0	173.6	76.3	146.1	77.7		76.6	74.9
com O3			75.1	135.8	53.7	133.8	59.6		54.7	52.9
com "best"			84.3	151.4	58.9	120.0	68.6		61.0	58.5
pwr			204.8	287.1	141.3	256.2	129.3		142.4	139.2
pwr O2			102.0	173.7	76.3	150.7	75.4		76.3	74.8
pwr O3			**75.2**	136.0	53.6	121.6	59.7		54.7	52.7
pwr "best"			-na-	-na-	57.1	ab.	ab.		59.9	56.4

	IBM	Bull				IBM	IBM	Bull	IBM	IBM
	320	460	470	150	690	40N	43P	250	390	590

ref.time = DAT999

xlf 1.0 9005:

O	4433					3069	956	2168	1008	

xlf 2.1 :

O	4078					2917	931	2181	936	

xlf 2.2 :

O3 Pv	3848				799	2780	998	1983	819	
O3 Pk	3754				818	2721	957	1937	836	

xlf 3.1 :

ppc O3			-na-	1786	-na-	2550	810			
ppc "best"			-na-	**1704**	-na-	**2468**	781			
pwrx O3			-na-	-na-		-na-	-na-		713	
pwrx "best"			-na-	-na-		-na-	-na-		**695**	
com O3				1844		2640	768		742	
com "best"				1757		2531	**727**		709	
pwr O3				1844		2632	793		741	
pwr "best"				-na-		ab.	ab.		695	

"best" = O3 Q qarch qhsflt qhot (but neither Pv nor Pk).

28. DEC Alpha-based machines:

	3000/300	3000/300X	3000/400	3000/500	4/166	5/250
ref.time = DAT100						
VMS, Fortran 1.x						
/opt=0				337.43		
/opt=1				197.04		
/opt=2				114.16		
/opt=3				110.70		
/opt=4				109.12		
OSF/1, Fortran 3.4.1						
/opt=0	531.6		361.5	335.5	376.5	132.4
/opt=1	264.8		167.9	153.2	163.0	64.4
/opt=2	146.4		94.7	86.8	89.2	33.2
/opt=3	156.4		95.3	86.2	92.1	33.5
/opt=4	141.4		94.1	86.3	89.7	33.2
DEC Rx000 f77 2.02 -Ox executables with mx 1.1-1						
-O2	256+178		214+131	185+114	176+118	55+43
-O3	250+181		210+132	181+114	168+119	55+43
-O4	274+193		220+142	169+123	173+121	abend
ref.time = DAT999						
OSF/1, Fortran 3.4.1						
/opt=0	6366.3	4180.0			4091.8	1498.5
/opt=1	2900.7	2284.5			1919.0	739.1
/opt=2	1649.7	1242.9			1086.2	384.2
/opt=3	1625.5	1166.3			1072.7	388.5
/opt=4	1612.1	1151.8			1055.7	385.1
DEC Rx000 f77 2.02 -Ox executables with mx 1.1-1						
-O2	3556+2458				2526+1755	750+576
-O3	3533+2480				2351+1829	740+572
-O4	3570+2600				2325+1627	abend

OSF/1	3000/300	3000/300X	4/166	3000/600	4/275	5/250	5/266	5/300
ref.time = DAT999								
f77 3.7								
-O0 -fast	5280.4		3472.9	3229.4		1301.6		
-O1 -fast	2317.7		1513.7	1441.6		614.9		
-O2 -fast	1441.8		913.6	826.4		326.9		
-O3 -fast	1454.1		875.2	873.6		318.5		
-O4 -fast	1445.7		870.2	876.6		**306.7**		
-O5 -fast	1447.8		927.1	850.6		308.8		
f77 3.8								
-O0 -fast				3228.1				
-O1 -fast	2378.9		1503.7	1416.9	793.7	614.6	584.2	516.8
-O2 -fast	1587.0		900.4	790.1	469.9	329.7	310.5	272.8
-O3 -fast	1559.0		1025.9	783.2	476.4	325.3	304.1	268.5
-O4 -fast	1557.0		949.6	748.6	479.6	325.3	305.6	268.5
-O5 -fast	1551.6		896.5	780.4	465.4	319.5	**303.2**	273.4

source f77 3.8	original	FOREST	KAP	SPAG	VAST	original	FOREST	KAP	SPAG	VAST
			-O5 -tune=ev4					-O5 -tune=ev5		
ref.time = DAT999										
3000/300	1773	1712	1867	1705	1696	1737	1764	2064	1856	1765
3000/300X	1145	1229	1341	1168	1215	1281	1294	1331	1246	1284
5/250	372	369	396	372	392	372	369	383	373	388
ref.time = DAT10K										
3000/300	16422	16723	19136	16313	15468	16820	16305	19465	15821	16344
3000/300X	10403	11130	11762	10465	11432	12276	10880	12781	11359	12271
5/250	3420	3392	3602	3417	3564	3416	3391	3479	3424	3528

source opt.	original		FOREST	
	O0	fast O4	O0	fast O4
ref.time = DAT999				
f77 T1.2 (Windows NT 3.51)				
AS 200 4/166				
AS 600 5/266	1032.27	269.90	1018.83	**267.48**

29. EC/ES/Ryad (IBM-compatible) mainframes, (ref.time = DAT50) :

fortran	1046	1060	1036	1022	1061	1130
G	2085.54	2124.54	7121.81	33926.58		1846.63
CC	2286.37	2299.85			1169.03	
SE	2057.23	2126.25			1080.74	
OE, opt=0	2275.93	2222.12			1101.52	2057.03
OE, opt=2	1792.62	1587.14			781.63	1615.23

30. Execution failed on the 360/67 & TSS, due to doubleword boundary problem, but the object code generated by the 360/67 runs normally on the 4341gp2. Ames's FTNQ = Fort H extended & enhanced: opt=2/opt=0 = 605/802.

31. IBM MVS mainframes, (ref.time = DAT50) :

opt=	G1	4.H.ext 0	4.H.ext 2	VS 1.3 0	VS 1.3 1	VS 1.3 2	VS 1.3 3	Fujitsu F77 2
168-1.5		*1683*	*1160*	*these 2 values refer to a particular test case*				
ref.time = DAT50								
3033-U			286.30	**the reference time for DAT50**				
3081-D	331		270					
3081-K		296	227					230.51
3083-J			283	285	253	210	209	
3084-Q		abend	191		208	181	abend	
ref.time = DAT100								
3033-U			1212.12	**the reference time for DAT100**				
ref.time = DAT999								
3033-U			16385.13	**the reference time for DAT999**				

- With only single precision values, the 3032 should be equal to the 370/168-3. In fact, it has been known that the difference could go as high as 15% if the code is 100% floating point & double precision (eg. 64 bits) values; here we have: 3032/168-3 = 1167/1033 = 113% .
- IBM 3090-180S:
  - AIX/370, O/O1/O2/O3 = 74.4/63.6/48.4/48.4
  - Metaware cc, noopt/opt = 73.7/70.6

optimization	none	O1	O2	O3
VM/CMS	79.46			50.60
AIX/370, fvs -XA	81.52			52.90
UTS, Fujitsu-f77		59.25	55.02	54.33

- IBM 3090-200, VSFortran 1.1.0 (Sept.85) = opt=0: 97.26 & opt=3: 68.50
- IBM 3090-200, Fujitsu f77 2.10 v10l20 = opt=2: 71.08 & opt=3: 70.58
- IBM 9000/720, noopt = 75.7, opt(3) novector = 50.2, opt(3) vector(report) = 54.4
- Siemens 7890, Fujitsu f77 2.10 v10l20 = opt=2: 63.48 & opt=3: 63.98

32. Emulation boards developped at Cern for use in on-line filtering in HEP activities.

33. **Vectorization** : All times in each column are not equivalent : some compare with data set DAT50, others compare with data sets DAT100 or DAT999 .

	vector	scalar	v/s
Cray X/MP, CFT1.14, (on, off=V)	190.62	193.99	**98 %**
Convex C1	755.0	715.3	106 %
Cyber 205, (LBV, LBO)	155.503	103.202	151 %
Cyber 990	97.97	91.18	107 %
Cyber 2000U, (=vl)	45.5	41.4	110 %
Cyber 2000V, (=vl)	42.2	39.0	108 %
DEC Vax 9000	47.75	40.33	118 %
Fujitsu VP 100	301.48	291.82	103 %
Fujitsu VP 200	261.48	225.82	103 %
IBM 3090-200, (VPF, no VPF)	265.28	243.00	109 %
NAS 9060 & IAP	385.00	295.00	130 %
Sperry 1190 & ISP	1029.72	865.83	119 %

34. **Single** versus **Double precision** (60, 64 or even 48 bits puis- but *not* 32 bits puis- versus 120 and 128 bits).

- CDC Cyber 170/835 :

compiler opt	FTN opt=0	FTN opt=1	FTN opt=2	FTN5 opt=0	FTN5 opt=1	FTN5 opt=2
single	977.56	783.10	658.84	1477.74	840.72	718.28
double	3756.22	3697.49	3404.08	4124.88	3568.91	3436.58

- CDC Cyber 170/875, FTN5, opt=2: double/single = 382.667/128.349 = 298%
- ETA 10P, SystemV 1.0b, FTN77 1.5c: d/s = 835.9/xxx.x
- ETA 10Q, SystemV 1.1, FTN77 1.xx: d/s = 548.2/150.2
- Cray X/MP-216 (SN:402), UNICOS 4.0, cft77 2.0.19: 641.54/39.99; cft 1.15: 648.77/55.67
- Cray X/MP-28 (SN:xxx), UNICOS 4.0, cft77 2.0.19: 558.61/32.38; cft 1.15: 564.99/45.47
- Cray 2 (SN:2027), UNICOS 5.0.8, cft77 3.1: 781.41/41.49; cft 3.1b: 899.30/56.06
- Dec/Vax machines, Fortran v4, /G precision versus /D precision : 11/780: 189414/2097=**9032%**; 11/785: 6812/1296; muVax2: 2315/2247; 8530: 594/474. **Only** on the Vax 11/780 is the G precision **emulated.**
- 64/48-bits precision: ModComp 11/45=3559/3009, 11/75=2449/1542, 32/85=1806/2924.

35. Control Data machines :

- All CDC 6x00,7600, Cyber 7x,17x,7x0 executions are done with FTN, opt=2.

	6400	7600	73	750	835	825	855
FTN	2025.4	106.09	1968.8	213.2	658.8	1458.7	204.8
FTN5	2033.4	108.01	1998.0	215.2	718.2	1506.1	210.3

opt=	0	1	2	3
FTN, 7600		132.068	106.087	
FTN, Cyber 825		1751.251	1579.261	
FTN, Cyber 835	977.566	783.101	658.841	
FTN5, 7600	204.855	126.430	108.010	108.034
FTN5, Cyber 835	1477.739	840.723	718.278	
FTN5, Cyber 750	410.674	260.353	215.250	212.944

- Particular feature of a Cyber 170/835 machine:
    - FTN, opt=1, machine, ep=on/ep=off = 3813.227/2789.440 = 136.7%
    - FTN, opt=2, machine, ep=on/ep=off = 3130.679/2286.971 = 136.9%
- Cyber 205, Fortran 2.0/VR02 (see note (33)) : LBO = 103.202 & LB = 148.763 & LBU = 148.815 & LBV = 155.503
- All Cyber 2000 runs are with opt=high:

compiler	2000U	2000V	AFT=inlining	2000U	2000V
(scalar) Fortran	41.3	38.2	Fortran + AFT	38.5	36.3
VFTN	41.4	39.0	VFTN + AFT	39.1	36.8
VFTN, opt=vl	45.5	42.2	VFTN, opt=vl + AFT	43.2	40.2

- Cyber 960-31, (SN:108, NOS/VE 1.6.1 and NOS 1.7.1), ref.time = DAT100:
    - NOS, FTN, opt = 0 = 797.378, 1 = 631.490, 2 = 534.166
    - NOS, FTN5, opt = 0 = 785.222, 1 = 625.784, 2 = 542.495, 3 = 542.684
    - NOS/VE, Fortran, ol = debug = 645.544, low = 597.068, high = 447.290 (-> R=460)
- ETA 10-Q: no switch = 732.9 , -vD = 714.6 , ODPRS = 454.1 , -vD ODPRS = 448.3

36. Sperry 1190, opt/no opt = 221.2(->R=220)/346.1 = 64 %

37. Fujitsu VP-2400 :

optimization	none	On,p	Ob,p	Of,p	Of,-p -Wv,-an,-p2400,Of
ref.time = DAT100	77.76	94.84	75.27	67.74	76.69

38. NEC :

- SX-2 (ref.time = DAT100) :
    - only control processor: 104.16 (->R=467);
    - with arithmetic processor: 33.19 (->R=1435);
    - with arithmetic processor and one **machine-dependent modification**: 27.21 (->R=1787).
- SX-3 (ref.time = DAT100) :
    - no inlining = 93.23 versus
    - inlining = 64.50 (->R=3187)

39. Bull DPS 90/x :

- F77/NEC Fortran = 129.24/131.04 = 99 % (no IAP)
- F77, opt/no opt = 124.2/175.7 = 71 % (no IAP)

40. Cray Research machines (ref.time = DAT100) :

- 1.S, cft: 1.9=258, 1.10=274(->R=751), 1.11=272, 1.12=217, 1.14=190(->R=1084).
- 2 (UNICOS 2.0, SN:2003): cft 2.70 / cft77 00.20 = 302.6 / 204.7
- 2 (UNICOS 3.0, SN:2007): cft 3.1b / cft77 1.0.5 = 240.5 / 178.85
- 2 (UNICOS 5.0.8, SN:2027): cft 3.1b / cft 5.0d / cft77 3.1 = 143.47(->R=1435) / 173.62 / 152.57
- X/MP, cft 1.14: 8.5ns / 9.5ns = 184.8 / 197.7 = 93.5 %
- X/MP (COS 1.15, SN:438, Feb.1989): cft 1.15bf3 / cft77 2.0.20 = 184.2 / 131.24
- X/MP-216 (UNICOS 4.0, SN:402, Cmos memory), cft 1.15bf3 / cft77 2.0.19 = 251.59 / 155.40
- X/MP-28 (UNICOS 4.0, SN:xxx, ECL memory), cft 1.15bf3 / cft77 2.0.19 = 200.21 / 121.04 (121.04 is the **elapsed time** for 2 processors in **autotasking** mode and with **unknown** machine load).
- Y/MP-2/116 (SN:1413) :

ref.time = DAT100	-o off	-o novector	-o full	OFF=V	ON=V	
COS 1.17, CFT 1.14				142.48		
COS 1.17, CFT 1.15				234.68	126.86	
COS 1.17, cft77 3.0	234.66	121.68	106.85			
UNICOS 6.0, cft77 4.0.3	228.40	115.28	104.81			
UNICOS 6.0, cft77 5.0.2	233.11	110.27	102.32			
UNICOS 6.0, cft77 5.0.3	225.71	109.01	98.42			
UNICOS 6.0, cft77 5.0.4	230.35	111.34	99.27			
UNICOS 6.0, cft77 6.0.0	228.85	110.45	98.63			
UNICOS 7.0.6, cft77 6.0.3.0	-O 0 = 224.09		-O scalar3 -O inline3 = abend			
UNICOS 7.0.6, cf90 1.0.1.0	O0=212.68	O1=111.44	O2=110.02	O3=107.73	-g=255.55	

compiler	original	FOREST	KAP	SPAG	STRUCT	VAST
cf90 1.0.1.0 -O3	107.73	108.51	131.67	108.06	107.78	127.10

- J 916 (SN:9093) :

ref.time = DAT100	-o off	-o novector	-o full	OFF=V	ON=V	
UNICOS 8.0.4, cft77 4.0.3	582.45	271.32	237.49			
UNICOS 8.0.4, cft77 5.0.3		213.40	211.62			
UNICOS 8.0.4, cft77 5.0.4		242.11	210.55			
UNICOS 8.0.4, cft77 6.0.0	553.58	237.72	202.01			
UNICOS 8.0.4, cft77 6.0.3.0	-O 0 = 550.55		-O scalar3 -O inline3 = abend			
UNICOS 8.0.4, cf90 1.0.1.0	O0=552.97	O1=235.02	O2=234.29	O3=239.79	-g=695.00	

compiler	original	FOREST	KAP	SPAG	STRUCT	VAST
cf90 1.0.1.0 -O3	239.79	234.38	272.96	279.90	231.93	272.78

41. Alliant machines :

   - FX 1/8 : 1 CE =570.6 ; 2 CE =519.5 ; 4 CE =494.8 ; 6 CE =485.2 ; 8 CE =481.1

   - FX 10/80 : 1 CE =243.75 ; 2 CE =211.43 ; 3 CE =201.55 ; 4 CE =196.15

   - FX 2800 : Ogcu -AS : 181.9 (14 proc.) versus Og -uniproc : 117.6

42. Convex machines :

   - C 1, FPP v2.1, FSKEL v2.1 : O0=745.5, O=754.8, O1=718.5, O2=745.9

   - C 1, FPP v2.3, FSKEL v2.2 : O0=753.0, O=916.1, O1=715.3, O2=755.0

   - C 1, fc, v4.1 : O=722.8, O1=703.9, O2=727.7

   - C 120, fc O2: v2.1 = 488.1, v2.2 = 485.8, v4.1 = 470.3

   - C 210, fc O2: v2.1 = 201.9, v2.2 = 485.8, v4.1 = 188.6, v5.1 = 113.5

   - C 210, fc v4.1, O2 : 08/1988 = 188.6, 12/1988 = 164.5

   - C 220, fc vx.x, no switch = 159.5, O1 = 108.0, O2 = 114.6, O3 = 119.6

43. FPSystems machines:

   - FPS 300: O0=482 ; O1=387 (->R=126) ; O2=419 ; O3 = 1626.0 (*but elapsed time on 4-proc. machine =* 420.9) ; no=512 ; uo=416 (see note (10)).

   - FPS 350S: O0=390 ; O1=347 (->R=140) ; O2=377

   - FPS 500EA, f77 4.1 vec=...: 138.7

f77 4.0	no opt	O	Oc
FPS 500	142.3	139.3	264.3
FPS 500EA	134.3	134.3	254.8

44. Prime, F77/FTN : 550-1=8883/8151, 550-2=4551/3903, 850=2458/2358, 2250=8697/7939.

45. Gould-SEL machines :

   - 32/8750, f77 4.0, bare system = 592, with macc = 434, plus 128k of shadow memory = 409.

   - PN 6040, f77, optimized / no optimized = 1715.2 / 1930.2 = 89%.

   - NP/1, fortran 1.0: AA / no AA = 234.80 / 808.65 = 29%.

46. MV/2500DC, AOS/VS II, f77 4.01: opt = none/full/full-float = 1893.719/1571.466/1578.117

47. DEC machines, compilers, versions and optimizations:

- FPA gains: 11/730: 8019/33824; 11/750: 4140/9553; 11/780: 2097/xxxx; 8600: 534/1845
- 11/750, Fortran v2.4-64 (no FPA): /OPT = 9553, no opt = 10126
- 11/750, Eunice 2.2 f77 (no FPA): opt -c = 12129.7, no opt = 12525.3
- 11/780, Ultrix 2.1, f77, FPA: opt/no opt = 3123.8/3322.8
- Vax Station 2/GPX, Ultrix 2.1, Berkeley f77 1.0: O3/no opt = 3611.7/3845.9
- Eunice 2.2 (=bsd 4.1) & f77 versus VMS 3.2 & Fortran v2:
    - 11/750, no FPA: 12129 versus 9553 and
    - 11/780, FPA: 3996 versus 2097
- 11/785, FPA, Ultrix 2.0 and Unity 5.2.3 & f77 versus VMS 3.6 & Fortran v4:
    - Unity = 2184.60 and
    - Ultrix = 2111.10,
    - VMS = 1371.30
- Vax 9000, Ultrix 4.0 & f77 O versus VMS 5.4 & Fortran v5 /OPT: 64 versus 42
- TOPS-20 :
    - 20/20, Fort6: /OPT = 14745, no opt = 15227
    - 20/50, Fort5: /OPT = 1842, no opt = 1934
    - Systems Concepts SC-30, Fortran 10: opt/no opt = 831/879

Fortran	11/780	11/785	6220	3100 /76	4000 /60	4000 /90	4000 /90A	4000 /100	4000 /105A	6000 /410	8530
ref.time = DAT50											
v2	2097	916									
v4.8_276	1866	789	696								
v5.1_10 /opt	1800		718								
ref.time = DAT100											
v4.8_276				3112	828	258	232	304	224	1210	2624
v5.1_10				3087	802	255	240	297	224	1223	2686
v5.1_10 /opt				3090	820	259	231	355	222	1182	2582
v5.8				3831	969	338	381				
v5.8 /opt				3064	793	256	286				

48. Telefile T85/LVM is a Xerox Sigma series plug-compatible machine. So CII 10070 and T85/LVM are cousins.

49. Bull DPS 8 : MR9 = 1756, MR10.2 = 1548, MR12 = 1850. The MR12 compiler doesn't allow any more any optimization (Jun.1987).

50. Bull DPX 2/350 :

- f77, FO vs FOF4 = 313.4 vs 286.1 and
- cc, FO vs FOF4 = 324.4 vs 307.9

51. The F77 compiler is a translator to ZetaLisp. The Double precision Floating Point Accelerator for 3610, 3620, 3650 is W1164-based; the Single precision Floating Point Accelerator for 3675 is Symbolics's proprietary.

52. ATT f77 versus gf77 :

- CSEE Unigraph 6272: ATT f77 = 3782 & gf77 = 3761
- Opus 532 board: ATT f77 = 1157 & gf77 = 1004 & NatSemi/GNX f77 = 948 (-> R=9).

R	machine (sort by value)	R	machine (sort by name)	R	machine (sort by FPU)
	32 bits & ndp :	168	(Forex chipset)	450	xxxxxxxxxxxxx
4709	Intel UTS P6/200	82	(Forex chipset)	276	i860/33
3094	Intel UTS P6/133	186	(Forex chipset)	138	i487SX/25
2924	Asus P55TP4XE	1197	(Triton chipset)	69	i487SX/16
2871	Shuttle Hot555	29	...... 386/16	348	i486DX2/66
2642	Asus P55TP4Xe	83	ADD-X 340	260	i486DX2/50
2271	DEC Celebris5150	751	Acer Vi15G	286	i486/50
2188	Asus P55T2P4	411	Acer Vi15G	191	i486/33
2179	DEC Celebris5133	80	Alaris 486DX3/75	121	i486/25
1680	Tadpole P1000	92	Alaris 486DX3/75	168	XC87DLX2/80
1614	Shuttle Hot555	886	Asus 486SP3	92	XC87DLX2/50
1562	Compaq XE 560	979	Asus 486SP3	38	XC87DLX2/33
1557	Asus 486SP3	785	Asus 486SP3	168	W4167/33
1479	Compaq XL 590	1557	Asus 486SP3	108	W3167/33
1352	NexGen 586PF100	2188	Asus P55T2P4	73	W3167/25
1197	(Triton chipset)	2924	Asus P55TP4XE	60	W3167/20
1111	Shuttle Hot555	2642	Asus P55TP4Xe	57	W1167/20
1088	Shuttle Hot555	25	Compaq 386-s	83	US83C87/40
979	Asus 486SP3	31	Compaq 386-s	72	TI8847/20
886	Asus 486SP3	29	Compaq 386-s	49	T800/20
870	Cpq Prolinea 450	22	Compaq 386-s	339	ST486/66
803	DECpc XL 560	25	Compaq 386-s	195	RapidCAD/40
785	Asus 486SP3	14	Compaq 386/16	186	RapidCAD/33
758	DECpc XL 4100	11	Compaq 386/16	4709	PentiumPro/200
751	Acer Vi15G	6	Compaq 386/16	3094	PentiumPro/133
682	DECpc XL 4100	38	Compaq 386/16	1479	Pentium/90
652	Cpq Prolinea 450	11	Compaq 386/16	803	Pentium/60
627	DECpc XL 4100	27	Compaq 386/16	2924	Pentium/200
543	Cpq Prolinea 450	60	Compaq 386/20	2642	Pentium/180
450	xxxxxxxxxxxxxxx	35	Compaq 386/20	2871	Pentium/166
411	Acer Vi15G	43	Compaq 386/20	2179	Pentium/133
408	Cpq Prolinea 450	57	Compaq 386/20	2188	Pentium/120
398	Cpq Prolinea 450	47	Compaq 386/25	1680	Pentium/100
382	DECpc XL 466D2	49	Compaq 386/25	870	PODP/83
348	Cpq Prolinea 450	73	Compaq 386/25	652	PODP/63
339	DECpc XL 466D2	41	Compaq 386/25	2271	PODP/150
335	DECpc XL 466D2	69	Compaq 386/33	1562	PODP/120
286	Compaq 486/50	108	Compaq 386/33	1557	PODP/100
276	uWay i860/33	93	Compaq 386/33	1352	Nx586PF100/93
260	Cpq Prolinea 450	138	Compaq 486-s	408	DX4/75
195	Datek RapidCAD	69	Compaq 486-s	543	DX4/100
191	Compaq 486/33	121	Compaq 486/25	32	Cx83S87/20
186	(Forex chipset)	168	Compaq 486/33	25	Cx83S87/16
168	Compaq 486/33	191	Compaq 486/33	69	Cx83D87/33
168	(Forex chipset)	286	Compaq 486/50	80	Cx83D87/25
138	Compaq 486-s	1562	Compaq XE 560	32	Cx83D87/16
121	Compaq 486/25	1479	Compaq XL 590	14	Cx82S87/8
108	Compaq 386/33	398	Cpq Prolinea 450	1614	Cx6x86/133
94	Datek 386	543	Cpq Prolinea 450	1197	Cx6x86/120
93	Compaq 386/33	870	Cpq Prolinea 450	1088	Cx6x86/100
92	Alaris 486DX3/75	408	Cpq Prolinea 450	398	Cx5x86/75
87	Datek 386	348	Cpq Prolinea 450	785	Cx5x86/120
83	ADD-X 340	260	Cpq Prolinea 450	758	Cx5x86/100
82	(Forex chipset)	652	Cpq Prolinea 450	335	Cx486/66
80	Alaris 486DX3/75	2179	DEC Celebris5133	94	Cx387+/40
73	Compaq 386/25	2271	DEC Celebris5150	87	Cx387+/33
72	Definicon SP-1				

69	Compaq 486-s	803	DECpc XL 560	49	CT38700/25
69	Compaq 386/33	682	DECpc XL 4100	751	AmdDX4/120
60	Compaq 386/20	627	DECpc XL 4100	627	AmdDX4/100
57	Compaq 386/20	758	DECpc XL 4100	979	Am5x86/160
49	DefiniconT4/T800	382	DECpc XL 466D2	886	Am5x86/133
49	Compaq 386/25	339	DECpc XL 466D2	682	Am5x86/100
47	Compaq 386/25	335	DECpc XL 466D2	1111	Am5K/100
43	Compaq 386/20	94	Datek 386	411	Am486DX2/80
41	Compaq 386/25	87	Datek 386	382	Am486DX2/66
38	Compaq 386/16	195	Datek RapidCAD	29	80387SX/20
36	Definicon 785	7	Definicon 32	22	80387SX/16
35	Compaq 386/20	36	Definicon 785	82	80387/33
32	uWay FastCache	28	Definicon 785	41	80387/25
32	Olivetti M380	72	Definicon SP-1	35	80387/20
31	Compaq 386-s	49	DefiniconT4/T800	27	80387/16
29	...... 386/16	3094	Intel UTS P6/133	6	80287/8
29	Compaq 386-s	4709	Intel UTS P6/200	36	68882/25
28	Definicon 785	1352	NexGen 586PF100	28	68881/25
27	Compaq 386/16	32	Olivetti M380	31	487SLX2/33
25	Compaq 386-s	1088	Shuttle Hot555	93	487DLC/33
25	Compaq 386-s	1614	Shuttle Hot555	25	3C87SX/16
22	Compaq 386-s	2871	Shuttle Hot555	47	3C87/25
14	Compaq 386/16	1111	Shuttle Hot555	43	3C87/20
11	Compaq 386/16	1680	Tadpole P1000	29	3C87/16
11	Compaq 386/16	276	uWay i860/33	7	32081/10
7	Definicon 32	32	uWay FastCache	11	2C87/8
6	Compaq 386/16	450	xxxxxxxxxxxxxxx	11	287XL/8

32 bits &no ndp :

76	NexGen Nx586	5	Compaq 386-s	21	i486SX/33
63	NexGen Nx586	5	Compaq 386/16	16	i486SX/25
53	NexGen Nx586	5	Compaq 386/16	28	UMC U5S/33
32	Venex 486DX3/75	22	Compaq 386/25	19	Ti486DLC/33
28	DECpc XL 433sx	11	Compaq 386/25	12	Ti486DLC/25
22	Compaq 386/25	9	Compaq 386/25	76	Nx586/90
21	Compaq 386/33L	12	Compaq 386/25	63	Nx586/75
21	DECpc LPv+433sx	15	Compaq 386/33L	53	Nx586/60
19	Compaq 386/33L	19	Compaq 386/33L	21	Cx486DRx2/66
16	Compaq 486-s	12	Compaq 386/33L	22	Cx486DRx2/50
15	Compaq 386/33L	21	Compaq 386/33L	15	CT38600/33
12	Compaq 386/25	16	Compaq 486-s	11	CT38600/25
12	Compaq 386/33L	21	DECpc LPv+433sx	10	Am386SX/40
11	Compaq 386/25	28	DECpc XL 433sx	5	Am386/16
10	Daewoo	10	Daewoo	5	80386SX/20
9	Compaq 386/25	2	IBM PS/2 8556	12	80386/33
5	Compaq 386-s	53	NexGen Nx586	9	80386/25
5	Compaq 386/16	76	NexGen Nx586	5	80386/16
5	Compaq 386/16	63	NexGen Nx586	32	486BL3/75
2	IBM PS/2 8556	32	Venex 486DX3/75	2	386SLC/20

16 bits & ndp :

420	xxx	49	(Forex chipset)	31	i487SX/25
402	Shuttle Hot555	60	(Forex chipset)	20	i487SX/16
371	Asus P55TP4XE	23	(Forex chipset)	81	i486DX2/66
363	DEC Celebris5150	38	(Forex chipset)	49	i486DX2/50
303	Shuttle Hot555	25	(Forex chipset)	62	i486/50
292	DEC Celebris5133	223	(Triton chipset)	41	i486/33
261	Asus 486SP3	7	...... 386sx/16	32	i486/25
261	Asus P55T2P4	14	ADD-X 325SX	60	XC87DLX2/80
256	DEC Celebris5120	15	ADD-X 325SX	48	XC87DLX2/50
230	Intel UTS P6/200	26	ADD-X 340	10	XC87DLX2/33
228	Shuttle Hot555	27	ADD-X 340	1	V50/7.16
223	(Triton chipset)	26	ADD-X 340	7	US83S87/16
204	Compaq XL 590	27	ADD-X 340	26	US83C87/40
203	Compaq XE 560	135	Acer Vi15G	22	US83C87/33

196	Shuttle Hot555	48	Alaris 486DX3/75	16	US83C87/25
166	Intel UTS P6/200	4	Amstrad 1512	10	US83C87/20
164	Asus 486SP3	261	Asus 486SP3	91	ST486/66
164	NexGen 586PF100	164	Asus 486SP3	38	RapidCAD/40
160	Asus 486SP3	160	Asus 486SP3	25	RapidCAD/33
144	Asus 486SP3	144	Asus 486SP3	230	PentiumPro/200
135	Acer Vi15G	261	Asus P55T2P4	166	PentiumPro/133
135	DECpc XL 560	371	Asus P55TP4XE	204	Pentium/90
134	Cpq Prolinea 450	2	Compaq 286Desk	135	Pentium/60
122	DECpc XL 4100	5	Compaq 286Desk	371	Pentium/200
106	Cpq Prolinea 450	4	Compaq 286Desk	420	Pentium/180
101	Cpq Prolinea 450	2	Compaq 286Desk	402	Pentium/166
92	DECpc XL 466D2	3	Compaq 286Desk	363	Pentium/150
91	DECpc XL 466D2	5	Compaq 286Desk	292	Pentium/133
86	DEC AS600 5/266	3	Compaq 286Desk	256	Pentium/120
85	DECpc XL 466D2	2	Compaq 286Desk	261	Pentium/100
82	Toshiba 4800CT	3	Compaq 286Desk	203	OVDPR/120
81	Compaq 486/66	2	Compaq 286Desk	134	OVDP/83
79	DECpc XL 466D2	4	Compaq 286Desk	101	OVDP/63
62	Compaq 486/50	4	Compaq 286Desk	261	OVDP/100
60	(Forex chipset)	11	Compaq 386-s	164	Nx586PF100/93
49	(Forex chipset)	9	Compaq 386-s	82	DX4/75
49	IBM PS/2 8570	8	Compaq 386-s	106	DX4/100
48	Alaris 486DX3/75	9	Compaq 386-s	27	CxEMC87/40
41	Compaq 486/33	9	Compaq 386/16	23	CxEMC87/33
38	(Forex chipset)	8	Compaq 386/16	29	CxEMC87/25
32	Compaq 486/25	4	Compaq 386/16	10	CxEMC87/20
31	Compaq 486-s	9	Compaq 386/16	15	Cx83S87/25
29	Compaq 386/25	10	Compaq 386/16	9	Cx83S87/16
28	Datek 386	7	Compaq 386/16	26	Cx83D87/40
27	ADD-X 340	10	Compaq 386/16	15	Cx83D87/25
27	ADD-X 340	10	Compaq 386/20	10	Cx83D87/20
26	ADD-X 340	8	Compaq 386/20	9	Cx83D87/16
26	ADD-X 340	10	Compaq 386/20	8	Cx82S87/8
25	(Forex chipset)	10	Compaq 386/20	4	Cx82S87/5.33
23	(Forex chipset)	10	Compaq 386/20	303	Cx6x86/133
23	Compaq 386/33L	10	Compaq 386/20	223	Cx6x86/120
22	Compaq 386/33	16	Compaq 386/25	228	Cx6x86/100
22	Compaq 386/33L	14	Compaq 386/25	164	Cx5x86/120
20	Compaq 486-s	16	Compaq 386/25	17	Cx487DLC/25
17	Compaq 386/25	16	Compaq 386/25	85	Cx486/66
16	Compaq 386/25	29	Compaq 386/25	28	Cx387+/40
16	Compaq 386/25	15	Compaq 386/25	49	Cx387+/33
16	Compaq 386/25	5	Compaq 386/25	16	CT38700/25
15	ADD-X 325SX	17	Compaq 386/25	10	CT38700/16
15	Compaq 386/25	22	Compaq 386/33	135	AmdDX4/120
14	ADD-X 325SX	23	Compaq 386/33L	160	Am5x86/160
14	Compaq 386/25	22	Compaq 386/33L	144	Am5x86/133
11	Compaq 386-s	31	Compaq 486-s	122	Am5x86/100
10	Compaq 386/20	20	Compaq 486-s	196	Am5K/100
10	Compaq 386/20	32	Compaq 486/25	92	Am486DX2/80
10	Compaq 386/20	41	Compaq 486/33	79	Am486DX2/66
10	Compaq 386/20	62	Compaq 486/50	4	Am287/8
10	Compaq 386/20	81	Compaq 486/66	2	Am287/5.33
10	Compaq 386/16	1	Compaq Deskpro	2	Am287/4
10	Compaq 386/16	2	Compaq Deskpro	4	8087/9.54
9	Compaq 386/16	203	Compaq XE 560	2	8087/7.16
9	Compaq 386/16	204	Compaq XL 590	1	8087/4.77
9	Compaq 386-s	101	Cpq Prolinea 450	11	80387SX/20
9	Compaq 386-s	106	Cpq Prolinea 450	8	80387SX/16
8	Compaq 386/20	134	Cpq Prolinea 450	23	80387/33
8	Toshiba 3200SX	86	DEC AS600 5/266	16	80387/25
8	Compaq 386-s	256	DEC Celebris5120	10	80387/20

8	Compaq 386/16	292	DEC Celebris5133	9	80387/16
7	...... 386sx/16	363	DEC Celebris5150	4	80287/8
7	Compaq 386/16	135	DECpc XL 560	2	80287/5.33
5	Compaq 286Desk	122	DECpc XL 4100	2	80287/4
5	Compaq 286Desk	79	DECpc XL 466D2	3	80287/20
5	Compaq 386/25	85	DECpc XL 466D2	5	80287/12
4	Compaq 386/16	92	DECpc XL 466D2	5	80287/10
4	Amstrad 1512	91	DECpc XL 466D2	9	487SLX2/33
4	Compaq 286Desk	28	Datek 386	14	3C87SX/25
4	Compaq 286Desk	49	IBM PS/2 8570	8	3C87SX/16
4	Compaq 286Desk	166	Intel UTS P6/200	27	3C87/40
3	Compaq 286Desk	230	Intel UTS P6/200	22	3C87/33
3	uWay 287Turbo	1	Kila System	14	3C87/25
3	Compaq 286Desk	164	NexGen 586PF100	10	3C87/20
3	Compaq 286Desk	228	Shuttle Hot555	8	3C87/16
2	Compaq 286Desk	303	Shuttle Hot555	7	2C87/8
2	Compaq 286Desk	402	Shuttle Hot555	4	2C87/5.33
2	Compaq Deskpro	196	Shuttle Hot555	3	2C87/4
2	Compaq 286Desk	8	Toshiba 3200SX	5	287XL/8
2	Compaq 286Desk	82	Toshiba 4800CT	3	287XL/5.33
1	Compaq Deskpro	3	uWay 287Turbo	3	287XL/4
1	Kila System	420	xxx	86	21164/266
	16 bits &**no** ndp :				
79	Asus P55TP4XE	15	(Forex chipset)	9	i486SX/33
71	Asus P55TP4XE	13	(Forex chipset)	6	i486SX/25
69	Intel UTS P6/200	8	(Forex chipset)	4	i486SX/16
64	DEC Celebris5166	6	(Forex chipset)	17	i486DX2/66
56	DEC Celebris5150	5	(Forex chipset)	12	i486DX2/50
55	Shuttle Hot555	48	(Triton chipset)	13	i486/50
52	DEC Celebris5133	4	ADD-X 325SX	9	i486/33
49	Asus P55T2P4	6	ADD-X 340	7	i486/25
48	(Triton chipset)	31	Acer Vi15G	0	V40/xx
46	Intel UTS P6/200	15	Alaris 486DX3/75	0	V40/8
44	Shuttle Hot555	34	Asus 486SP3	1	V30/7.14
44	Compaq XE 560	39	Asus 486SP3	0	V30/4.77
42	Asus P55T2P4	33	Asus 486SP3	0	V20/4.77
41	Shuttle Hot555	39	Asus 486SP3	13	UMC U5S/33
39	Asus 486SP3	37	Asus 486SP3	8	Ti486DLC/33
39	Asus 486SP3	49	Asus P55T2P4	5	Ti486DLC/25
37	Compaq XL 590	42	Asus P55T2P4	18	ST486/66
37	NexGen 586PF100	79	Asus P55TP4XE	8	RapidCAD/40
37	Asus 486SP3	71	Asus P55TP4XE	6	RapidCAD/33
34	NexGen Nx586	7	Chip - Tech.	69	PentiumPro/200
34	Asus 486SP3	4	Chip - Tech.	46	PentiumPro/133
33	Asus 486SP3	1	Compaq 286Desk	37	Pentium/90
31	Acer Vi15G	1	Compaq 286Desk	25	Pentium/60
31	DECpc XL 4100	1	Compaq 286Desk	79	Pentium/200
29	NexGen Nx586	3	Compaq 386-s	71	Pentium/180
26	Cpq Prolinea 450	2	Compaq 386-s	64	Pentium/166
25	Compaq XE 560	2	Compaq 386/16	52	Pentium/133
24	DECpc XL 4100	2	Compaq 386/16	49	Pentium/120
24	NexGen Nx586	2	Compaq 386/16	42	Pentium/100
20	DECpc XL 466D2	3	Compaq 386/20	34	PODP/83
20	Cpq Prolinea 450	9	Compaq 386/25	56	PODP/150
18	DECpc XL 466D2	6	Compaq 386/25	44	PODP/120
17	Compaq 486/66	5	Compaq 386/25	39	PODP/100
17	Cpq Prolinea 450	5	Compaq 386/25	37	Nx586PF100/93
15	(Forex chipset)	4	Compaq 386/25	34	Nx586/90
15	Alaris 486DX3/75	8	Compaq 386/33L	29	Nx586/75
13	Compaq 486/50	6	Compaq 386/33L	24	Nx586/60
13	DECpc XL 433sx	4	Compaq 486-s	20	DX4/75
13	(Forex chipset)	6	Compaq 486-s	26	DX4/100
12	DEC AS600 5/266	7	Compaq 486/25	55	Cx6x86/133

12	Cpq Prolinea 450	9	Compaq 486/33	48	Cx6x86/120
9	DECpc LPv+433sx	13	Compaq 486/50	41	Cx6x86/100
9	Compaq 486/33	17	Compaq 486/66	17	Cx5x86/75
9	Compaq 386/25	0	Compaq Deskpro	37	Cx5x86/120
8	Datek 386	1	Compaq Deskpro	31	Cx5x86/100
8	Compaq 386/33L	0	Compaq Deskpro	4	Cx486SLC/25(?)
8	(Forex chipset)	1	Compaq LTE	15	Cx486DRx2/80
7	Compaq 486/25	25	Compaq XE 560	13	Cx486DRx2/66
7	Chip - Tech.	44	Compaq XE 560	9	Cx486DRx2/50
6	(Forex chipset)	37	Compaq XL 590	8	Cx486DLC/33
6	ADD-X 340	12	Cpq Prolinea 450	6	Cx486DLC/25
6	Compaq 386/33L	20	Cpq Prolinea 450	3	Cx486DLC/16
6	Compaq 486-s	26	Cpq Prolinea 450	7	CT38605/33
6	Compaq 386/25	17	Cpq Prolinea 450	4	CT38605/25
5	(Forex chipset)	12	DEC AS600 5/266	6	CT38600/33
5	Compaq 386/25	52	DEC Celebris5133	5	CT38600/25
5	Compaq 386/25	56	DEC Celebris5150	2	CT38600/16
4	Tandon	64	DEC Celebris5166	31	AmdDX4/120
4	Chip - Tech.	9	DECpc LPv+433sx	24	AmdDX4/100
4	Compaq 486-s	31	DECpc XL 4100	39	Am5x86/160
4	Daewoo	24	DECpc XL 4100	33	Am5x86/133
4	IBM PS/2 8556	13	DECpc XL 433sx	44	Am5K/100
4	Compaq 386/25	20	DECpc XL 466D2	20	Am486DX2/80
4	ADD-X 325SX	18	DECpc XL 466D2	4	Am386SX/40
3	Compaq 386/20	4	Daewoo	4	Am386SX/25
3	Olivetti M380	8	Datek 386	6	Am386/40
3	Compaq 386-s	1	Goupil G4	2	Am386/16
2	Leanord 286/20	0	IBM PC	0	8088/4.77
2	Compaq 386/16	0	IBM PC	1	8086/9.54
2	Compaq 386/16	4	IBM PS/2 8556	0	8086/7.14
2	Compaq 386/16	46	Intel UTS P6/200	0	8086/4.77
2	Mitac/LCE 286/16	69	Intel UTS P6/200	3	80386SX/20
2	Compaq 386-s	0	Iskra 1030-M	2	80386SX/16
1	Compaq 286Desk	0	Iskra 1030-M	5	80386/33
1	Compaq 286Desk	2	Leanord 286/20	4	80386/25
1	Compaq 286Desk	2	Mitac/LCE 286/16	3	80386/20
1	Goupil G4	37	NexGen 586PF100	2	80386/16
1	Compaq LTE	34	NexGen Nx586	1	80286/8
1	Compaq Deskpro	24	NexGen Nx586	1	80286/6
0	Compaq Deskpro	29	NexGen Nx586	2	80286/20
0	Olivetti PC 1	0	Normerel ST-2	2	80286/16
0	Ryad ES 1842	3	Olivetti M380	1	80286/12
0	Normerel ST-2	0	Olivetti PC 1	1	80186/7.16
0	Iskra 1030-M	0	Ryad ES 1842	15	486BL3/75
0	IBM PC	41	Shuttle Hot555	4	386SLC/20
0	Compaq Deskpro	44	Shuttle Hot555	12	21164/266
0	Iskra 1030-M	55	Shuttle Hot555	0	1810WM86/8
0	IBM PC	4	Tandon	0	1810WM86/4.77
	emulation mode :				
4	DEC APX 3000/500	0	Acorn A310	1	Sparc/40
2	HP 9000/720	0	Atari ST-1040	1	Romp/12.5
1	IBM RS/6000-540	4	DEC APX 3000/500	0	Romp/10
1	Sun 4/ 75	2	HP 9000/720	1	Power/31
1	Next Station	0	IBM PC/RT 125	2	HP-PA/50
1	IBM PC/RT 135	1	IBM PC/RT 135	0	Arm/4
0	IBM PC/RT 125	1	IBM RS/6000-540	1	68040/25
0	Atari ST-1040	1	Next Station	0	68000/7.77
0	Acorn A310	1	Sun 4/ 75	4	21064/150

R	machine (sort by value)	R	machine (sort by name)	R	machine (sort by FPU)
10349	DEC 8400 5/300	35	– 68020+68882	735	i860XP/50
9496	SGI. Onyx	40	– 68020+68882	445	i860/40
9164	DEC AS 600 5/266	1295	... Pentium/90	406	i860/33.33
9060	DEC AS 600 5/250	1430	....	139	i860/32
7392	Sun Ultra2 m 200	108	....	158	i487SX/25
6191	Sun Ultra1 m 170	242	ADI AD-100	121	i487SX/20
5970	DEC AS2100 4/275	121	ALR VEISA 486ASX	100	i487SX/16
5823	Sun 20 HS 151	213	ATT StarServerE	2	i486SX/25
5353	Sun Ultra1 m 140	6	Acorn Risc 260	401	i486DX2/66
4498	Sun 20 HS 22	445	Alacron AL860	300	i486DX2/50
4179	HP 9000/735-125	85	Alliant FX/1	298	i486/50
4136	Bull DPX /20 690	93	Alliant FX/2	181	i486/33
3908	IBM 6000/390	101	Alliant FX/8	47	i486/25
3820	IBM 6000/43P	247	Alliant FX/80	731	Weitek/80
3724	SGI. PowerChall.	1	Altos 400	787	Weitek/33
3678	HP 9000/735	92	Amdahl 470/V5-1	421	W8601/40
3650	HP 9000/T500	154	Amdahl 470/V7	213	W4167/33
3625	Cray M98 (1proc)	134	Amdahl 470/V7-B	96	W4167/25
3600	Sun 20 HS 11	165	Amdahl 470/V8	121	W3172/25
3590	Fujitsu VP-2600	149	Amdahl 470/V8	113	W3172/20
3518	HP 9000/887S	348	Amdahl 5850-S	470	W3171/40.1
3490	Sun SS 1000E-85	474	Amdahl 5860	449	W3171/40
3187	NEC SX/3-14	301	Amdahl 5880	387	W3171/33.33
3099	DEC AS 200 4/166	1	Apollo DN 550	303	W3171/33
3041	Sun 20 m71	16	Apollo DN 580	276	W3171/25
3040	SGI. Impact	55	Apollo DN 3500	157	W3170/25
3016	IBM 6000/580H	33	Apollo DN 4000	119	W3170/20
2996	Axil 320/61	605	Apollo DN 10000	82	W3167/33
2879	SGI. PowerChall	392	Apple 6100/60	72	W3167/25
2873	Hitachi 3050/330	6	Apple 6100/66	55	W3164/12.5
2737	Bull DPX /20 470	522	Apple 6200/75	146	W3164/10
2463	SGI. Indigo2	934	Apple 6300	439	W2264/32
2425	DEC APX 3000300X	899	Apple 7100/80	97	W2264/16
2424	HP 9000/715-100	852	Apple 7200/90	57	W1167/20
2385	DEC APX 3000/500	1387	Apple 8500/120	51	W1167/16
2323	IBM 6000/580	2	Apple Mac 170	24	W1164/xx
2271	Hitachi EX ??	9	Apple Mac 170	35	W1164/8
2233	Cray Y/MP 2E	3	Apple Mac II	62	W1164/16.67
2217	IBM 6000/370	17	Apple Mac II	31	W1164/15
2184	DEC APX 3000/400	3	Apple Mac IIcx	74	W1164/14.275
2174	SGI. Indigo2	7	Apple Mac IIfx	31	W1064/16.67
2066	Intel Pentium100	3	Apple Mac IIsi	7392	ULSp/200
2037	HP 9000/712-80i	1	Apple Mac Plus	6191	ULSp/167
1992	Sun SS 1000	3	Apple Mac SE/30	5353	ULSp/143
1950	HP 9000/G40	97	Ardent TiTan P2	29	US83C87/20
1938	Cpq Proliant4500	1	Atari ST-1040	340	TI8847/33
1927	DEC APX 3000/300	51	Avalon Att.Proc.	233	TI8847/25
1908	Sun 10 m40	891	Axil 240	164	TI8847/20
1810	SGI. Indigo2	2996	Axil 320/61	167	TI8847/16.67
1806	Sun 5 m110	6	Bull 66/DPS 3	164	TI8847/14.275
1806	Sun 4 m110	17	Bull 68/DPS 2	310	TI602A/40.1
1792	IBM 6000/360	17	Bull 68/DPS 3	454	TI602A/40
1781	CDC 9460	17	Bull 68/DPS 4	77	T800/25
1761	HP 9000/750	10	Bull DPS 7/ 60	62	T800/20
1760	Bull Escala M401	37	Bull DPS 7/ 717	400	Sparc/33
1740	Sun 10 m51	36	Bull DPS 7/ 727	1	SkyFFP

1698	Cray X/MP-28	139	Bull DPS 7/1017	136	SOC/25
1608	IBM 6000/560	6	Bull DPS 8/46	0	Romp/5.88
1597	DECsys 5000/260	5	Bull DPS 8/482T	5823	RT626/150
1518	Hitachi EX 80	7	Bull DPS 8/52	4498	RT625/125
1476	HP 9000/F30	7	Bull DPS 8/62	3600	RT625/100
1463	NEC SX/2	8	Bull DPS 8/70	3724	R8010/90
1437	IBM 6000/250	31	Bull DPS 8/70M	2879	R8010/75
1433	Cray 2	194	Bull DPS 88/x	1415	R6010/80
1430	....	376	Bull DPS 90/x	1114	R6010/60
1415	CDC 4680-312	1200	Bull DPS 9000	915	R4600/100
1407	SGI. Challenge-L	186	Bull DPX /2 250	3040	R4400SC/250
1387	Apple 8500/120	1267	Bull DPX /20 450	2463	R4400SC/200
1378	Sun 5 m80	2737	Bull DPX /20 470	2174	R4400SC/175
1368	Solbourne 6/901	1081	Bull DPX /20 620	1810	R4400SC/150
1337	CDC Cyber 2000-V	4136	Bull DPX /20 690	1144	R4400SC/100
1330	HP 9000/712-60	18	Bull DPX 2000/20	1781	R4400/150
1327	SGI. Crimson	65	Bull DPX 5000/25	1597	R4400/120
1323	HP 9000/715-50	1760	Bull Escala M401	1407	R4400/100
1320	Hitachi EX 60	343	Bull Isis	993	R4000SC/100
1314	HP 9000/720	12	Bull SPS 9/ 60	1327	R4000/100
1295	... Pentium/90	31	Bull SPS 9/ 67	696	R3010/40
1292	IBM 6000/550	31	Bull SPS 9/400	641	R3010/36
1290	IBM 6000/350	61	Bull SPS 9/830	533	R3010/33
1287	Harris NHawk5800	10	Bull Taurus X5	418	R3010/25
1269	Convex C3810	50	CCI Power 6/32	290	R3010/20
1267	Bull DPX /20 450	993	CDC 4460	256	R2010/xx
1261	CDC Cyber 2000-U	1114	CDC 4680	72	R2010/8
1246	Compaq SystemPro	1415	CDC 4680-312	258	R2010/16.67
1210	DEC Vax 9000	24	CDC 6400	228	R2010/15
1200	Bull DPS 9000	82	CDC 6600	166	R2010/12.5
1187	Intel Pentium/60	458	CDC 7600	9496	R10010/190
1144	SGI. Indigo2	1781	CDC 9460	605	Prism/18.2
1126	IBM 6000/40N	25	CDC Cyber 73	759	PowerRSC/45.5
1114	CDC 4680	458	CDC Cyber 76	526	PowerRSC/33
1103	Hitachi 3050/310	22	CDC Cyber 171	3908	Power2/66.67
1098	DEC Vax 7000/610	36	CDC Cyber 173	4136	Power2/66.5
1082	Cray 1.S	167	CDC Cyber 175	3016	Power2/55
1081	Bull DPX /20 620	1261	CDC Cyber 2000-U	2323	Power1.0/62.5
1077	HP 9000/715-33	1337	CDC Cyber 2000-V	1608	Power1.0/50
1052	Sun 10 m30	470	CDC Cyber 205	1020	Power1.0/31
1049	DEC Vax 4000/600	32	CDC Cyber 720	1290	Power0.9/41.6
1031	IBM 6000/340	44	CDC Cyber 730	1031	Power0.9/33
1029	DEC Vax 6000/610	113	CDC Cyber 740	757	Power0.9/25
1020	IBM 6000/530H	227	CDC Cyber 750	597	Power0.9/20
1018	Cray J 916	301	CDC Cyber 760	2737	Power/62.5
1003	IBM 3090-600J	18	CDC Cyber 810	1792	Power/50
993	CDC 4460	20	CDC Cyber 815	1292	Power/41.6
990	HP 9000/890-1	33	CDC Cyber 825	1081	Power/33
967	IBM ES 9000-720	35	CDC Cyber 830	850	Power/31
960	IBM 3090-180S	37	CDC Cyber 830-A	771	Power/25
958	Hitachi EX 50	79	CDC Cyber 835	1295	Pentium/90
946	DG AViiON 5500	99	CDC Cyber 840	1246	Pentium/66
945	Sun 10 m20	123	CDC Cyber 840-A	1187	Pentium/60
934	Apple 6300	183	CDC Cyber 845	1938	Pentium/166
927	IBM 9021	157	CDC Cyber 850	2066	Pentium/100
916	DEC Vax 4000/ 90	217	CDC Cyber 850-A	3820	PPC604/133
915	SNI RM 200-120	245	CDC Cyber 855	1387	PPC604/120
903	HP 9000/870	187	CDC Cyber 860	934	PPC603E/100
899	Apple 7100/80	283	CDC Cyber 860-A	522	PPC603/75
891	Axil 240	239	CDC Cyber 870	852	PPC601/90
877	Cray X/MP-48	282	CDC Cyber 870-A	899	PPC601/80
852	Apple 7200/90	378	CDC Cyber 875	1760	PPC601/75
850	IBM 6000/540	55	CDC Cyber 930-11	1437	PPC601/66.7

846	IBM 3090-200	82	CDC Cyber 930-31	6	PPC601/66
846	HP 9000/852	234	CDC Cyber 960-11	392	PPC601/60
839	DEC Vax 4000/500	460	CDC Cyber 960-31	1126	PPC601/50
794	HP 9000/705	496	CDC Cyber 990	2037	PA7100LC/80
788	Fujitsu VP-200	591	CDC Cyber 990-E	1330	PA7100LC/60
787	FPSystems 500	585	CDC Cyber 995-E	3678	PA7100/99
771	IBM 6000/530	459	CDC ETA 10Q	3518	PA7100/96
768	Siemens VP400-EX	10	CII 10070	3650	PA7100/90
759	Siemens 7890-S	31	Celerity C1200	2873	PA7100/80
759	IBM 6000/230	48	Celerity C1260	1323	PA7100/50
757	IBM 6000/320H	24	Celi Logo 6000	1103	PA7100/40
749	Cray 1.S	142	Cern 3081-E	1077	PA7100/33
735	Intel Paragon	57	Compaq 386/20	4179	PA7100/125
731	Sun 4/ 75	0	Compaq 386/25	2424	PA7100/100
715	Intergraph 2700	298	Compaq 486/50	1761	PA-1.1/66.7
697	NAS 9060	401	Compaq 486/66	1950	PA-1.1/64
696	SGI. 4D/420	100	Compaq 486s/16m	990	PA-1.1/60
694	Cray 1.M	2	Compaq 486s/25m	1314	PA-1.1/50
682	Fujitsu VP-100	158	Compaq Deskpro/i	1476	PA-1.1/48
674	Fujitsu M 380	1246	Compaq SystemPro	794	PA-1.1/35
641	SGI. 4D/ 35	158	Concurrent 3280	6	PA-1.1/32
622	DEC Vax 4000/400	69	Convex C1	433	MN10501/36
605	Apollo DN 10000	103	Convex C120	270	MN10501/33
604	Multiflow 14/300	197	Convex C201	1378	MB86904/80
598	Hitachi S 810/2	428	Convex C210	1806	MB86904/11O
597	IBM 6000/320	502	Convex C220	1806	MB86904/110
591	CDC Cyber 990-E	516	Convex C3410	417	MB86903/40
585	CDC Cyber 995-E	1269	Convex C3810	1	MB86903/33
584	Intergraph 2430	1938	Cpq Proliant4500	1	MB86901/16.67
545	HP 9000/842	694	Cray 1.M	0	MB86901/14.275
534	NAS 9060	1082	Cray 1.S	441	LSI64814/40
533	Hitachi M 280H	749	Cray 1.S	1	LSI64801/25
533	SGI. 4D/320VGX	1433	Cray 2	1	LSI64801/20
526	IBM 6000/220	1018	Cray J 916	1098	KA7AA/11ns
522	Apple 6200/75	3625	Cray M98 (1proc)	1049	KA690/12ns
518	Gould NP/2	1698	Cray X/MP-28	839	KA680/14ns
516	Convex C3410	877	Cray X/MP-48	1029	KA680/12ns
502	Convex C220	217	Cray X/MS	622	KA675/16ns
496	CDC Cyber 990	2233	Cray Y/MP 2E	212	KA670/28ns
493	Sun 4/670	490	Cray Y/MP EL	123	KA660/35ns
490	Cray Y/MP EL	126	Culler PSC	358	KA650/16ns
474	Amdahl 5860	3	DEC 20/20	192	KA640/28ns
470	Solbourne 5E/901	25	DEC 20/50	287	KA46 /18ns
470	CDC Cyber 205	25	DEC 20/60	53	HP-PA/8
463	Solbourne 5E/702	181	DEC 486/33	846	HP-PA/50
460	CDC Cyber 960-31	10349	DEC 8400 5/300	903	HP-PA/48
459	CDC ETA 10Q	1927	DEC APX 3000/300	161	HP-PA/30
458	CDC Cyber 76	2184	DEC APX 3000/400	545	HP-PA/28
458	CDC 7600	2385	DEC APX 3000/500	266	HP-PA/27.5
454	Sun 4/ 75	2425	DEC APX 3000300X	108	HP-PA/25
449	ITRI/CCL St. M10	3099	DEC AS 200 4/166	62	HP-PA/16.7
445	Alacron AL860	9060	DEC AS 600 5/250	205	HP-PA/13.7
443	Sun Classic/LX	9164	DEC AS 600 5/266	59	HP-PA/12.5
442	Huyndai SparcSt	5970	DEC AS2100 4/275	70	EdgeI/7.7
441	Solair 2	1	DEC Vax 11/725	192	DX4/75
439	Stardent 3000 P3	6	DEC Vax 11/730	916	DC246/71.43
435	IBM 3090-150	12	DEC Vax 11/750	29	Cx83D87/20
433	SolbourneS4000DX	27	DEC Vax 11/780	493	CY7C602/40
428	Convex C210	35	DEC Vax 11/785	1	CY7C601/40
421	Sun 4/ 50 IPX	21	DEC Vax 2000	1	CY7C601/33
418	IN2 IN 6230	62	DEC Vax 3100	29	CT38700/20
417	Sun 4/ 50 IPX	87	DEC Vax 3100-38	715	C421/58
406	Intel STAR 860	182	DEC Vax 3100-76	584	C421/40

401	Compaq 486/66	63	DEC Vax 3500	72	C300/40
400	Star 910/VP-300	88	DEC Vax 3800	40	C100/33
395	FPSystems 264	287	DEC Vax 4000/ 60	34	C100/30
392	Apple 6100/60	916	DEC Vax 4000/ 90	32	C100/25
387	Unisys S2000TWS	123	DEC Vax 4000/200	6	Arm3/xx
386	Multiflow 14/200	212	DEC Vax 4000/300	34	AFPA
378	CDC Cyber 875	622	DEC Vax 4000/400	1287	88110/50
376	Bull DPS 90/x	839	DEC Vax 4000/500	946	88110/40
364	FPSystems 500EA	1049	DEC Vax 4000/600	303	88100/33
358	DEC Vax 6000/510	136	DEC Vax 4000/VLC	308	88100/25
348	Amdahl 5850-S	91	DEC Vax 6000/310	187	88100/20
343	Bull Isis	192	DEC Vax 6000/410	148	88100/16.67
340	Sun 4/490	358	DEC Vax 6000/510	4	8087/8
310	Solbourne 5/E	1029	DEC Vax 6000/610	39	80387/33
308	Harris NHawk4800	70	DEC Vax 6220	37	80387/25
303	Solbourne 5/801	1098	DEC Vax 7000/610	34	80387/24
303	Telmat TR5000	24	DEC Vax 8200	28	80387/20
301	CDC Cyber 760	26	DEC Vax 8250	20	80387/16
301	Amdahl 5880	99	DEC Vax 8530	1	80386SX/20
300	Intel 486DX2/50	136	DEC Vax 8550	2	80386/33
298	Compaq 486/50	91	DEC Vax 8600	0	80386/25
290	SGI. 4D/ 25	129	DEC Vax 8650	0	80386/16
287	DEC Vax 4000/ 60	135	DEC Vax 8800	6	80287/8
283	CDC Cyber 860-A	1210	DEC Vax 9000	2233	6ns (166MHz)
282	CDC Cyber 870-A	3	DEC micro Vax1	35	68882/xx
278	SCS 40	22	DEC micro Vax2	81	68882/50
276	Tadpole Sp'Book	1597	DECsys 5000/260	40	68882/40
270	Solbourne S4000	17	DG MV 2000DC	47	68882/33
268	IBM 3084-Q	31	DG MV 2500DC	35	68882/30
268	Telmat STX 40	12	DG MV 4000DC	9	68882/25
266	HP 9000/855	12	DG MV 8000	23	68882/20
264	Diab DS90/45	54	DG MV 9500	28	68882/16.67
258	SGI. 4D/ 80GT	57	DG MV 10000	38	68881/33
256	Tandem Int. S200	99	DG MV 20000	33	68881/25
247	Alliant FX/80	245	DG MV 40000	14	68881/20
245	DG MV 40000	148	DG AViiON 200	18	68881/16.67
245	CDC Cyber 855	946	DG AViiON 5500	17	68881/15.66
242	ADI AD-100	264	Diab DS90/45	16	68881/12.5
239	CDC Cyber 870	96	ESD SDX 3400	1	680x0/xx
235	IBM 3081-K	97	Elxsi S/6400	268	68040/40
234	CDC Cyber 960-11	31	Encore APC-02	264	68040/33
233	Sun 4/330	52	Encore M.max 510	186	68040/25
231	IBM 3083-J	116	Evans Suth. ES-1	7	68030/40
228	MIPS M/1000	113	FPSystems 164	2	68030/25
227	CDC Cyber 750	395	FPSystems 264	3	68030/20
217	Cray X/MS	125	FPSystems 300	3	68030/16
217	CDC Cyber 850-A	140	FPSystems 350S	3	68030/15.66
213	ATT StarServerE	787	FPSystems 500	5	68020/25
212	DEC Vax 4000/300	364	FPSystems 500EA	3	68020/20
211	Siemens 7880	37	Falco 5025	2	68020/16.67
207	Gould NP/1	6	FoonLee F4	3	68020/15.66
205	HP 9000/850	4	Formation4000/10	2	68020/15
201	MasPar MP-1	4	Formation4000/20	1	68010/10
200	Sperry 1190+ISP	674	Fujitsu M 380	0	68000/8
197	Convex C201	682	Fujitsu VP-100	1	68000/7.83
194	Bull DPS 88/x	788	Fujitsu VP-200	1	68000/7.77
192	DEC Vax 6000/410	3590	Fujitsu VP-2600	0	68000/12.5
192	Zenith Notebook	28	GEC 63	1	68000/10
187	Norsk Uniline 88	19	Gould 32/27	2217	6232/62.5
187	CDC Cyber 860	32	Gould 32/67	3625	4ns (250MHz)
186	Bull DPX /2 250	19	Gould 32/7780	28	3C87/20
185	ICL 3980	119	Gould 32/8750	3490	390Z55/85
183	CDC Cyber 845	63	Gould 32/9750	3041	390Z55/75

182	DEC Vax 3100-76	207	Gould NP/1	2996	390Z55/60
181	IBM 3081-D	518	Gould NP/2	1992	390Z55/50
181	DEC 486/33	28	Gould PN 6040	1740	390Z50/50
180	IBM 3081-G	30	Gould PN 6050	1908	390Z50/40
170	IBM 3033-U	92	Gould PN 9050	1052	390Z50/36
167	CDC Cyber 175	1	Gould PS 3000	1368	390Z50/33.33
167	Sun 4/260	4	HLHardware Orion	945	390Z50/33
166	SGI. 4D/ 70	7	HP 1000-A700	443	390S10/50
165	Amdahl 470/V8	15	HP 1000-A900	52	32381/30
164	Sun 4/ 60	28	HP 9000/340	38	32381/25
164	Sun 4/110	82	HP 9000/370	14	32206/18
163	Siemens 7570-G	47	HP 9000/370	8	32106/14
161	HP 9000/832	81	HP 9000/375	5	32081/8
158	Compaq Deskpro/i	23	HP 9000/500	15	32081/15
158	Concurrent 3280	16	HP 9000/520	7	32081/10
157	Sun 4/ 65	794	HP 9000/705	3590	3.2ns
157	CDC Cyber 850	1330	HP 9000/712-60	67	29327/8
154	Amdahl 470/V7	2037	HP 9000/712-80i	82	29027/25
153	Siemens 7580-E	2424	HP 9000/715-100	34	29000/25
149	Amdahl 470/V8	1077	HP 9000/715-33	10349	21164/300
148	DG AViiON 200	1323	HP 9000/715-50	9164	21164/266
146	Mercury MC 6400	1314	HP 9000/720	9060	21164/250
142	Cern 3081-E	3678	HP 9000/735	5970	21064/275
140	FPSystems 350S	4179	HP 9000/735-125	2425	21064/175
139	Intel iPsc 860	1761	HP 9000/750	3099	21064/166
139	Bull DPS 7/1017	6	HP 9000/807S	2385	21064/150
136	DEC Vax 8550	62	HP 9000/815	2184	21064/133
136	IBM 3083-B	108	HP 9000/822	1927	21064/125(?)
136	DEC Vax 4000/VLC	59	HP 9000/825	3187	2.9ns
135	DEC Vax 8800	161	HP 9000/832		
134	Amdahl 470/V7-B	53	HP 9000/840		
130	NAS 8040	545	HP 9000/842		
129	DEC Vax 8650	205	HP 9000/850		
126	Culler PSC	846	HP 9000/852		
125	FPSystems 300	266	HP 9000/855		
123	DEC Vax 4000/200	903	HP 9000/870		
123	CDC Cyber 840-A	3518	HP 9000/887S		
121	Sun 4/ 40 IPC	990	HP 9000/890-1		
121	SuperTek S-1	1476	HP 9000/F30		
121	ALR VEISA 486ASX	1950	HP 9000/G40		
120	Harris 1200	3650	HP 9000/T500		
119	Gould 32/8750	20	HP 9050-B		
119	Sun 4/ 60	28	HP Vectra RS/20C		
116	Evans Suth. ES-1	1	Harris 300		
113	Sun 4/ 20 SLC	22	Harris 500		
113	CDC Cyber 740	18	Harris 700		
113	FPSystems 164	41	Harris 800		
110	NAS/Itel AS 6	89	Harris 1000		
108	HP 9000/822	120	Harris 1200		
108	....	64	Harris HCX-7		
103	Convex C120	67	Harris NHawk3800		
102	IBM 370/168-1.5	308	Harris NHawk4800		
101	Alliant FX/8	1287	Harris NHawk5800		
100	Compaq 486s/16m	958	Hitachi EX 50		
100	IBM 370/168-3	1320	Hitachi EX 60		
99	DEC Vax 8530	1518	Hitachi EX 80		
99	CDC Cyber 840	2271	Hitachi EX ??		
99	DG MV 20000	533	Hitachi M 280H		
97	Elxsi S/6400	598	Hitachi S 810/2		
97	Ardent TiTan P2	1103	Hitachi 3050/310		
96	ESD SDX 3400	2873	Hitachi 3050/330		
93	Alliant FX/2	442	Huyndai SparcSt		
92	Gould PN 9050	65	IBM 360/91		

92	Amdahl 470/V5-1	21	IBM 370/158-1		
91	MasPar MP-1	102	IBM 370/168-1.5		
91	DEC Vax 8600	100	IBM 370/168-3		
91	DEC Vax 6000/310	26	IBM 3031		
90	IBM 4381-2	88	IBM 3032		
89	Harris 1000	170	IBM 3033-U		
88	IBM 3032	181	IBM 3081-D		
88	DEC Vax 3800	180	IBM 3081-G		
87	DEC Vax 3100-38	235	IBM 3081-K		
85	Alliant FX/1	136	IBM 3083-B		
82	Yarc	231	IBM 3083-J		
82	HP 9000/370	268	IBM 3084-Q		
82	CDC Cyber 930-31	435	IBM 3090-150		
82	CDC 6600	960	IBM 3090-180S		
81	HP 9000/375	846	IBM 3090-200		
80	NorskData 570/CX	1003	IBM 3090-600J		
79	CDC Cyber 835	2	IBM 4331-1		
78	Prime 4450	24	IBM 4341-1		
77	Telmat T-Node	39	IBM 4341-12		
75	Matra MD 570/CX	36	IBM 4341-2		
74	Sun 4/110	44	IBM 4341-gp2		
72	InterAct C370	34	IBM 4361-5		
72	Intel SYP 302	90	IBM 4381-2		
72	SGI. 4D/ 50	526	IBM 6000/220		
70	Olivetti LSX3070	759	IBM 6000/230		
70	DEC Vax 6220	1437	IBM 6000/250		
69	Convex C1	597	IBM 6000/320		
67	Harris NHawk3800	757	IBM 6000/320H		
65	Bull DPX 5000/25	1031	IBM 6000/340		
65	IBM 360/91	1290	IBM 6000/350		
64	Harris HCX-7	1792	IBM 6000/360		
63	DEC Vax 3500	2217	IBM 6000/370		
63	Gould 32/9750	3908	IBM 6000/390		
62	Paracom TPM-4	1126	IBM 6000/40N		
62	Sun 3/260	3820	IBM 6000/43P		
62	DEC Vax 3100	771	IBM 6000/530		
62	IBM 9370-xx	1020	IBM 6000/530H		
62	Ryad EC 1061	850	IBM 6000/540		
62	HP 9000/815	1292	IBM 6000/550		
61	Bull SPS 9/830	1608	IBM 6000/560		
59	HP 9000/825	2323	IBM 6000/580		
58	SysConceptSC-30M	3016	IBM 6000/580H		
57	Compaq 386/20	0	IBM 6150-25		
57	DG MV 10000	34	IBM 6151-115		
55	Pyramid 9080	927	IBM 9021		
55	CDC Cyber 930-11	62	IBM 9370-xx		
55	Apollo DN 3500	967	IBM ES 9000-720		
54	DG MV 9500	24	ICL 2966		
53	HP 9000/840	185	ICL 3980		
52	Encore M.max 510	418	IN2 IN 6230		
51	Avalon Att.Proc.	449	ITRI/CCL St. M10		
50	CCI Power 6/32	47	Intel 520		
49	Unisys 7000/40	735	Intel Paragon		
49	SysConceptSC-30M	300	Intel 486DX2/50		
48	Celerity C1260	4	Intel 86+ 87		
47	HP 9000/370	406	Intel STAR 860		
47	Intel 520	139	Intel iPsc 860		
47	NorskData 560/CX	6	Intel 386+287		
46	Prime 9950	39	Intel 386.133		
45	NorskData 560	1187	Intel Pentium/60		
44	CDC Cyber 730	2066	Intel Pentium100		
44	IBM 4341-gp2	20	Intel SYP 301		
41	Harris 800	72	Intel SYP 302		

40	– 68020+68882	72	InterAct C370
40	InterPro C245	32	InterPro C145
39	IBM 4341-12	40	InterPro C245
39	Intel 386.133	584	Intergraph 2430
38	Olivetti LSX3035	715	Intergraph 2700
38	Siemens MX300-30	0	Kaypro 386
37	Bull DPS 7/ 717	8	Kendall KSR-1
37	CDC Cyber 830-A	35	MIPS M/ 500
37	Unixsys NX 32VX	228	MIPS M/1000
37	Falco 5025	201	MasPar MP-1
37	NAS/Itel AS 3.5	91	MasPar MP-1
36	IBM 4341-2	75	Matra MD 570/CX
36	Bull DPS 7/ 727	19	Matra MSX 621
36	CDC Cyber 173	146	Mercury MC 6400
35	CDC Cyber 830	14	ModCompCl 11/45
35	DEC Vax 11/785	20	ModCompCl 11/75
35	– 68020+68882	27	ModCompCl 32/85
35	Sony News 1750	386	Multiflow 14/200
35	MIPS M/ 500	604	Multiflow 14/300
34	IBM 6151-115	130	NAS 8040
34	IBM 4361-5	534	NAS 9060
34	Yarc	697	NAS 9060
34	Opus 350 PM	37	NAS/Itel AS 3.5
34	no-brand-name	110	NAS/Itel AS 6
33	CDC Cyber 825	1	NCR Tower 1632
33	Apollo DN 4000	1463	NEC SX/2
32	Gould 32/67	3187	NEC SX/3-14
32	InterPro C145	23	Nixdorf T 31/ 5
32	CDC Cyber 720	14	Nixdorf T 31/10
31	Bull SPS 9/400	8	Nixdorf Targon35
31	Bull SPS 9/ 67	23	Nixdorf Targon35
31	Bull DPS 8/70M	187	Norsk Uniline 88
31	SGI. Iris 1400	13	NorskData 530/CX
31	Encore APC-02	31	NorskData 550/CX
31	DG MV 2500DC	45	NorskData 560
31	NorskData 550/CX	47	NorskData 560/CX
31	Celerity C1200	80	NorskData 570/CX
31	Ryad EC 1060	38	Olivetti LSX3035
30	Ryad EC 1130	70	Olivetti LSX3070
30	Gould PN 6050	8	Olivetti3B15/200
29	Sun 386 i150	14	Olivetti3B2 /600
29	Sun 386 i150	34	Opus 350 PM
29	Sun 386 i150	62	Paracom TPM-4
28	Gould PN 6040	2	Parallel XR 300
28	Sun 386 i150	1	PlexusComp P/35
28	HP Vectra RS/20C	0	PlexusComp P/35
28	HP 9000/340	6	Prime 2250
28	GEC 63	6	Prime 250-2
27	Ryad EC 1046	4	Prime 350
27	DEC Vax 11/780	6	Prime 400
27	ModCompCl 32/85	78	Prime 4450
26	DEC Vax 8250	6	Prime 550-1
26	Ridge 32	12	Prime 550-2
26	Siemens 7760	11	Prime 650
26	IBM 3031	19	Prime 750
25	DEC 20/50	21	Prime 850
25	DEC 20/60	46	Prime 9950
25	CDC Cyber 73	55	Pyramid 9080
24	ICL 2966	5	Pyramid 9x0
24	DEC Vax 8200	26	Ridge 32
24	Celi Logo 6000	13	Ridge 32 mod/1
24	CDC 6400	1	Ryad EC 1022
24	IBM 4341-1	7	Ryad EC 1036

23	Nixdorf T 31/ 5	21	Ryad EC 1045
23	Nixdorf Targon35	27	Ryad EC 1046
23	HP 9000/500	31	Ryad EC 1060
22	Harris 500	62	Ryad EC 1061
22	CDC Cyber 171	30	Ryad EC 1130
22	DEC micro Vax2	278	SCS 40
21	Ryad EC 1045	290	SGI. 4D/ 25
21	DEC Vax 2000	641	SGI. 4D/ 35
21	IBM 370/158-1	72	SGI. 4D/ 50
21	Prime 850	166	SGI. 4D/ 70
20	HP 9050-B	258	SGI. 4D/ 80GT
20	Siemens 7550-D	533	SGI. 4D/320VGX
20	ModCompCl 11/75	696	SGI. 4D/420
20	CDC Cyber 815	31	SGI. Iris 1400
20	Intel SYP 301	1407	SGI. Challenge-L
19	Prime 750	1327	SGI. Crimson
19	Siemens 7551	3040	SGI. Impact
19	Matra MSX 621	1810	SGI. Indigo2
19	Gould 32/7780	1144	SGI. Indigo2
19	Gould 32/27	2174	SGI. Indigo2
18	Harris 700	2463	SGI. Indigo2
18	CDC Cyber 810	9496	SGI. Onyx
18	Bull DPX 2000/20	3724	SGI. PowerChall.
17	Apple Mac II	2879	SGI. PowerChall
17	DG MV 2000DC	915	SNI RM 200-120
17	Bull 68/DPS 2	10	Siemens 7530-D
17	Bull 68/DPS 3	20	Siemens 7550-D
17	Bull 68/DPS 4	19	Siemens 7551
16	Apollo DN 580	163	Siemens 7570-G
16	HP 9000/520	153	Siemens 7580-E
15	HP 1000-A900	26	Siemens 7760
15	Siemens MX300-20	211	Siemens 7880
14	Olivetti3B2 /600	759	Siemens 7890-S
14	Nixdorf T 31/10	15	Siemens MX300-20
14	ModCompCl 11/45	38	Siemens MX300-30
13	NorskData 530/CX	7	Siemens MX500-20
13	Ridge 32 mod/1	5	Siemens PC-2000
12	Prime 550-2	768	Siemens VP400-EX
12	Bull SPS 9/ 60	2	Siemens WX 200
12	DG MV 4000DC	441	Solair 2
12	DG MV 8000	303	Solbourne 5/801
12	Telefile T85	310	Solbourne 5/E
12	DEC Vax 11/750	463	Solbourne 5E/702
11	Prime 650	470	Solbourne 5E/901
10	Siemens 7530-D	1368	Solbourne 6/901
10	Bull DPS 7/ 60	270	Solbourne S4000
10	Bull Taurus X5	433	SolbourneS4000DX
10	CII 10070	35	Sony News 1750
9	Apple Mac 170	200	Sperry 1190+ISP
8	Olivetti3B15/200	400	Star 910/VP-300
8	Kendall KSR-1	439	Stardent 3000 P3
8	Nixdorf Targon35	2	Sun 3/ 50
8	Bull DPS 8/70	3	Sun 3/ 60
7	Symbolics Ivory	5	Sun 3/260
7	Apple Mac IIfx	62	Sun 3/260
7	Bull DPS 8/62	1806	Sun 4 m110
7	HP 1000-A700	113	Sun 4/ 20 SLC
7	Siemens MX500-20	1	Sun 4/ 20 SLC
7	Ryad EC 1036	1	Sun 4/ 25 ELC
7	Bull DPS 8/52	1	Sun 4/ 40 IPC
7	Symbolics 3650	121	Sun 4/ 40 IPC
6	HP 9000/807S	417	Sun 4/ 50 IPX
6	Symbolics 3670	421	Sun 4/ 50 IPX

6	Prime 400	164	Sun 4/ 60
6	FoonLee F4	119	Sun 4/ 60
6	Symbolics 3600	157	Sun 4/ 65
6	Acorn Risc 260	731	Sun 4/ 75
6	Prime 2250	454	Sun 4/ 75
6	DEC Vax 11/730	1	Sun 4/ 75
6	Prime 250-2	0	Sun 4/110
6	Prime 550-1	164	Sun 4/110
6	Intel 386+287	74	Sun 4/110
6	Bull DPS 8/46	167	Sun 4/260
6	Bull 66/DPS 3	1	Sun 4/260
6	Apple 6100/66	233	Sun 4/330
5	Pyramid 9x0	1	Sun 4/490
5	Unixsys NX 6T	340	Sun 4/490
5	Bull DPS 8/482T	493	Sun 4/670
5	Siemens PC-2000	1806	Sun 5 m110
5	Sun 3/260	1378	Sun 5 m80
4	Intel 86+ 87	945	Sun 10 m20
4	HLHardware Orion	1052	Sun 10 m30
4	Prime 350	1908	Sun 10 m40
4	Formation4000/20	1740	Sun 10 m51
4	Formation4000/10	3600	Sun 20 HS 11
3	Sun 3/ 60	5823	Sun 20 HS 151
3	Apple Mac IIsi	4498	Sun 20 HS 22
3	DEC 20/20	3041	Sun 20 m71
3	DEC micro Vax1	29	Sun 386 i150
3	Apple Mac II	29	Sun 386 i150
3	Apple Mac SE/30	29	Sun 386 i150
3	Apple Mac IIcx	28	Sun 386 i150
2	Compaq 486s/25m	443	Sun Classic/LX
2	Parallel XR 300	1992	Sun SS 1000
2	Apple Mac 170	3490	Sun SS 1000E-85
2	IBM 4331-1	5353	Sun Ultra1 m 140
2	Sun 3/ 50	6191	Sun Ultra1 m 170
2	Siemens WX 200	7392	Sun Ultra2 m 200
1	Harris 300	121	SuperTek S-1
1	Ryad EC 1022	6	Symbolics 3600
1	DEC Vax 11/725	7	Symbolics 3650
1	Sun 4/ 75	6	Symbolics 3670
1	Sun 4/490	7	Symbolics Ivory
1	Sun 4/ 25 ELC	58	SysConceptSC-30M
1	Apollo DN 550	49	SysConceptSC-30M
1	PlexusComp P/35	276	Tadpole Sp'Book
1	Gould PS 3000	256	Tandem Int. S200
1	Sun 4/ 40 IPC	12	Telefile T85
1	Atari ST-1040	77	Telmat T-Node
1	Altos 400	268	Telmat STX 40
1	Sun 4/ 20 SLC	303	Telmat TR5000
1	Apple Mac Plus	49	Unisys 7000/40
1	Sun 4/260	387	Unisys S2000TWS
1	NCR Tower 1632	37	Unixsys NX 32VX
0	Compaq 386/25	5	Unixsys NX 6T
0	Sun 4/110	0	WicatSystems 200
0	WicatSystems 200	82	Yarc
0	PlexusComp P/35	34	Yarc
0	IBM 6150-25	192	Zenith Notebook
0	Kaypro 386	34	no-brand-name

Part 3 - Chapter 7 : Top fifty machines table

R_{78}	R_{96}	machine	CPU @ MHz	cache & compiler
10349	5.4	DEC 8400 5/300	21164/300	16K+96K+4M; f77 3.8 O4 fast
9496	5.0	SGI. Onyx	R10010/190	64K+1M; f90 x.y -64 -O3
9164	4.8	DEC AS 600 5/266	21164/266	16K+96K+2M; f77 3.8 O5 fast
9060	4.8	DEC AS 600 5/250	21164/250	16K+96K+2M; f77 3.7 O4 fast
7392	3.9	Sun Ultra2 m 200	Ul_Sp/200	32K+1M; Apogee 2.3, O5 cg92
6191	3.3	Sun Ultra1 m 170	Ul_Sp/167	32+512K; Apogee 2.3, O3 cg92
5970	3.1	DEC AS2100 4/275	21064/275	f77 3.8 O5 fast
5823	3.1	Sun 20 HS 151	RT626/150	Apogee 2.3, O3 cg92
5353	2.8	Sun Ultra1 m 140	Ul_Sp/143	32+512K; Apogee 2.3, O3 cg92
4709	2.5	Intel UTS P6/200	PentiumPro/200	256K L2; Pf32 1.0 oX g4
4498	2.4	Sun 20 HS 22	RT625/125	Apogee 2.3, O3 cg92
4136	2.2	Bull DPX /20 690	Power2/66.5	32+256K; xlf 3.1 pwrx O3
4015	2.1	HP 9000/735-125	PA7100/125	f77 9.0 Wl a archive OP3 O3
3908	2.1	IBM 6000/390	Power2/66.67	xlf 3.1 pwrx O3
3820	2.0	IBM 6000/43P	PPC604/133	16+512K; f77 3.1 ppc O3
3724	2.0	SGI. PowerChall.	R8010/90	32K+4M; f77 6.1 mips4 O4
3678	1.9	HP 9000/735	PA7100/99	f77 9.0 Wl a archive OP3 O3
3650	1.9	HP 9000/T500	PA7100/90	
3625	1.9	Cray M98 (1proc)	4ns (250MHz)	cft77 7.0
3600	1.9	Sun 20 HS 11	RT625/100	Apogee 2.3, O3 cg92
3596	1.9	Hitachi 3050/340	PA7100/100	
3518	1.9	HP 9000/887S	PA7100/96	HP/UX 9.0
3490	1.8	Sun SS 1000E-85	390Z55/85	
3187	1.7	NEC SX/3-14	2.9ns	
3099	1.6	DEC AS 200 4/166	21064/166	16+512K; f77 3.8 O5 fast
3094	1.6	Intel UTS P6/133	PentiumPro/133	256K L2; Pf32 1.0 oX g4
3041	1.6	Sun 20 m71	390Z55/75	
3040	1.6	SGI. Impact	R4400SC/250	32K+2M; f77 3.4.1
3034	1.6	Fujitsu VP-2400	3.2ns	VSP; frt Of,p
3016	1.6	IBM 6000/580H	Power2/55	
2992	1.6	Sun 20 m612-100	390Z55/60	
2924	1.5	Asus P55TP4XE	Pentium/200	512K L2; Wfl386 9.5 oT 4
2879	1.5	SGI. PowerChall	R8010/75	32K+4M; f77 5.x mips4
2873	1.5	Hitachi 3050/330	PA7100/80	
2871	1.5	Shuttle Hot555	Am5K/100	mk8
2737	1.4	Bull DPX /20 470	Power/62.5	32+32K; f77 3.1 pwx O3
2642	1.4	Asus P55TP4Xe	Pentium/180	512K L2; Wfl386 9.5 oT 4
2463	1.3	SGI. Indigo2	R4400SC/100	32K+1M; f77 6.1 mips1 O2
2425	1.3	DEC APX 3000300X	21064/175	
2385	1.3	DEC APX 3000/500	21064/150	16+512K; Fortran 3.4.1 opt=4
2323	1.2	IBM 6000/580	Power1.0/62.5	xlf 2.3 O P Wp ewa
2271	1.2	DEC Celebris5150	PODP/150	256K L2; Wfl386 10.5 oX 5 fp5
2271	1.2	Hitachi EX ??		
2231	1.2	Cray Y/MP 8/128	6ns (166MHz)	Unicos 5.1; cft77 4.0
2217	1.2	IBM 6000/370	6232/62.5	xlf 2.3 O P Wp ea78
2184	1.1	DEC APX 3000/400	21064/133	Fortran 3.4.1 opt=4
2179	1.1	DEC Celebris5133	Pentium/133	256K L2; Wfl386 10.5 oX 5 fp5
2174	1.1	SGI. Indigo2	R4400SC/100	32K+1M; f77 6.1 mips1 O2
2066	1.1	Intel Pentium100	Pentium/100	
2037	1.1	HP 9000/712-80i	PA7100LC/80	f77 8.05 Wl a archive O3 OP4
1908	1.0	Sun 10 m40	390Z50/40	36+0K; f77 3.0 O4 fast
100	.0	IBM 370/168-3		Fortran 4.H.extended opt=2

R_{78} refers to the 1978 reference machine, an IBM 370/168-3;
R_{96} refers to the 1996 reference machine, a SPARCstation 10/40 .