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Information Bulletin No.1.

1. In Nov 77, Kilobaud magazine published the results of running benchmarks on several micro-systems using Floating Point Basics. They chose not to include 'Integer only' Basics; this excluded the Apple II. Since then, Applesoft II, an extended floating point Basic has been released by Apple.

The timing of the Applesoft II Basic, together with that of the Apple Integer Basic has been added to the list originally published by Kilobaud magazine. See attached table.

You will note that the Integer Basic is really fast! For game type applications with lots of animation, you don't normally need floating point. Also Integer Basic is more efficient in memory utilization (provided short names are used).

As for Applesoft II; it was written by Microsoft Inc, who also wrote the OSI 6502 Basic. Since Apple uses a 6502 also, and runs the 6502 with a 1.0 Mhz clock, one would expect the Benchmark times to be similar to the 6502 OSI running at 1.0Mhz. Well it is. Actually the Apple is slightly faster than the OSI except for array handling.

2. MINI'APP'LES has the 'Shape' creating utility program. This utility will generate a vector table for use with the HIRES graphics subroutine 'SHAPE' or for use with the Applesoft II commands SHLOAD, DRAW and XDRAW .

SYNOPSIS OF MICRO-SYSTEM BENCHMARKS

Refer to Nov 77 Kilobaud magazine for details of benchmarks and other system times.

SOFTWARE/HARDWARE	MPU	BENCHMARK NO						
		1	2	3	4	5	6	7
OSI 8k Basic ver 1.0rev3.3 OSI Challenger@2MHz	6502	0.9	4.6	8.2	9.3	10.0	14.8	21.
Apple II -Integer Basic <u>16K Apple II</u>	6502	1.4	3.1	7.1	7.2	8.7	17.7	<u>27.9</u>
Zapple 8K Basic (1.1) Altair 8800a, Cromemco Z-80@4MHz-lwait state	Z-80	0.9	5.9	13.0	13.5	14.8	22.7	32.7
OSI 8k Basic(ver 1.0rev3.2) OSI Challenger @1 MHz	6502	1.4	8.6	15.9	17.8	19.3	28.7	42.2
OSI 8k Basic(ver 1.0rev 3.3) OSI Challenger @1 MHz	6502	1.6	8.9	16.2	18.2	19.7	29.2	42.9
Applesoft II <u>Apple II 16K</u>	6502	1.3	9.2	15.7	17.4	18.8	28.0	<u>44.3</u>
PET Basic Commodore PET	6502	1.7	9.8	18.6	20.4	22.1	32.6	51.3
Zapple 'K Basic(1.1) Altair 8800a TDL ZPU @2 Mhz	Z-80	1.7	9.5	20.6	21.7	23.7	36.2	51.8
North Star Basic-FPB(ver6) Altair 8800a, North Star Floating Point Board	8080	1.9	9.1	18.4	18.5	20.9	36.1	59.4
CompuColor 8k Basic CompuColor 8001	8080	2.1	13.1	27.0	29.0	31.3	47.5	67.8
North Star Basic(ver 6) Altair 8800a	8080	2.3	9.5	26.6	31.3	33.7	50.6	73.8
Poly 11K Basic(ver 9v27) Poly 88 system 16	8080	2.5	10.2	29.0	34.0	36.5	54.0	79.0
IBM 5100 Basic IBM 5100	IBM	4.0	20.5	56.5	54.3	58.1	87.	173.
SouthWest Tech 8k Basic SWTPC 6800	6800	14.9	24.7	96.1	105.	110.	174.	204.

Execution time in seconds.