Digital Scientific

Digital Scientific Corporation
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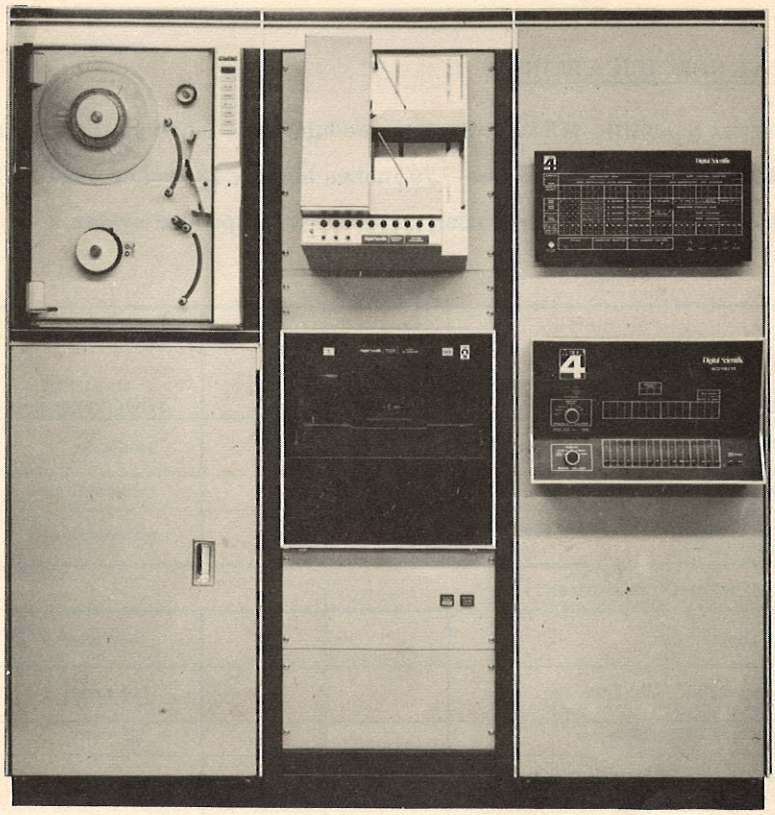
META 4™

COMPUTER SYSTEM
DATA SHEET

The Digital Scientific META 4 is a flexible, logical processor controlled by a random-access Read-Only Memory (ROM). ROM firmware (control memory program) can be custom-tailored to user specifications, either by us or by you; it will process special instructions or other computers' instruction sets at speeds sufficient to emulate all operations of a computer . . . . including I/O.

The control memory program executes at less than 90 nanoseconds per step. ROM firmware programs can be field changed or modified by either Digital Scientific or user personnel, easily and quickly. This makes META 4 a true offspring of the fourth generation. The META 4's firmware Microassembler and software models that are written in IBM 1130/1800 language are offered to facilitate firmware programming.

ROM programs and options also provide capability for handling data communications jobs; high-speed, floating-point hardware requirements; sophisticated controller interface replacements; or more — all at high speed and low cost.



EXPANSION CAPABILITIES

• ROM (35-nanosecond access):	up to 4096 16-bit words
• Internal Registers, directly addressable:	up to 31 16-bit words
• Integrated Circuit Scratch-Pad Memory:	up to 256 16-bit words
• Core Memory (400-nanosecond access, 900-nanosecond cycle):	up to 65,536 18-bit words per memory I/O register up to a maximum 458,753 words
• Multiple Overlapping Core Memory Banks:	up to 8 8192-word banks per memory I/O register
• Multiple Memory Ports:	4 ports per bank
• Options:	Real-Time Clock, Storage Protect, Stall Alarm

SOFTWARE

The Digital Scientific Model 4001 META 4 Processor's 1130/1800 Emulator Versions are software-compatible with the IBM 1130/1800 computer systems.

OPERATIONAL FEATURES AS A COMPUTER

TYPICAL CYCLE TIMES

- ADD 16-bit numbers in < 90 nanoseconds
- ADD 32-bit floating-point numbers in < 6 microseconds (firmware option)
- MULTIPLY 16-bit fixed-point numbers in < 3 microseconds
- MULTIPLY 32-bit floating-point numbers in < 14 microseconds (firmware option)
- DIVIDE 32-bit by 16-bit fixed-point numbers in < 6 microseconds
- DIVIDE 32-bit floating-point numbers in < 20 microseconds (firmware option)

PHYSICAL SPECIFICATIONS

- Digital Scientific META 4 System modules are designed for standard 19-inch EIA rack mounting
- Standard cabinet available: 70 inches high by 23 inches wide by 30 inches deep
- Multiple cabinet configuration available for expanded systems

ITEM (BASIC SYSTEM)	POWER SOURCE	MAXIMUM POWER REQUIRED	FLOORSPACE	MAXIMUM WEIGHT	TOTAL META 4 SYSTEM ENVIRONMENTAL TEMPERATURE RANGE
1. META 4 CPU plus ROM, in Cabinet	115 VAC ±10 , 60 Hz ±2 Hz, single-phase	3100 watts	2 feet by 2 1/2 feet	300 pounds	68° F. to 78° F.
2. 16 K Words of Core Memory		Included in Item 1	Included in Item 1	75 pounds	
3. I/O Unit with Controllers and Operator's Control Panel		Included in Item 1	Included in Item 1	75 pounds	
(PERIPHERAL EQUIPMENT)					
4. Disc Memory Unit		460 watts	Rack mount in standard 19-inch rack	150 pounds	
5. Teletypewriter, KSR, ASR 33		230 watts	18 1/2 inches by 22 inches	56 pounds	
6. Operator's I/O Typewriter		138 watts	Table mount	35 pounds	
7. Magnetic Tape Transport (7- or 9-track)		380 watts	Rack mount in standard 19-inch rack	65 pounds	
8. Paper Tape Punch		281 watts	Rack mount in standard 19-inch rack	20 pounds	
9. Paper Tape Reader		150 watts	Rack mount in standard 19-inch rack	20 pounds	
10. X-Y Plotter		184 watts	Table mount	45 pounds	
11. Card Reader		300 watts	Table mount	75 pounds	
12. 600-Line-Per-Minute Printer	115 VAC ±10 , 60 Hz ±2 Hz, single-phase	690 watts	4 feet by 2 1/2 feet	680 pounds	
13. Card Punch/Read Station	220 VAC +10%, 60 Hz ±2 Hz, single-phase	2200 watts	4 1/2 feet by 2 1/2 feet	300 pounds	68° F. to 78° F.

FOR FURTHER INFORMATION, PLEASE CALL:

Digital Scientific. DSC has offices in pricipal cities across the country.

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