Form 7802

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Available for
Nova, PDP-11

[FSA NB]

The FP-01 Floating Point Hardware is a peripheral arithmetic processor attached to either the programmed I/O bus or DMA channel of a general purpose computer.

Operations within the FP-01 are carried out in 32 bit parallel fashion for the Add/Subtract, Multiply/Divide, Fix and Float functions with the results presented to the computer in normalized form.

The FP-01 utilizes an 8 bit, two's complement exponent with a 24 bit signed binary mantissa. The FP-02 hardware is functionally the same as the FP-01 except that the FP-02 utilizes a 32 bit mantissa giving increased precision.

Options for the FP-01 and FP-02 are plug-ins which performs trigonometric operations via a combination of hardware/software. See form 7077 for additional information on this option.

In the table below, the times given are accurate for use with any computer. The necessary I/O transfer times to allow transfer of 64 bits of information and the operator to the FP-01 should be added to obtain total execution times. Typically these times will show a 30:1 improvement over floating software execution.

FUNCTION	FP-01 TIME
ADD	1.8 microseconds
SUBTRACT	1.8
MULTIPLY	9.6
DIVIDE	12.0
FIX	4.9
FLOAT	2.8

Floating Point Systems Inc.

4377 S. W. 142nd Ave.
Beaverton, Oregon 97005
(503) 643-1552

FORM 7061
10/1/71

Price List

Conforms to latest federal pricing restriction.

Part No.	Description	Prerequisite	Price
	Arithmetic Units		
FP-01	Floating Point Hardware, (32 bits), 24 bit signed fractional mantissa and 8 bit, two's complement exponent. Add/Subtract, Multiply/Divide, Fix/-Float.	Interface FP-xx-I	$5750
FP-02	Floating Point Hardware, (40 bits), 32 bit signed fractional mantissa and 8 bit, two's complement exponent. Add/Subtract, Multiply/Divide, Fix/-Float.	Interface FP-xx-I	$6750
FP-03	Floating Point Hardware, (48 bits), 40 bit signed fractional mantissa and 8 bit, two's complement exponent. Add/Subtract, Multiply/Divide, Fix/-Float.	Interface FP-xx-I	$8250
	Iterative Extension Options		
FP-01-E	Iterative Extension, (32 bit), with 3 internal accumulators. Allows evaluation of Power Series for Calculating Sines, Cosines, Arctan, Logs, etc., in less than one Millisecond.	FP-01	$ 250
FP-11-E	3 additional accumulators for FP-01-E. Allows calculations with complex numbers, FFT, etc.	FP-01-E	$ 250
FP-02-E	Iterative Extension, (40 bits), with 3 internal accumulators. Allows evaluation of Power Series for calculating Sines, Cosines, Arctan, Logs, etc., in less than one Millisecond.	FP-02	$ 350
FP-12-E	3 additional accumulators for FP-02-E. Allows calculations with complex numbers, FFT, etc.	FP-02-E	$ 350
FP-03-E	Iterative Extension (48 bits), with 3 internal accumulators. Allows evaluation of power series for calculating Sines, Cosines, Arctan, Logs, etc., in less than one Millisecond.	FP-03	$ 450
FP-13-E	3 additional accumulators for FP-03-E. Allows calculations with complex numbers, FFT, etc.	FP-03-E	$ 450

Part No.	Description	Prerequisite	Price
	Software		
FP-xx-SA	Access level software. Assembler language subroutines to program the FP-01 or FP-02 for Add/-Subtract, Multiply/Divide, Fix/-Float.	FP-01, 02 or 03	$ 250
FP-01-SB	Modification to DGC Floating Point Interpreter. (091-000013) to allow use with FP-01 or FP-02 ($350 when purchased without FP-02-SA).	FP-01, 02 or 03	$ 250
FP-02-SB	Modification to DEC-11-YQPB-PA (version V) Floating Point Interpreter to allow use with FP-01 or FP-02. ($350 when purchased without FP-02-SA).	FP-01, 02 or 03	$ 250
FP-06-SA FP-07-SA	Access level software for IBM 1130/1800. Compatible with Disc. Monitor version II, Fortran and all other manufacturer supplied software.	FP-01,02 or 03	$ 500
	Systems		
FPS-50A	Family: Base FP-02/Nova 800, 8K core.		$19,395
FPS-50A2	Nova 800 Jumbo Chasis with 4K core, ASR 33 Teletype and FP-01, FP-01-E, FP-08-1 and FFT software to allow forward or inverse transform of 512 complex floating-point data-points in less than one second. May be expanded to 32K core. FPS-50A2 options are graphics CRT display and hard copy via Tektronix T4010 and 4601.		$15,850
FPS-50B	Family: Base FP-01/Super Nova, 4K core.		$16,975
FPS-50C	Family: Base FP-02/PDP-11/20, TTY.		$20,230
FPS-51A	Family: Base FP-02/Nova 800, 20K core.		$29,295

Note: "xx" Indicates that the item described is configuration dependent. See Interfaces.

Part No.	Description	Prerequisite	Price
	Prerequisite Interfaces		
FP-00-I	Formating Interface. Converts input format, by shifting and/or complementing as required, to FPS standard format.	FP-xx-I	$1250
FP-01-I	Interface to Date General Nova/-Supernova.	FP-01, 02 or 03	$ 550
FP-02-I	Interface to Digital Equipment Corp. PDP-11 Unibus.	FP-01, 02 or 03	$ 750
FP-03-I	Interface to Digital Equipment Corp. PDP-8 series programmed I/O bus.	FP-01, 02 or 03	$ 750
FP-04-I	Interface to Hewlett-Packard HP 2100 series programmed I/O bus.	FP-01, 02 or 03	$ 750
FP-05-I	Interface to Varian 620/i programmed I/O bus.	FP-01, 02 or 03	$ 750
FP-06-I	Interface to IBM 1130 SAC channel.	FP-01, 02 or 03	$1650
FP-07-I	Interface to IBM 1800 data channel.	FP-01, 02 or 03	$1650
FP-08-I	Interface to Data General Nova/800.	FP-01, 02 or 03	$ 550
FP-09-I	Interface to Bell 205 Modom.		$4900
FP-10-I	Interface to Control Data 1700 programmed I/O bus.		$1250
FP-11-I	DMA Interface to Nova. series computers.		$1500
FP-12-I	Interface to Data General Nova/1200.	FP-01, 02 or 03	$ 550
FP-13-I	Interface to Varian 620/f programmed I/O bus.	FP-01, 02 or 03	$ 750
FP-14-I	Interface to XDS 7902 extended device subcontroller.	FP-01, 02 or 03	$1750
FP-15-I	Interface to Lockheed Electronics MAC 16 PDC.	FP-01, 02 or 03	$ 750
FP-16-I	Interface to H-316 programmed I/O bus.	FP-01, 02 or 03	$ 750
FP-17-I	Special DMA Interface for PDP-11.		$1500
FP-18-I	Interface to PDP-9/15.	FP-01, 02 or 03	$1850
FP-19-I	Interface to SEL 810 I/O bus.	FP-01, 02 or 03	$1050
FP-20-I	Interface to Westinghouse 2500 programmed I/O bus.	FP-01,02 or 03	$ 750
FP-21-I	Interface to PDP-7 I/O bus. Negative Logic Levels.	FP-01, 02 or 3	$1850

Quantity Discount

1 ... 0%	10-19 ... 10%
2-9 ... 5%	20-29 ... 12%

For quantities 30 and above, negotiate with FPS Inc., Vice President, Marketing.

Note: "xx" Indicates that the item described is configuration dependent.

April 4, 1972

Mr. T. Nelson
Syst. Consult.
Box 3
Schooleys Mtn, New Jersey 07870

Dear Mr. Nelson:

Thank you for your recent request for additional information about our Floating Point Processor advertised in the February issue of Computer Design.

I have enclosed our Form 7802 which describes, in general terms, our FP-01 processor. Our standard price sheet, copy enclosed, defines the computers for which we have off the shelf interfaces.

Our local authorized representative, whose address appears below, has complete documentation for the product line and will be contacting you shortly.

> Mr. Ted Dyer
> Bartlett Associates
> 4405 East- West Highway
> Bethesda, Maryland 20014

If you would like us to be more specific, we need to know the make, model, configuration, and application of the computer with which our hardware will be used.

If I may be of further assistance, please contact me at your convenience.

Sincerely,

FLOATING POINT SYSTEMS, INC.

Robert L. Carter

Robert L. Carter
Vice Pres., Marketing

RLC:en
Enclosures

cc: Ted Dyer