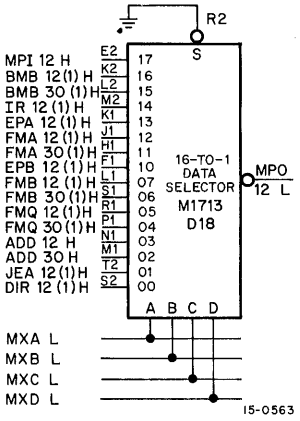
M1713
16-to-1 Data Selector

The M1713 16-To-1 Data Selector contains a single DEC74150 integrated circuit. It is used in the output multiplexer section of the FP15 Floating-Point Processor where up to 16 major register outputs are selected for transfer to the common MPO bus. The block schematic of the output multiplexer is shown on D-BS-FP15-0-03 of the FP15 drawings.

Data inputs are selected by combinations of data select signals MXA, MXB, MXC, and MXD, which are generated by the multiplexer control logic shown on D-BS-FP15-0-05. The strobe inputs are wired to ground so that each IC is always enabled. A typical truth table for the 16-To-1 Data Selector is shown in the following table.

Data Select Inputs				Data Input* Selected
MXD	MXC	MXB	MXA	
0	0	0	0	DIR12
0	0	0	1	JEA12
0	0	1	0	ADD30
0	0	1	1	ADD12
0	1	0	0	FMQ30
0	1	0	0	FMQ12
0	1	1	0	FMB30
0	1	1	1	FMB12
1	0	0	0	EPB12
1	0	0	1	FMA30
1	0	1	0	FMA12
1	0	1	1	EPA12
1	1	0	0	IR12
1	1	0	1	BMB30
1	1	1	0	BMB12
1	1	1	1	MPI12

*Signal mnemonics vary as shown on D-BS-FP15-0-03. Note that the output is the complement of the selected input.



INPUTS: Each input represents 1 unit load.

OUTPUTS: The output is capable of driving up to 10 unit loads.

POWER: Typical power dissipation is 200 mw.