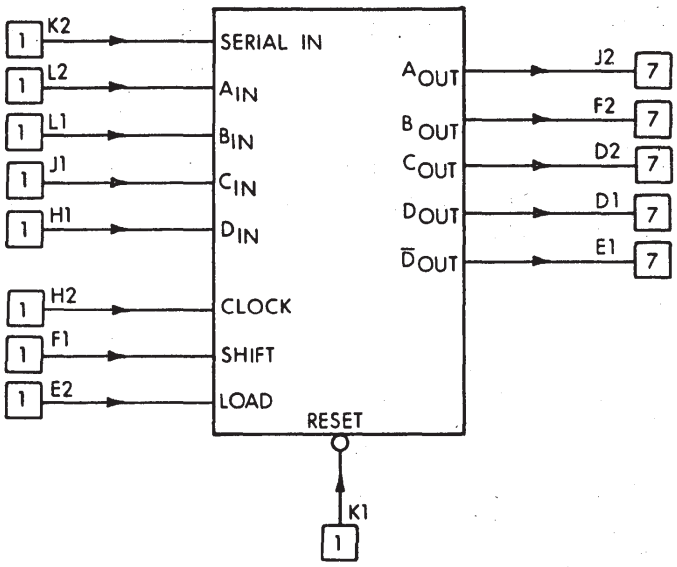
M245
DUAL 4-BIT
SHIFT REGISTER

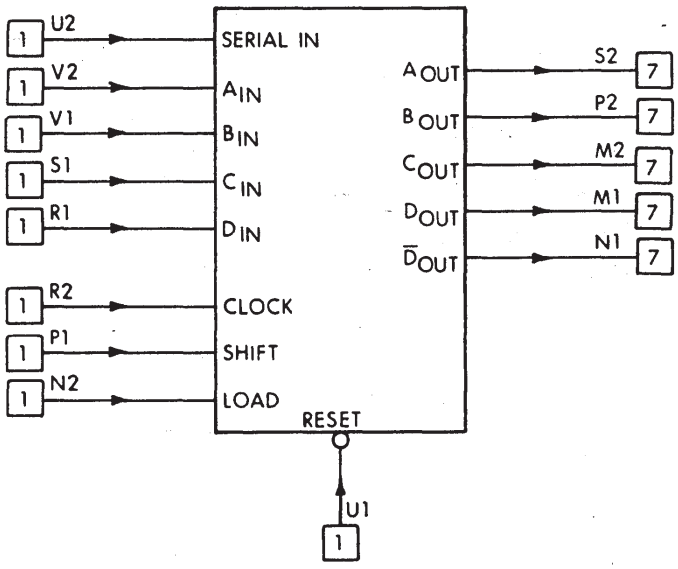
FLIP-FLOPS

M SERIES

Length: Standard
Height: Single
Width: Single

Price
$28





The M245 module consists of two 4-bit shift registers with both serial and parallel data entry capability. They are shift-right only registers; that is, the output data is shifted from A toward D.

Three control modes are possible: serial shift right, parallel enter mode, and no change or hold mode. These control modes are chosen by inputs at the SHIFT and LOAD lines as shown in the Truth Table.

In the serial mode of operation, data present at the SERIAL INput, when the SHIFT input is High, is loaded on the Low-going edge of the CLOCK pulse.

In the parallel entry mode, data present at the data inputs A IN through D IN, when the LOAD line is High, is loaded on the Low-going edge of the CLOCK pulse.

The hold mode is created by holding both the LOAD and SHIFT lines Low. By doing this, the CLOCK pulse will have no effect on the output, regardless of data present at the SERIAL INputs or DATA INputs.

A RESET line has been provided for the registers which will clear the internal flip-flop circuitry.

SPECIFICATIONS

Transfer Rate	= 10 MHz (max)
SHIFT Set-up Time	= 50 ns (min)
LOAD SET-up Time	= 50 (min)
DATA IN Set-up Time	= 25 ns (min)

Propagation Delay

From:	To:
CLOCK	Output (HIGH or LOW) = 50 ns (max)

TRUTH TABLE

CONTROL STATE	LOAD	SHIFT
Hold	L	L
Parallel Entry	H	L
Serial Shift Right	L	H