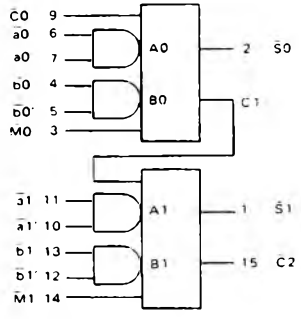

V_{CC} = Pin 16
V_{EE} = Pin 8

P_D = 400 mW typ/pkg (No Load)
t_{pd}: (Outputs loaded 1 kΩ to V_{EE})
C0 to C2 1.7 ns typ
a0 to C2 2.8
a0 to S0 2.7
b0 to S0 3.1
a0 to S1 3.9
b0 to S1 4.4
M0 to S1 8.7

High Speed
2 x 1 Bit Array Multiplier Block

The MC10287 is a dual high speed iterative multiplier. It is designed for use as an array multiplier block. Each device is a modified full adder/subtractor that forms a single bit binary product at each operand input of the adder. Internal carry lookahead is employed for high speed operation.

An addition or subtraction is selected by mode controls (M0, M1). The mode controls are buffered such that they can be grounded or taken to a standard high iogic level to accomplish subtraction. When left open or taken to a low logic level, M0 and M1 cause addition.

TYPICAL MULTIPLY TIME FOR AN n-BIT BY n-BIT 2's COMPLEMENT ARRAY MULTIPLIER

Number of Bits	Total Multiply Time (ns)	Package Count
4	14	6
8	25	28
12	39	66
16	44	120

4-BIT BY 4-BIT 2's COMPLEMENT ARRAY MULTIPLIER