POSITIVE LOGIC

V_{CC1} = Pin 1
V_{CC2} = Pin 24
V_{EE} = Pin 12

P_D = 600 mW typ/pkg (No Load)
t_{pd} (typ): A1 to F = 6.5 ns
　　　　　　C_n to C_{n-4} = 3.1 ns
　　　　　　A1 to P_G = 5.0 ns
　　　　　　A1 to G_G = 4.5 ns
　　　　　　A1 C_{n-4} = 5.0

4-Bit Arithmetic Logic Unit/Function Generator

The MC10181 is a high-speed arithmetic logic unit capable of performing 16 logic operations and 16 arithmetic operations on two four-bit words. Full internal carry is incorporated for ripple through operation. Arithmetic logic operations are selected by applying the appropriate binary word to the select inputs (S0 through S3) as indicated in the tables of arithmetic/logic functions.

Group carry propagate (P_G) and carry generate (G_G) are provided to allow fast operations on very long words using a second order look ahead. The internal carry is enabled by applying a low level voltage to the mode control input (M).

When used with the MC10179, full-carry look-ahead, as a second order look ahead block, the MC10181 provides high speed arithmetic operations on very long words.