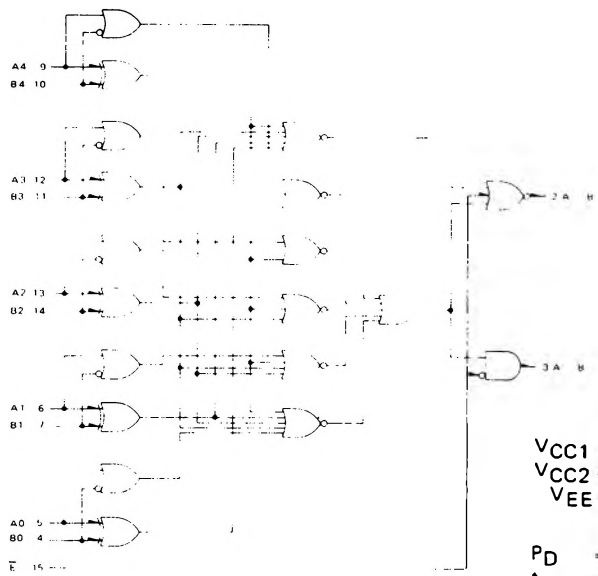


5-Bit Magnitude Comparator

The MC10166 is a high speed expandable 5-bit comparator for comparing the magnitude of two binary words. Two outputs are provided $A < B$ and $A > B$. $A = B$ can be obtained by NORing the two outputs with an additional gate. A high level on the enable function forces both outputs low. Multiple MC10166s may be used for larger word comparisons.

TRUTH TABLE

E	Inputs		Outputs	
	A	B	A < B	A > B
H	X	X	L	L
L	Word A	Word B	L	L
L	Word A	Word B	L	H
L	Word A	Word B	H	L



V_{CC1} = Pin 1
 V_{CC2} = Pin 16
 V_{EE} = Pin 8

P_D = 440 mW typ/pkg (No Load)
 t_{pd} = Data to output 6.0 ns typ
 \bar{E} to output 2.5 ns typ

MC10166

ARITHMETIC FUNCTIONS