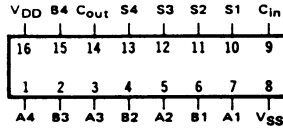
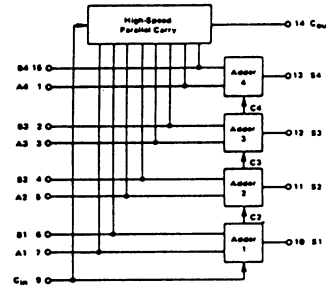


SCL4008B

FOUR BIT FULL ADDER



BLOCK DIAGRAM



STATIC CHARACTERISTICS: (V_{SS} = 0 V)

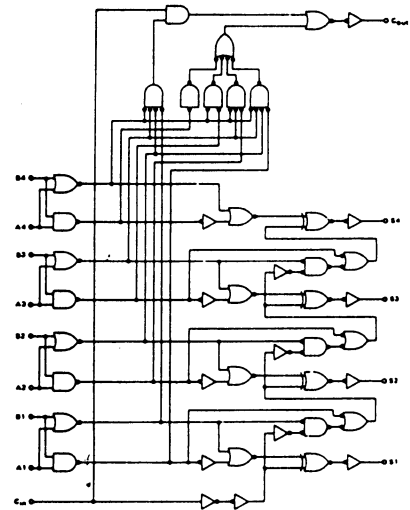
PARAMETER	CONDITIONS	V _{DD} (Vdc)	T _{LOW} *		+ 25°C			T _{HIGH} **		UNIT
			MIN	MAX	MIN	TYP	MAX	MIN	MAX	
QUIESCENT DEVICE CURRENT I _{DD}	V _{IN} = V _{SS} OR V _{DD}	5		5		0.05	5		150	μAdc
		10		10		0.1	10		300	
		15		20		0.2	20		600	

Note: *T_{LOW} = -55°C for C / H devices, -40°C for E / S devices, **T_{HIGH} = +125°C for C / H devices, +85°C for E / S devices.

DYNAMIC CHARACTERISTICS: (CL = 50pF, TA = 25°C)

PARAMETER	V _{DD} (Vdc)	MINIMUM	TYPICAL	MAXIMUM	UNIT
PROPAGATION DELAY TIME Sum In to Sum Out τ _{PLH} , τ _{PHL}	5		400	800	ns
	10		160	320	
	15		115	230	
PROPAGATION DELAY TIME Sum In to Carry Out τ _{PLH} , τ _{PHL}	5		310	620	ns
	10		140	280	
	15		110	220	
PROPAGATION DELAY TIME Carry In to Sum Out τ _{PLH} , τ _{PHL}	5		380	760	ns
	10		150	300	
	15		115	230	
PROPAGATION DELAY TIME Carry In to Carry Out τ _{PLH} , τ _{PHL}	5		180	360	ns
	10		75	150	
	15		55	110	
OUTPUT TRANSITION TIME τ _{TLH} , τ _{THL}	5		100	200	ns
	10		50	100	
	15		40	80	

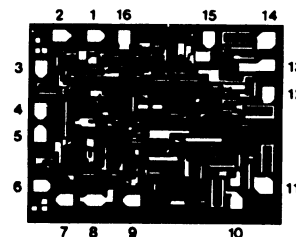
LOGIC DIAGRAM



DIE DRAWING

SCL4008B

78 x 62 mils



Note: Refer to "SCL4000B SERIES FAMILY SPECIFICATIONS" for remaining Dynamic & Static Characteristics, and, for recommended and maximum operating conditions.