SCL4018B

PRESTTABLE DIVIDE-BY-N COUNTER

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

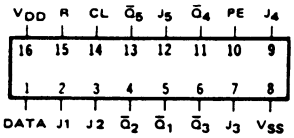
PARAMETER	CONDITIONS	V_{DD} (Vdc)	T_{LOW}* MIN	T_{LOW}* MAX	+25°C MIN	+25°C TYP	+25°C MAX	T_{HIGH}** MIN	T_{HIGH}** MAX	UNIT
QUIESCENT DEVICE CURRENT I_{DD}	V_{IN} = V_{SS} OR V_{DD}	5		5		0.05	5		150	μAdc
		10		10		0.1	10		300	
		15		20		0.2	20		600	

Note: * TLOW = -55°C for C / H devices, -40°C for E / S devices, **THIGH = +125°C for C / H devices, +85°C for E / S devices.

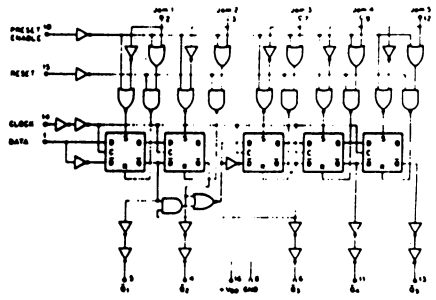
DYNAMIC CHARACTERISTICS: (C_L = 50pF, T_A = 25°C)

PARAMETER	V_{DD} (Vdc)	MINIMUM	TYPICAL	MAXIMUM	UNIT
PROPAGATION DELAY TIME t_{PLH}, t_{PHL}	5		500	1000	ns
	10		150	300	
	15		120	240	
OUTPUT TRANSITION TIME t_{TLH}, t_{THL}	5		130	260	ns
	10		65	130	
	15		50	100	
CLOCK PULSE WIDTH MINIMUM PW_{CL}	5		200	400	ns
	10		100	200	
	15		80	160	
CLOCK FREQUENCY MAXIMUM f_{CL}	5	1.25	2.5		MHz
	10	2.5	5		
	15	3	6		
CLOCK RISE & FALL TIME MAXIMUM t_{rCL} t_{fCL}	5	15			μs
	10	15			
	15	5			
DATA INPUT SETUP TIME MINIMUM t_{set}	5		200	400	ns
	10		100	200	
	15		80	160	
DATA INPUT HOLD TIME MINIMUM t_{hold}	5		0	100	ns
	10		0	50	
	15		0	40	
PRE/RESET PROPAGATION DELAY TIME t_{PLH}, t_{PHL} (FROM PE OR RESET INPUT)	5		500	1000	ns
	10		250	500	
	15		200	400	
PRESET OR RESET PULSE WIDTH MINIMUM PW_{RP}, PW_R	5		200	400	ns
	10		100	200	
	15		80	160	
JAM INPUT SETUP TIME t_{set}	5		200	400	ns
	10		100	200	
	15		80	160	
PRESET OR RESET REMOVAL TIME t_{rem}	5		375	750	ns
	10		125	250	
	15		90	180	

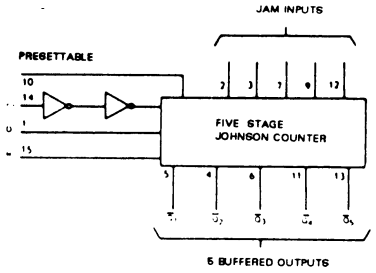
CONNECT DIAGRAM



LOGIC DIAGRAM



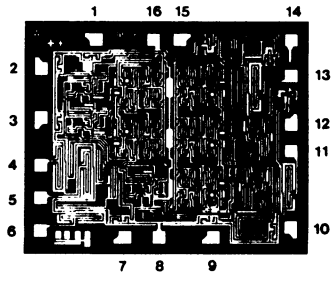
BLOCK DIAGRAM



DIE DRAWING

SCL4018B

88 x 72 mils



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