

SCL4017B

DECADE COUNTER/DIVIDER

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

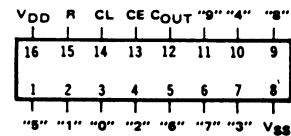
PARAMETER	CONDITIONS	V_{DD} (Vdc)	T_{LOW}^*		+ 25°C		T_{HIGH}^{**}		UNIT
			MIN	MAX	MIN	TYP	MAX	MIN	
QUIESCENT DEVICE CURRENT I_{DD}	$V_{IN} = V_{SS}$ OR V_{DD}	5		5			5		150
		10		10			10		300
		15		20			20		600

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

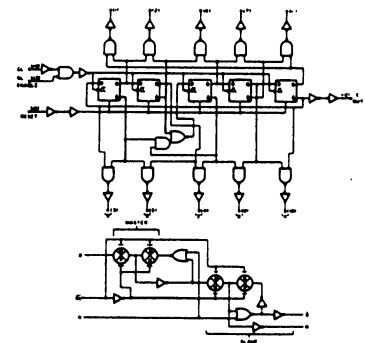
DYNAMIC CHARACTERISTICS: ($C_L = 50pF, T_A = 25^{\circ}C$)

PARAMETER	V_{DD} (Vdc)	MINIMUM	TYPICAL	MAXIMUM	UNIT
PROPAGATION DELAY TIME t_{PLH}, t_{PHL} (TO DECODED OUTPUTS)	5		350	700	ns
	10		200	400	
	15		150	300	
PROPAGATION DELAY TIME t_{PLH}, t_{PHL} (TO CARRY OUTPUT)	5		325	650	ns
	10		175	350	
	15		125	250	
OUTPUT TRANSITION TIME t_{TLH}, t_{THL} (DECODED & CARRY OUTPUTS)	5		100	200	ns
	10		50	100	
	15		40	80	
CLOCK PULSE WIDTH MINIMUM PW_{CL}	5		100	200	ns
	10		40	70	
	15		30	60	
MAXIMUM CLOCK FREQUENCY f_{CL}	5	2.5	5		MHz
	10	7	12		
	15	9.3	16		
MAXIMUM CLOCK OR ENABLE RISE & FALL TIME $t_{rCL} t_{fCL}$	5 to 15	NO LIMIT			
MINIMUM ENABLE SETUP TIME t_{set}	5		100	300	ns
	10		50	100	
	15		35	70	
MINIMUM ENABLE REMOVAL TIME t_{rem}	5		250	500	ns
	10		100	200	
	15		75	150	
RESET PROPAGATION DELAY TIME t_{PLH}, t_{PHL} (DECODED & CARRY OUTPUTS)	5		325	650	ns
	10		175	350	
	15		125	250	
RESET PULSE WIDTH MINIMUM PW_R	5		150	300	ns
	10		75	150	
	15		60	120	
RESET REMOVAL TIME t_{rem}	5		250	500	ns
	10		100	200	
	15		80	160	

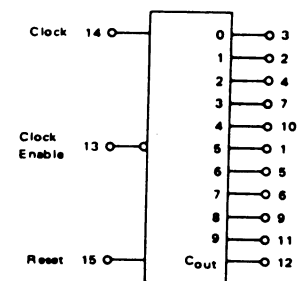
CONNECT DIAGRAM



LOGIC DIAGRAM

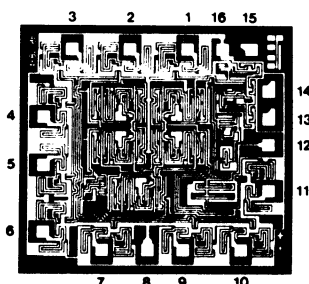


BLOCK DIAGRAM



DIE DRAWING

SCL4017B
83 x 76 mils



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