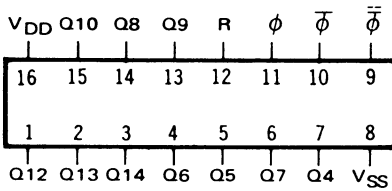
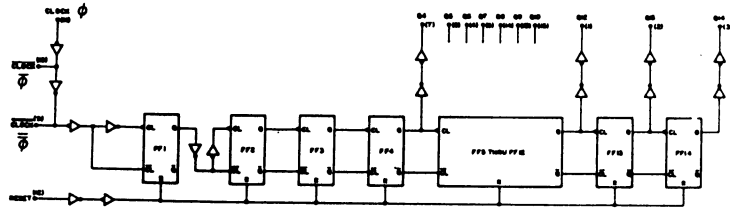


# SCL4060B

FOURTEEN STAGE COUNTER & OSCILLATOR



LOGIC 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	$\mu A_{dc}$
		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.

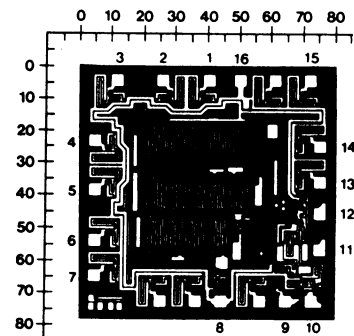
**DYNAMIC CHARACTERISTICS:** (  $C_L = 50pF, T_A = 25^\circ C$  )

PARAMETER	$V_{DD}$ Vdc	MINIMUM	TYPICAL	MAXIMUM	UNIT
PROPAGATION DELAY TIME $t_{PLH}, t_{PHL}$ (CLOCK TO Q4)	5		400	800	ns
	10		200	400	
	15		150	300	
PROPAGATION DELAY TIME $t_{PLH}, t_{PHL}$ ( $Q_i$ TO $Q_{i+1}$ )	5		100	200	ns
	10		40	80	
	15		30	60	
OUTPUT TRANSITION TIME $t_{TLH}, t_{THL}$	5		100	200	ns
	10		40	80	
	15		30	60	
CLOCK PULSE WIDTH MINIMUM $PW_{CL}$	5		70	140	ns
	10		30	60	
	15		20	40	
CLOCK FREQUENCY MAXIMUM $f_{CL}$	5	3	4.5		MHz
	10	6	9		
	15	7.5	11		
CLOCK RISE & FALL TIME MAXIMUM $t_{rCL}, t_{fCL}$	5	50	100		$\mu s$
	10	50	100		
	15	50	100		

**RESET OPERATIONS**

PROPAGATION DELAY TIME $t_{PHL}$	5		200	400	ns
	10		100	200	
	15		75	150	
RESET PULSE WIDTH MINIMUM $PW_R$	5		100	200	ns
	10		40	80	
	15		30	60	
RESET REMOVAL TIME $t_{rem}$	5		150	300	ns
	10		65	125	
	15		40	75	

**DIE DRAWING**  
SCL4060B  
80 x 78 mils



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