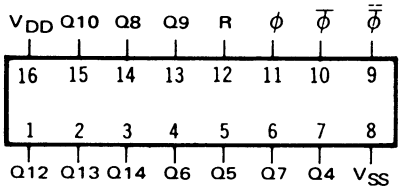
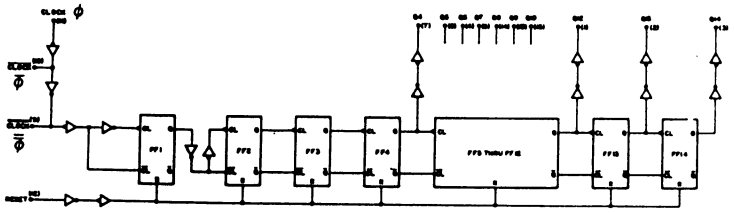
SCL4060B

FOURTEEN STAGE COUNTER & OSCILLATOR



LOGIC DIAGRAM



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: *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.

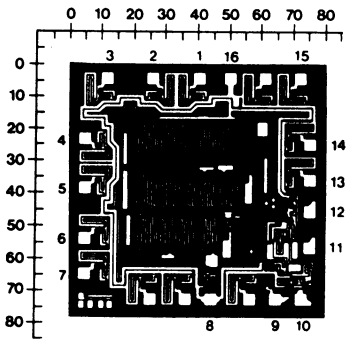
DYNAMIC CHARACTERISTICS: (C_L = 50pF, T_A = 25°C)

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		μs
	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.