

**SCL4014B**

EIGHTEEN STAGE SHIFT REGISTER

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

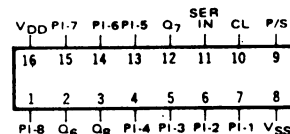
PARAMETER	CONDITIONS	$V_{DD}$ (Vdc)	$T_{LOW}^*$		+25°C			$T_{HIGH}^{**}$		UNIT
			MIN	MAX	MIN	TYP	MAX	MIN	MAX	
QUIESCENT DEVICE CURRENT $I_{DD}$	$V_{IN} = V_{SS}$ OR $V_{DD}$	5		5		0.05	5		150	$\mu A_{dc}$
		10		10		0.1	10		300	
		15		20		0.2	20		600	

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

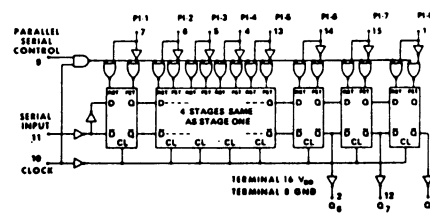
DYNAMIC CHARACTERISTICS: (  $CL = 50pF, TA = 25^\circ C$  )

PARAMETER	$V_{DD}$ Vdc	MINIMUM	TYPICAL	MAXIMUM	UNIT
PROPAGATION DELAY TIME $t_{PLH}, t_{PHL}$	5		160	320	ns
	10		80	160	
	15		60	120	
OUTPUT TRANSITION TIME $t_{TLH}, t_{THL}$	5		100	200	ns
	10		50	100	
	15		40	80	
CLOCK PULSE WIDTH MINIMUM $PW_{CL}$	5		90	180	ns
	10		40	80	
	15		25	50	
MAXIMUM CLOCK FREQUENCY $f_{CL}$	5	3	5		MHz
	10	6	10		
	15	8.5	14		
CLOCK RISE & FALL TIME MAXIMUM $t_{rCL}, t_{fCL}$	5	15			$\mu s$
	10	15			
	15	5			
MINIMUM SETUP TIME $t_{set}$ SERIAL INPUT	5		60	120	ns
	10		40	80	
	15		30	60	
P/S INPUT	5		90	180	
	10		40	80	
	15		30	60	
PARRALLEL INPUT	5		90	180	
	10		40	80	
	15		30	60	
MINIMUM HOLD TIME $t_{hold}$	5		40	80	ns
	10		20	40	
	15		10	20	

CONNECT DIAGRAM

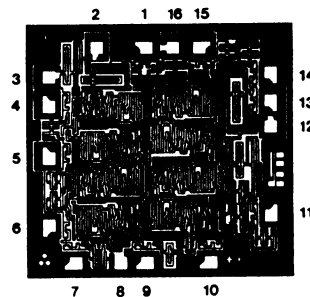


LOGIC DIAGRAM



DIE DRAWING

SCL4014B  
82 x 79 mils



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