

SCL4014B

EIGHTEEN STAGE SHIFT REGISTER

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

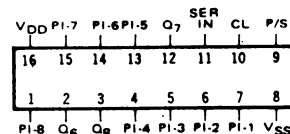
PARAMETER	CONDITIONS	V_{DD} (Vdc)	T_{LOW}^*		+25°C			T_{HIGH}^{**}		UNIT
			MIN	MAX	MIN	TYP	MAX	MIN	MAX	
QUIESCENT DEVICE CURRENT I_{DD}	$V_{IN} = V_{SS}$ OR V_{DD}	5		5		0.05	5		150	μA_{dc}
		10		10		0.1	10		300	
		15		20		0.2	20		600	

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.

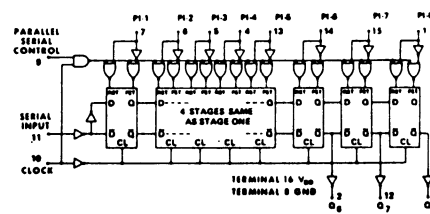
DYNAMIC CHARACTERISTICS: ($CL = 50pF, TA = 25^\circ C$)

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			μs
	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

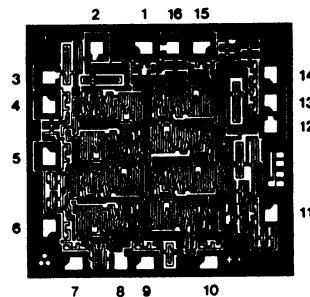


LOGIC DIAGRAM



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.