

SCL4015B

DUAL FOUR STAGE SHIFT REGISTER

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

PARAMETER	CONDITIONS	V _{DD} (Vdc)	T _{LOW} * MIN MAX		+ 25°C MIN TYP MAX			T _{HIGH} ** MIN MAX		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	μAdc
		10		10		0.1	10		300	
		15		15		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.

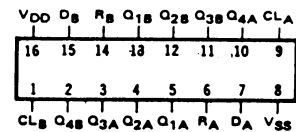
DYNAMIC CHARACTERISTICS: (CL = 50pF, TA = 25°C)

PARAMETER	V _{DD} Vdc	MINIMUM	TYPICAL	MAXIMUM	UNIT
PROPAGATION DELAY TIME t _{PLH} , t _{PHL}	5		250	500	ns
	10		100	200	
	15		90	180	
OUTPUT TRANSITION TIME t _{TLH} , t _{THL}	5		100	200	ns
	10		50	100	
	15		40	80	
CLOCK PULSE WIDTH MINIMUM PW _{CL}	5		200	400	ns
	10		100	200	
	15		80	160	
CLOCK FREQUENCY MAXIMUM f _{CL}	5	1.25	2.5		MHz
	10	2.5	5		
	15	3	6		
CLOCK RISE & FALL TIME MAXIMUM t _{rCL} , t _{fCL}	5	15			μs
	10	15			
	15	5			
DATA INPUT/SETUP TIME MINIMUM t _{set}	5		150	300	ns
	10		50	100	
	15		40	80	
DATA INPUT HOLD TIME MINIMUM t _{hold}	5		0	50	ns
	10		0	25	
	15		0	15	

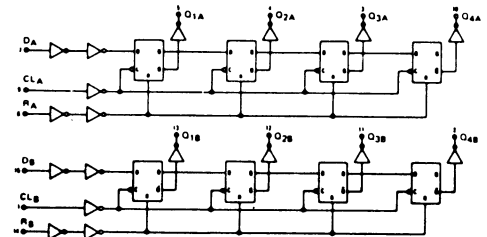
RESET OPERATIONS

PROPAGATION DELAY TIME t _{PHL}	5		200	400	ns
	10		100	200	
	15		90	180	
RESET PULSE WIDTH MINIMUM PW _R	5		200	400	ns
	10		80	160	
	15		60	120	
RESET REMOVAL TIME t _{rem}	5		375	750	ns
	10		125	250	
	15		100	200	

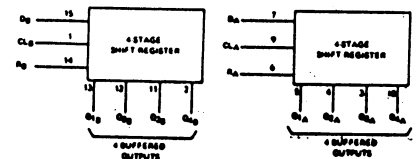
CONNECT DIAGRAM



LOGIC DIAGRAM

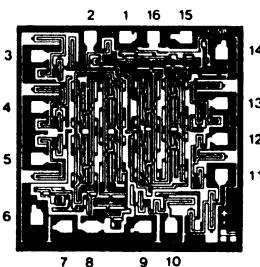


BLOCK DIAGRAM



DIE DRAWING

SCL4015B
70 x 70 mils



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