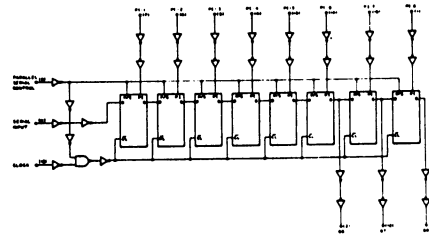
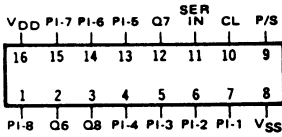


**SCL4021B**

EIGHT STAGE STATIC SHIFT REGISTER

LOGIC DIAGRAM



**STATIC CHARACTERISTICS: ( V<sub>SS</sub> = 0 V )**

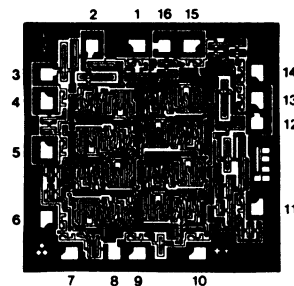
PARAMETER	CONDITIONS	V <sub>DD</sub> (Vdc)	T <sub>LOW</sub> *		+25°C			T <sub>HIGH</sub> **		UNIT
			MIN	MAX	MIN	TYP	MAX	MIN	MAX	
QUIESCENT DEVICE CURRENT I <sub>DD</sub>	V <sub>IN</sub> = V <sub>SS</sub> OR V <sub>DD</sub>	5		5		0.05	5		150	μA <sub>dc</sub>
		10		10		0.1	10		300	
		15		20		0.2	20		600	

Note: \* T<sub>LOW</sub> = -55°C for C / H devices, -40°C for E / S devices, \*\*T<sub>HIGH</sub> = +125°C for C / H devices, +85°C for E / S devices.

**DYNAMIC CHARACTERISTICS: ( C<sub>L</sub> = 50pF, T<sub>A</sub> = 25°C )**

PARAMETER	V <sub>DD</sub> (Vdc)	MINIMUM	TYPICAL	MAXIMUM	UNIT
PROPAGATION DELAY TIME t <sub>PLH</sub> , t <sub>PHL</sub> (FROM CLOCK OR P/S OUTPUT)	5		180		ns
	10		90		
	15		75		
OUTPUT TRANSITION TIME t <sub>TLH</sub> , t <sub>THL</sub>	5		100		ns
	10		50		
	15		40		
CLOCK PULSE WIDTH MINIMUM PW <sub>CL</sub>	5		90		ns
	10		40		
	15		25		
CLOCK FREQUENCY MAXIMUM f <sub>CL</sub>	5	3	5		MHz
	10	6	12		
	15	8	16		
CLOCK RISE & FALL TIME MAXIMUM t <sub>rCL</sub> t <sub>fCL</sub>	5	15			μs
	10	15			
	15	15			
P/S PULSE WIDTH MINIMUM PW	5		80	160	ns
	10		40	80	
	15		25	50	
SETUP TIME MINIMUM t <sub>set</sub> (PARALLEL OR SERIAL INPUTS)	5		60	120	ns
	10		40	80	
	15		30	60	
HOLD TIME MINIMUM t <sub>hold</sub> (PARALLEL OR SERIAL INPUTS)	5		100	200	ns
	10		30	60	
	15		20	40	
P/S REMOVAL TIME t <sub>rem</sub>	5		140	280	ns
	10		70	140	
	15		50	100	

**DIE DRAWING**  
SCL4021B  
80 x 77 mils



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