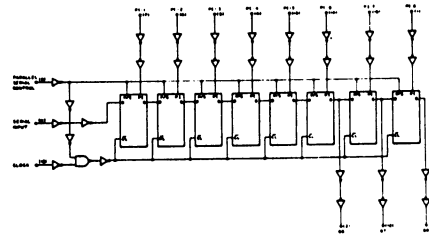
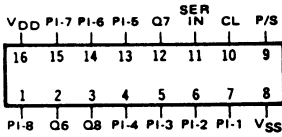


SCL4021B

EIGHT STAGE STATIC SHIFT REGISTER

LOGIC DIAGRAM



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

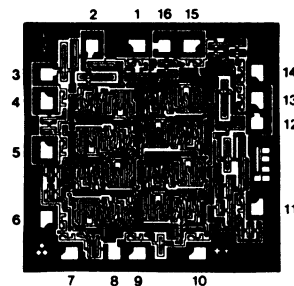
PARAMETER	CONDITIONS	V _{DD} (Vdc)	T _{LOW} *		+ 25°C			T _{HIGH} **		UNIT
			MIN	MAX	MIN	TYP	MAX	MIN	MAX	
QUIESCENT DEVICE CURRENT I _{DD}	V _{IN} = V _{SS} OR V _{DD}	5		5		0.05	5		150	μA _{dc}
		10		10		0.1	10		300	
		15		20		0.2	20		600	

Note: * T_{LOW} = -55°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} (FROM CLOCK OR P/S OUTPUT)	5		180		ns
	10		90		
	15		75		
OUTPUT TRANSITION TIME t _{TLH} , t _{THL}	5		100		ns
	10		50		
	15		40		
CLOCK PULSE WIDTH MINIMUM PW _{CL}	5		90		ns
	10		40		
	15		25		
CLOCK FREQUENCY MAXIMUM f _{CL}	5	3	5		MHz
	10	6	12		
	15	8	16		
CLOCK RISE & FALL TIME MAXIMUM t _{rCL} t _{fCL}	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 _{set} (PARALLEL OR SERIAL INPUTS)	5		60	120	ns
	10		40	80	
	15		30	60	
HOLD TIME MINIMUM t _{hold} (PARALLEL OR SERIAL INPUTS)	5		100	200	ns
	10		30	60	
	15		20	40	
P/S REMOVAL TIME t _{rem}	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.