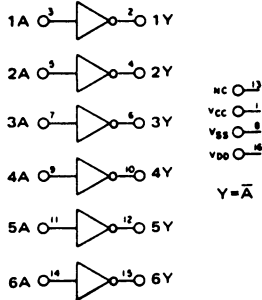


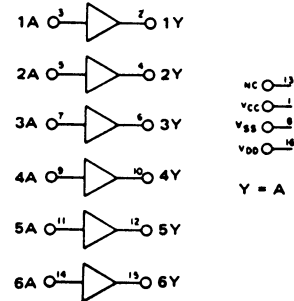
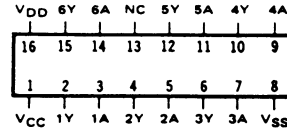
SCL4009UB

HEX INVERTING BUFFER/LEVEL SHIFTER



SCL4010B

HEX BUFFER/LEVEL SHIFTER



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

PARAMETER	CONDITIONS	V _{DD} (V _{dC})	T _{LOW} *		+25°C			T _{HIGH} **		UNIT
			MIN	MAX	MIN	TYP	MAX	MIN	MAX	
QUIESCENT DEVICE CURRENT I _{DD} SCL4009UB	V _{IN} = V _{SS} OR V _{DD}	5		0.25		0.005	0.25		7.5	μA _{dC}
		10		0.5		0.01	0.5		15	
		15		1		0.02	1		30	
QUIESCENT DEVICE CURRENT I _{DD} SCL4010B	V _{IN} = V _{SS} OR V _{DD}	5		1		0.005	1		30	μA _{dC}
		10		2		0.01	2		60	
		15		4		0.02	4		120	
MINIMUM INPUT HIGH VOLTAGE V _{IH} SCL4009UB I _O ≤ 1μA	V _{OL} = 0.5V V _{OL} = 1.0V V _{OL} = 1.5V	5		4		2.75	4		4	V _{dC}
		10		8		5.5	8		8	
		15		12		8.25	12		12	
MAXIMUM INPUT LOW VOLTAGE V _{IL} SCL4009UB I _O ≤ 1μA	V _{OH} = 3.6V V _{OH} = 7.2V V _{OH} = 10.8V	5	1		1	2.25		1		V _{dC}
		10	2		2	4.5		2		
		15	2.5		2.5	6.75		2.5		
OUTPUT HIGH CURRENT (SOURCE) I _{OH}	V _{OH} = 4.6V V _{OH} = 9.5V V _{OH} = 13.5V	5	-0.25	-0.2				-0.14		mA _{dC}
		10	-0.62	-0.5				-0.35		
		15	-1.9	-1.5				-1.1		
OUTPUT LOW CURRENT (SINK) I _{OL}	V _{OL} = 0.4V V _{OL} = 0.5V V _{OL} = 1.5V	5	3.7		3	4		2.1		mA _{dC}
		10	9.9		8	10		5.6		
		15	29.8		24	36		16.8		

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.

SCL4009UB

HEX INVERTING BUFFER/LEVEL SHIFTER

SCL4010B

HEX BUFFER/LEVEL SHIFTER

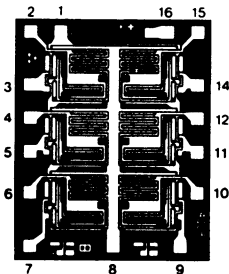
DYNAMIC CHARACTERISTICS: (CL = 50pF, TA = 25°C)

PARAMETER	V _{DD} V _{dC}	V _{CC} V _{dC}	MINIMUM	TYPICAL	MAXIMUM	UNIT	
PROPAGATION DELAY TIME t _{PLH} DRIVING CMOS	5 10 15	5 10 15		60 35 28	120 70 56	ns	
PROPAGATION DELAY TIME t _{PHL} DRIVING CMOS	5 10 15	5 10 15		45 20 15	90 40 30		ns
PROPAGATION DELAY TIME t _{PLH} DRIVING TTL/DTL	5 10 15	5 5 5		30 18 12	60 36 24		
PROPAGATION DELAY TIME t _{PHL} DRIVING TTL/DTL	5 10 15	5 5 5		35 15 10	70 30 20	ns	
OUTPUT TRANSITION TIME t _{TLH}	5 10 15	5 10 15		150 75 60	300 150 120		ns
OUTPUT TRANSITION TIME t _{THL}	5 10 15	5 10 15		30 20 12	60 40 24		
INPUT CAPACITANCE C _{IN} SCL4009UB SCL4010B				10 5	15 7.5	pF	

DIE DRAWING

SCL4009UB

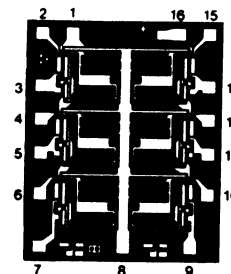
60 x 74 mils



DIE DRAWING

SCL4010B

60 x 74 mils



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