

96106

QUAD 2-INPUT NOR RECEIVER

DESCRIPTION — The 96106 inputs are designed to provide higher noise immunity than standard TTL inputs and also present less loading to the signal source. Also, in the power down condition, input leakage is 80 μ A or less, making the 96106 well suited for data bus applications. Output signal levels are standard TTL.

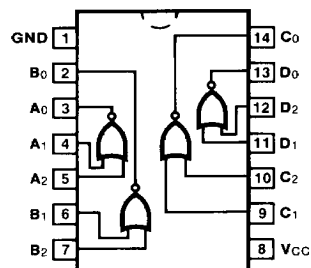
ORDERING CODE: See Section 9

PKGS	PIN OUT	COMMERCIAL GRADE	MILITARY GRADE	PKG TYPE
		$V_{CC} = +5.0 \text{ V} \pm 5\%$, $T_A = 0^\circ\text{C to } +75^\circ\text{C}$	$V_{CC} = +5.0 \text{ V} \pm 10\%$, $T_A = -55^\circ\text{C to } +125^\circ\text{C}$	
Plastic DIP (P)	A	96106PC		9A
Ceramic DIP (D)	A	96106DC	96106DM	6A
Flatpak (F)	A	96106FC	96106FM	3I

INPUT LOADING/FAN-OUT: See Section 3 for U.L. definitions

PINS	96XX (U.L.) HIGH/LOW
Inputs	2.0/0.006
Outputs	50/12.5

CONNECTION DIAGRAM
PINOUT A



$V_{CC} = \text{Pin 8}$
 $\text{GND} = \text{Pin 1}$

DC CHARACTERISTICS OVER OPERATING TEMPERATURE RANGE (unless otherwise specified)

SYMBOL	PARAMETER		96XX		UNITS	CONDITIONS
			Min	Max		
V_{IH}	Input HIGH Voltage	XC	1.53		V	$V_{CC} = \text{Min}$
		XM	1.49			
		XC	1.70		V	$V_{CC} = \text{Max}$
		XM	1.84			
V_{IL}	Input LOW Voltage	XC		1.30	V	$V_{CC} = \text{Min}$
		XM		1.21		
		XC		1.47	V	$V_{CC} = \text{Max}$
		XM		1.56		
I_{IH}	Input HIGH Current			80	μ A	$V_{CC} = 0 \text{ V to Max}$, $V_{IN} = 4.0 \text{ V}$
I_{IL}	Input LOW Current			-10	μ A	$V_{CC} = \text{Max}$, $V_{IN} = 0 \text{ V}$
I_{OS}	Output Short Circuit Current		-18	-55	mA	$V_{CC} = \text{Max}$, $V_{OUT} = 0 \text{ V}$
I_{CCH}	Power Supply Current			40	mA	$V_{IN} = 4.5 \text{ V}$
I_{CCL}				20		$V_{IN} = 0 \text{ V}$
						$V_{CC} = \text{Max}$

AC CHARACTERISTICS: $V_{CC} = +5.0\text{ V}$, $T_A = +25^\circ\text{C}$ (See Section 3 for waveforms and load configurations)

SYMBOL	PARAMETER	96XX		UNITS	CONDITIONS
		C _L = 15 pF			
		Min	Max		
t _{PLH} t _{PHL}	Propagation Delay	10 10	30 30	ns	R _L = 390 Ω to V _{CC} , 1.6 kΩ to Gnd, Fig. 3-4
t _{PLH} t _{PHL}	Propagation Delay	10 10	35 35	ns	R _L = 390 Ω to V _{CC} 1.6 kΩ to Gnd C _L = 50 pF, Fig. 3-4