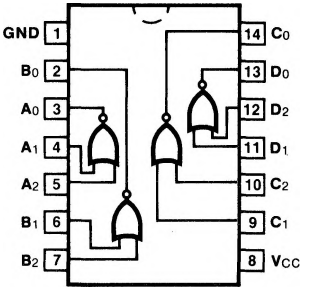
96106

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 μA or less, making the 96106 well suited for data bus applications. Output signal levels are standard TTL.

CONNECTION DIAGRAM
PINOUT A



VCC = Pin 8
GND = Pin 1

ORDERING CODE: See Section 9

PKGS	PIN OUT	COMMERCIAL GRADE VCC = +5.0 V ±5%, TA = 0°C to +75°C	MILITARY GRADE VCC = +5.0 V ±10%, TA = -55°C to +125°C	PKG TYPE
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

DC CHARACTERISTICS OVER OPERATING TEMPERATURE RANGE (unless otherwise specified)

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

AC CHARACTERISTICS: V_{CC} = +5.0 V, T_A = +25°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