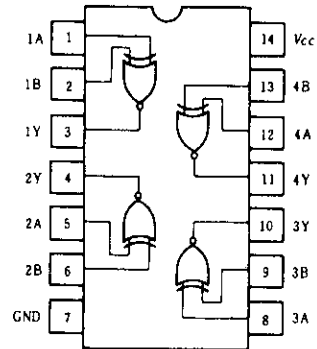


HD74HC266 ● Quad. 2-input Exclusive-NOR Gates

FEATURES

- High Speed Operation: $t_{pd} = 12.5\text{ns}$ typ. ($C_L = 50\text{pF}$)
- High Output Current: Fanout of 10 LSTTL Loads
- Wide Operating Voltage: $V_{CC} = 2 \sim 6\text{V}$
- Low Input Current: $1\mu\text{A}$ max.
- Low Quiescent Supply Current: I_{CC} (static) = $1\mu\text{A}$ max. ($T_a = 25^\circ\text{C}$)

PIN ARRANGEMENT



(Top View)

DC CHARACTERISTICS

Item	Symbol	$V_{CC}(\text{V})$	Test Conditions	$T_a = 25^\circ\text{C}$			$T_a = -40 \sim +85^\circ\text{C}$		Unit		
				min	typ	max	min	max			
Input Voltage	V_{IH}	2.0		1.5	—	—	1.5	—	V		
		4.5		3.15	—	—	3.15	—			
		6.0		4.2	—	—	4.2	—			
	V_{IL}	2.0		—	—	0.5	—	0.5	V		
		4.5		—	—	1.35	—	1.35			
		6.0		—	—	1.8	—	1.8			
Output Voltage	V_{OH}	2.0	$V_{in} = V_{IH}$ or V_{IL}	$I_{OH} = -20\mu\text{A}$	1.9	2.0	—	1.9	—	V	
		4.5			4.4	4.5	—	4.4	—		
		6.0			5.9	6.0	—	5.9	—		
		4.5		$I_{OH} = -4\text{mA}$	4.18	—	—	4.13	—		
		6.0		$I_{OH} = -5.2\text{mA}$	5.68	—	—	5.63	—		
	V_{OL}	2.0	$V_{in} = V_{IH}$ or V_{IL}	$I_{OL} = 20\mu\text{A}$	—	0.0	0.1	—	0.1	V	
		4.5			—	0.0	0.1	—	0.1		
		6.0			—	0.0	0.1	—	0.1		
		4.5			$I_{OL} = 4\text{mA}$	—	—	0.26	—		0.33
		6.0			$I_{OL} = 5.2\text{mA}$	—	—	0.26	—		0.33
Input Current	I_{in}	6.0	$V_{in} = V_{CC}$ or GND	—	—	± 0.1	—	± 1.0	μA		
Quiescent Supply Current	I_{CC}	6.0	$V_{in} = V_{CC}$ or GND, $I_{out} = 0\mu\text{A}$	—	—	1.0	—	10	μA		

AC CHARACTERISTICS ($C_L = 50\text{pF}$, Input $t_r = t_f = 6\text{ns}$)

Item	Symbol	$V_{CC}(\text{V})$	Test Conditions	$T_a = 25^\circ\text{C}$			$T_a = -40 \sim +85^\circ\text{C}$		Unit
				min	typ	max	min	max	
Propagation Delay Time	t_{PLH}	2.0		—	—	120	—	150	ns
		4.5		—	13	24	—	30	
		6.0		—	—	20	—	26	
	t_{PHL}	2.0		—	—	120	—	150	ns
		4.5		—	12	24	—	30	
		6.0		—	—	20	—	26	
Output Rise Time	t_{TLH}	2.0	—	—	75	—	95	ns	
		4.5	—	7	15	—	19		
		6.0	—	—	13	—	16		
Output Fall Time	t_{THL}	2.0	—	—	75	—	95	ns	
		4.5	—	7	15	—	19		
		6.0	—	—	13	—	16		
Input Capacitance	C_{in}	—		—	5	10	—	10	pF