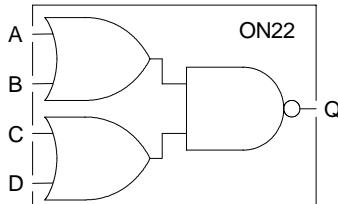


ON22 is an OR/NAND circuit providing the logical function  $Q = \text{NOT} [ (A+B).(C+D) ]$ .

### Truth Table

A	B	C	D	Q
L	L	X	X	H
X	X	L	L	H
X	H	H	X	L
X	H	X	H	L
H	X	X	H	L
H	X	H	X	L



### Capacitance

	$C_i$ (pF)
A	0.057
B	0.051
C	0.053
D	0.045

### Area

0.68 mils<sup>2</sup>

### Power

2.25 µW/MHz

Delay [ns] =  $t_{pd..} = f(SL, L)$

with  $SL$  = Input Slope [ns] ;  $L$  = Output Load [pF]

Output Slope [ns] =  $op\_sl.. = f(L)$

with  $L$  = Output Load [pF]

AC Characteristics :  $T_j = 25^\circ\text{C}$   $VDD = 3.3\text{V}$  Typical Process

### AC Characteristics

Characteristics	Symbol	SL = 0.1			SL = 2.0		
		$L = 0.1$	$L = 0.7$	$L = 1.0$	$L = 0.1$	$L = 0.7$	$L = 1.0$
Delay A to Q	$t_{pdar}$	0.39	1.69	2.45	0.68	1.86	2.52
	$t_{pdaf}$	0.30	1.22	1.67	0.47	1.36	1.80
Delay B to Q	$t_{pdbr}$	0.43	1.81	2.39	0.59	1.82	2.46
	$t_{pdbr}$	0.35	1.28	1.71	0.53	1.40	1.83
Delay C to Q	$t_{pdcr}$	0.47	1.78	2.53	0.76	1.95	2.60
	$t_{pdcf}$	0.34	1.27	1.70	0.40	1.29	1.74
Delay D to Q	$t_{pddr}$	0.50	1.80	2.48	0.67	1.90	2.58
	$t_{pddf}$	0.37	1.31	1.73	0.45	1.32	1.76
Output Slope A to Q	$op\_slar$	1.22	5.42	7.52	1.48	5.50	7.53
	$op\_slaf$	0.76	3.50	4.76	1.16	3.57	4.93
Output Slope B to Q	$op\_slbr$	1.23	5.38	7.62	1.40	5.38	7.52
	$op\_slbf$	0.88	3.48	4.82	1.23	3.60	4.86
Output Slope C to Q	$op\_slcr$	1.37	5.35	7.37	1.62	5.36	7.37
	$op\_slcf$	0.77	3.51	4.78	1.02	3.51	4.88
Output Slope D to Q	$op\_sldr$	1.37	5.22	7.30	1.50	5.37	7.36
	$op\_sldf$	0.87	3.51	4.82	1.12	3.57	4.88