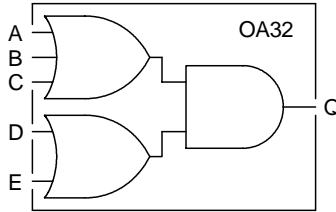


OA32 is an OR/AND circuit providing the logical function  $Q = [ (A+B+C).(D+E) ]$ .

### Truth Table

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



### Capacitance

	C <sub>i</sub> (pF)
A	0.054
B	0.054
C	0.066
D	0.048
E	0.056

### Area

0.95 mils<sup>2</sup>

### Power

2.72 μW/MHz

Delay [ns] = tpd.. = 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<sub>j</sub> = 25°C VDD = 3.3V 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	tpdar	0.74	2.12	2.82	0.85	2.22	2.87
	tpdaf	0.82	1.98	2.50	0.94	2.10	2.62
Delay B to Q	tpdbr	0.69	2.05	2.79	0.79	2.13	2.81
	tpdbf	0.80	1.96	2.49	0.97	2.13	2.68
Delay C to Q	tpdcr	0.62	2.01	2.64	0.71	2.03	2.73
	tpdcf	0.73	1.87	2.41	1.00	2.15	2.71
Delay D to Q	tpddr	0.69	2.09	2.75	0.88	2.27	2.91
	tpddf	0.69	1.87	2.42	0.86	2.04	2.60
Delay E to Q	tpder	0.63	2.00	2.76	0.83	2.19	2.86
	tpdef	0.66	1.82	2.36	0.94	2.12	2.67
Output Slope A to Q	op_slar	1.02	5.30	7.48	0.95	5.27	7.48
	op_slaf	0.78	3.76	5.02	0.78	3.63	5.00
Output Slope B to Q	op_slbr	0.96	5.31	7.37	0.92	5.26	7.50
	op_slbf	0.80	3.68	4.98	0.78	3.65	5.07
Output Slope C to Q	op_slcr	0.95	5.20	7.52	0.88	5.23	7.48
	op_slcf	0.78	3.80	5.03	0.78	3.62	5.03

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
Output Slope D to Q	op_sldr	1.01	5.33	7.55	0.93	5.23	7.50
	op_sldf	0.80	3.77	5.10	0.81	3.78	5.08
Output Slope E to Q	op_sler	0.95	5.32	7.56	0.92	5.26	7.48
	op_slef	0.77	3.62	5.00	0.83	3.78	5.17