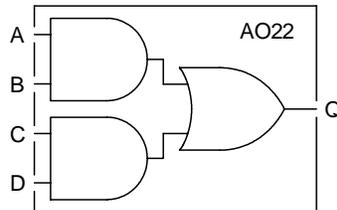


AO22 is an AND/OR circuit providing the logical function $Q = (A.B+C.D)$.

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



| | Ci (pF) |
|---|---------|
| A | 0.048 |
| B | 0.042 |
| C | 0.055 |
| D | 0.051 |

Area

0.81 mils²

Power

2.84 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_j = 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 | 0.56 | 1.94 | 2.64 | 0.75 | 2.11 | 2.78 |
| | tpdaf | 0.56 | 1.68 | 2.17 | 0.74 | 1.84 | 2.39 |
| Delay B to Q | tpdbr | 0.57 | 1.94 | 2.66 | 0.66 | 1.98 | 2.67 |
| | tpdbf | 0.59 | 1.70 | 2.27 | 0.79 | 1.91 | 2.43 |
| Delay C to Q | tpdcr | 0.48 | 1.87 | 2.52 | 0.61 | 1.93 | 2.62 |
| | tpdcf | 0.51 | 1.59 | 2.15 | 0.75 | 1.85 | 2.37 |
| Delay D to Q | tpddr | 0.49 | 1.87 | 2.53 | 0.54 | 1.87 | 2.56 |
| | tpddf | 0.54 | 1.64 | 2.17 | 0.83 | 1.92 | 2.49 |
| Output Slope A to Q | op_slar | 0.93 | 5.33 | 7.50 | 0.90 | 5.23 | 7.50 |
| | op_slaf | 0.66 | 3.72 | 4.96 | 0.68 | 3.51 | 5.28 |
| Output Slope B to Q | op_slbr | 0.95 | 5.32 | 7.50 | 0.90 | 5.22 | 7.48 |
| | op_slbf | 0.66 | 3.70 | 5.17 | 0.70 | 3.73 | 5.33 |
| Output Slope C to Q | op_slcr | 0.91 | 5.32 | 7.55 | 0.88 | 5.20 | 7.46 |
| | op_slcf | 0.67 | 3.50 | 5.06 | 0.67 | 3.51 | 5.20 |
| Output Slope D to Q | op_sl dr | 0.91 | 5.33 | 7.52 | 0.91 | 5.21 | 7.41 |
| | op_sl df | 0.68 | 3.72 | 5.03 | 0.67 | 3.53 | 5.15 |