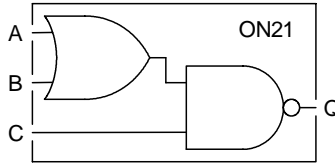


ON21 is an OR/NAND circuit providing the logical function  $Q = \text{NOT} [(A+B).C]$ .

**Truth Table**

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



**Capacitance**

|   | Ci (pF) |
|---|---------|
| A | 0.049   |
| B | 0.043   |
| C | 0.040   |

**Area**

0.54 mils<sup>2</sup>

**Power**

1.77 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 : Tj = 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   | 0.41     | 1.71    | 2.35    | 0.69     | 1.87    | 2.55    |
|                     | tpdaf   | 0.27     | 1.22    | 1.63    | 0.32     | 1.22    | 1.67    |
| Delay B to Q        | tpdbr   | 0.44     | 1.74    | 2.42    | 0.60     | 1.85    | 2.51    |
|                     | tpdbf   | 0.31     | 1.25    | 1.66    | 0.38     | 1.26    | 1.70    |
| Delay C to Q        | tpdcr   | 0.33     | 1.66    | 2.41    | 0.69     | 1.90    | 2.56    |
|                     | tpdcf   | 0.26     | 1.18    | 1.63    | 0.44     | 1.32    | 1.75    |
| Output Slope A to Q | op_slar | 1.10     | 5.10    | 7.11    | 1.37     | 5.10    | 7.17    |
|                     | op_slaf | 0.62     | 3.43    | 4.72    | 0.92     | 3.43    | 4.82    |
| Output Slope B to Q | op_slbr | 1.08     | 5.08    | 7.17    | 1.25     | 5.06    | 7.11    |
|                     | op_slbf | 0.70     | 3.38    | 4.67    | 1.00     | 3.42    | 4.73    |
| Output Slope C to Q | op_slcr | 1.10     | 5.41    | 7.51    | 1.37     | 5.33    | 7.55    |
|                     | op_slcf | 0.71     | 3.43    | 4.68    | 1.10     | 3.55    | 4.87    |