5.

最大的不同在於 CLKBUFXL 有 clock signal 來當作延遲訊號

6.

T_{PHL} : 0.064+4.661*0.1=0.5301

T_{PLH} : 0.058+5.274*0.1=0.5854

CLKBUFXL : T_{PHL} 0. 5301ns T_{PLH} 0. 5854ns

T_{PHL} : 0.084+3.418*0.1=0.4258

T_{PLH} : 0.059+5.775*0.1=0.6365

BUFXL : T_{PHL} 0. 4258ns T_{PLH} 0. 6365ns

7.

T_{PHL} : (0.064+4.661*0.0026)*9+0.064=0.749067

T_{PLH} : (0.058+5.274*0.0026)*9+0.058=0.709412

Delay= T_{PLH} – T_{PHL} = -0.039655

5-(-0.039655)=5.039655ns

5.039655/10*100%=50.39655%

8.

T_{PHL} : (0.084+3.418*0.0023)*9+0.084=0.910753

T_{PLH} : (0.059+5.775*0.0023)*9+0.059=0.709543

Delay= T_{PLH} – T_{PHL} = -0.039655=-0.20121

5-(-0.20121)=5.20121ns

5.20121/10*100%=52.0121%

10.

T_{PHL} : (1.115+0.024*20)+(1.172+0.024*20)

=1.595+1.652

=3.247

T_{PLH} : (1.150+0.025*20)+(1.151+0.025*20)

=1.65+1.651

=3.301

POC16C : T_{PHL} 3.247 ns T_{PLH} 3.301 ns

13.

max capacitance : 0.150000 leakage power : 247.448682

15.

max capacitance : 0.150000 leakage power : 5.896343

20.

met1 到 met6 的 max width 都是 9.0

met1 pitch=0.560 met2 pitch=0.660 met3 pitch=0.560

met4 pitch=0.660 met5 pitch=0.560 met6 pitch=1.320

21.

```
OBS
    LAYER met1 ;
    RECT  5.530 2.160 9.610 2.560 ;
    RECT  4.140 2.210 5.530 2.510 ;
    RECT  4.050 1.490 4.140 3.290 ;
    RECT  3.840 1.390 4.050 3.290 ;
    RECT  2.370 1.390 3.840 1.790 ;
    RECT  3.740 2.840 3.840 3.290 ;
    RECT  2.670 2.840 3.740 3.140 ;
    RECT  1.500 2.070 3.600 2.470 ;
    RECT  2.270 2.840 2.670 3.820 ;
    RECT  1.260 1.390 1.500 2.990 ;
    RECT  0.970 1.390 1.260 1.790 ;
    RECT  1.220 2.750 1.260 2.990 ;
    RECT  0.820 2.750 1.220 3.150 ;
END
INVX20
```