ECEN 454
Lab 7
Roberto Luis
Section 505 - Rahul
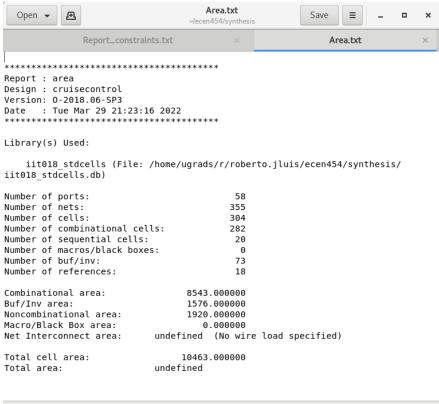
Part A:

Constraints:

```
Information: Updating design information... (UID-85)

****************************************
Report : constraint
        -all_violators
        -verbose
Design : cruisecontrol
Version: O-2018.06-SP3
Date   : Tue Mar 29 21:22:55 2022
****************************************

This design has no violated constraints.
```

Area:

```
****************************************
Report : area
Design : cruisecontrol
Version: O-2018.06-SP3
Date   : Tue Mar 29 21:23:16 2022
****************************************

Library(s) Used:

    iit018_stdcells (File: /home/ugrads/r/roberto.jluis/ecen454/synthesis/
iit018_stdcells.db)

Number of ports:                     58
Number of nets:                     355
Number of cells:                    304
Number of combinational cells:      282
Number of sequential cells:          20
Number of macros/black boxes:         0
Number of buf/inv:                   73
Number of references:                18

Combinational area:            8543.000000
Buf/Inv area:                  1576.000000
Noncombinational area:         1920.000000
Macro/Black Box area:             0.000000
Net Interconnect area:     undefined  (No wire load specified)

Total cell area:               10463.000000
Total area:                undefined
```

Netlist:
At end of document

Number of regs = 20

Part B:
Max_paths:
At end of file

Min_paths:
At end of file

Part C:
Wire length and vias:

```
#Total wire length = 9328 um.
#Total half perimeter of net bounding box = 10143 um.
#Total wire length on LAYER metal1 = 902 um.
#Total wire length on LAYER metal2 = 4336 um.
#Total wire length on LAYER metal3 = 3901 um.
#Total wire length on LAYER metal4 = 157 um.
#Total wire length on LAYER metal5 = 32 um.
#Total wire length on LAYER metal6 = 0 um.
#Total number of vias = 1436
#Up-Via Summary (total 1436):
#
```

Number of cells:

```
#std cell=302 (0 fixed + 302 movable) #block=0 (0 floating + 0 preplaced)
#ioInst=0 #net=323 #term=1008 #term/net=3.12, #fixedIo=0, #floatIo=0, #fixedPin=0, #floatPin=26
stdCell: 302 single + 0 double + 0 multi
Total standard cell length = 1.0808 (mm), area = 0.0108 (mm^2)
```

layout :