Synthesis Report

Testbench	Pass (Pass/Failed)
Clock Cycle	10.0 (ns)
Cell Area	37487.079181 (Please report **Total cell area**)
Total Time	11420.00 ns (ns)
Area*Time	

Synthesis No-latch (screenshot)

```
Inferred memory devices in process
        in routine IOTDF line 20 in file
                '/home/raid7_2/userb09/b09142/ICD2024/ICD_HW3/02_SYN/IOTDF_syn.v'
=========================================================================================
|     Register Name     |   Type    | Width | Bus | MB | AR | AS | SR | SS | ST |
=========================================================================================
|       busy_reg        | Flip-flop |   1   |  N  | N  | Y  | N  | N  | N  | N  |
|       valid_reg       | Flip-flop |   1   |  N  | N  | Y  | N  | N  | N  | N  |
| received_segments_reg | Flip-flop |   5   |  Y  | N  | Y  | N  | N  | N  | N  |
|    data_buffer_reg    | Flip-flop |  128  |  Y  | N  | Y  | N  | N  | N  | N  |
|      iot_out_reg      | Flip-flop |  128  |  Y  | N  | Y  | N  | N  | N  | N  |
=========================================================================================
Presto compilation completed successfully.
Current design is now '/home/raid7_2/userb09/b09142/ICD2024/ICD_HW3/02_SYN/IOTDF.
Loaded 1 design.
Current design is 'IOTDF'.
```

Synthesis slack (screenshot)

```
  clock clk (rise edge)                          10.00      10.00
  clock network delay (ideal)                     1.00      11.00
  clock uncertainty                              -0.10      10.90
  iot_out_reg[10]/CK (DFFRXL)                     0.00      10.90 r
  library setup time                             -0.14      10.76
  data required time                                        10.76
  ---------------------------------------------------------------
  data required time                                        10.76
  data arrival time                                        -10.73
  ---------------------------------------------------------------
  slack (MET)                                               0.03
```