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# Vivado v2022.2 (64-bit)
# SW Build 3671981 on Fri Oct 14 05:00:03 MDT 2022
# IP Build 3669848 on Fri Oct 14 08:30:02 MDT 2022
# Start of session at: Thu Feb 9 10:41:05 2023
# Process ID: 6924
# Current directory: E:/img/Comp 4 Bit/Comp 4 Bit.runs/synth 1
# Command line: vivado.exe -log Comp 4 Bit.vds -product Vivado
-mode batch -messageDb vivado.pb -notrace -source Comp 4 Bit.tcl
# Log file:
E:/img/Comp 4 Bit/Comp 4 Bit.runs/synth 1/Comp 4 Bit.vds
# Journal file:
E:/img/Comp 4 Bit/Comp 4 Bit.runs/synth 1\vivado.jou
# Running On: LAPTOP-AOQKOD16, OS: Windows, CPU Frequency: 2496
MHz, CPU Physical cores: 4, Host memory: 6827 MB
source Comp 4 Bit.tcl -notrace
create project: Time (s): cpu = 00:00:06; elapsed = 00:00:06.
Memory (MB): peak = 1000.309; gain = 116.934
Command: read checkpoint -auto incremental -incremental
E:/img/Comp 4 Bit/Comp 4 Bit.srcs/utils 1/imports/synth 1/Comp 4 Bi
t.dcp
INFO: [Vivado 12-5825] Read reference checkpoint from
E:/img/Comp 4 Bit/Comp 4 Bit.srcs/utils 1/imports/synth 1/Comp 4 Bi
t.dcp for incremental synthesis
INFO: [Vivado 12-7989] Please ensure there are no constraint
changes
Command: synth design -top Comp 4 Bit -part xc7vx485tffg1157-1
Starting synth design
Attempting to get a license for feature 'Synthesis' and/or device
'xc7vx485t'
INFO: [Common 17-349] Got license for feature 'Synthesis' and/or
device 'xc7vx485t'
INFO: [Common 17-86] Your Synthesis license expires in 21 day(s)
INFO: [Designutils 20-5440] No compile time benefit to using
incremental synthesis; A full resynthesis will be run
INFO: [Designutils 20-4379] Flow is switching to default flow due
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to incremental criteria not met. If you would like to alter this
behaviour and have the flow terminate instead, please set the
following parameter config implementation
{autoIncr.Synth.RejectBehavior Terminate}
INFO: [Synth 8-7079] Multithreading enabled for synth design using
a maximum of 2 processes.
INFO: [Synth 8-7078] Launching helper process for spawning children
vivado processes
INFO: [Synth 8-7075] Helper process launched with PID 15012
INFO: [Synth 8-11241] undeclared symbol 'REGCCE', assumed default
net type 'wire'
[E:/Vivado/2022.2/data/verilog/src/unimacro/BRAM SINGLE MACRO.v:217
0]
Starting Synthesize: Time (s): cpu = 00:00:07; elapsed = 00:00:07
. Memory (MB): peak = 1440.398; gain = 408.051
INFO: [Synth 8-638] synthesizing module 'Comp 4 Bit'
[E:/img/Comp 4 Bit/Comp 4 Bit.srcs/sources 1/new/Comp 4 Bit.vhd:43]
INFO: [Synth 8-226] default block is never used
[E:/img/Comp 4 Bit/Comp 4 Bit.srcs/sources 1/new/Comp 4 Bit.vhd:47]
INFO: [Synth 8-256] done synthesizing module 'Comp 4 Bit' (0#1)
[E:/img/Comp 4 Bit/Comp 4 Bit.srcs/sources 1/new/Comp 4 Bit.vhd:43]
Finished Synthesize: Time (s): cpu = 00:00:09; elapsed = 00:00:10
. Memory (MB): peak = 1529.867; gain = 497.520
Finished Constraint Validation : Time (s): cpu = 00:00:10 ; elapsed
= 00:00:11 . Memory (MB): peak = 1529.867; gain = 497.520
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Start Loading Part and Timing Information
Loading part: xc7vx485tffg1157-1
Finished Loading Part and Timing Information : Time (s): cpu =
00:00:10; elapsed = 00:00:11. Memory (MB): peak = 1529.867; gain
= 497.520
INFO: [Device 21-403] Loading part xc7vx485tffg1157-1
Finished RTL Optimization Phase 2: Time (s): cpu = 00:00:10;
elapsed = 00:00:11 . Memory (MB): peak = 1529.867; gain = 497.520
No constraint files found.
Start RTL Component Statistics
Detailed RTL Component Info:
+---Muxes :
      4 Input 4 Bit Muxes := 1
Finished RTL Component Statistics
Start Part Resource Summary
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Part Resources: DSPs: 2800 (col length:140) BRAMs: 2060 (col length: RAMB18 140 RAMB36 70)
Finished Part Resource Summary
 No constraint files found.
Start Cross Boundary and Area Optimization
WARNING: [Synth 8-7080] Parallel synthesis criteria is not met
Finished Cross Boundary and Area Optimization: Time (s): cpu = 00:00:22; elapsed = 00:00:23. Memory (MB): peak = 1875.828; gain = 843.480
 No constraint files found.
Finished Timing Optimization : Time (s): cpu = 00:00:22 ; elapsed = 00:00:23 . Memory (MB): peak = 1881.445 ; gain = 849.098

 Start Technology Mapping
Finished Technology Mapping: Time (s): cpu = 00:00:22; elapsed = 00:00:23. Memory (MB): peak = 1881.625; gain = 849.277
Start IO Insertion
Start Flattening Before IO Insertion
Finished Flattening Before IO Insertion
Start Final Netlist Cleanup
Finished Final Netlist Cleanup

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Finished IO Insertion: Time (s): cpu = 00:00:28; elapsed =
00:00:29 . Memory (MB): peak = 1882.426; gain = 850.078
Start Renaming Generated Instances
Finished Renaming Generated Instances: Time (s): cpu = 00:00:28;
elapsed = 00:00:29 . Memory (MB): peak = 1882.426 ; gain = 850.078
Start Rebuilding User Hierarchy
Finished Rebuilding User Hierarchy: Time (s): cpu = 00:00:28;
elapsed = 00:00:29 . Memory (MB): peak = 1882.426 ; gain = 850.078
Start Renaming Generated Ports
Finished Renaming Generated Ports: Time (s): cpu = 00:00:28;
elapsed = 00:00:29 . Memory (MB): peak = 1882.426 ; gain = 850.078
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Start Handling Custom Attributes
Finished Handling Custom Attributes: Time (s): cpu = 00:00:28;
elapsed = 00:00:29 . Memory (MB): peak = 1882.426 ; gain = 850.078
Start Renaming Generated Nets
Finished Renaming Generated Nets: Time (s): cpu = 00:00:28;
elapsed = 00:00:29 . Memory (MB): peak = 1882.426; gain = 850.078
Start Writing Synthesis Report
Report BlackBoxes:
+-+----+
| |BlackBox name |Instances |
+-+----+
+-+----+
Report Cell Usage:
+----+
     |Cell |Count |
```

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|1 |LUT4 | 2|
    |LUT5 |
12
                 2 |
    |IBUF |
13
                6 I
    |OBUF |
| 4
                4 |
+----+
Report Instance Areas:
+----+
| | Instance | Module | Cells |
+----+
|1 |top |
+----+
Finished Writing Synthesis Report : Time (s): cpu = 00:00:28 ;
elapsed = 00:00:29 . Memory (MB): peak = 1882.426 ; gain = 850.078
Synthesis finished with 0 errors, 0 critical warnings and 1
warnings.
Synthesis Optimization Runtime : Time (s): cpu = 00:00:28 ; elapsed
= 00:00:29 . Memory (MB): peak = 1882.426; gain = 850.078
Synthesis Optimization Complete: Time (s): cpu = 00:00:28;
elapsed = 00:00:29 . Memory (MB): peak = 1882.426; gain = 850.078
INFO: [Project 1-571] Translating synthesized netlist
Netlist sorting complete. Time (s): cpu = 00:00:00; elapsed =
00:00:00 . Memory (MB): peak = 1894.461 ; gain = 0.000
INFO: [Project 1-570] Preparing netlist for logic optimization
INFO: [Opt 31-138] Pushed 0 inverter(s) to 0 load pin(s).
Netlist sorting complete. Time (s): cpu = 00:00:00; elapsed =
00:00:00 . Memory (MB): peak = 2010.176 ; gain = 0.000
INFO: [Project 1-111] Unisim Transformation Summary:
No Unisim elements were transformed.
Synth Design complete, checksum: ade12a09
INFO: [Common 17-83] Releasing license: Synthesis
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19 Infos, 1 Warnings, 0 Critical Warnings and 0 Errors encountered.

synth_design completed successfully

 $synth_design: Time (s): cpu = 00:00:32 ; elapsed = 00:00:36 .$

Memory (MB): peak = 2010.176; gain = 986.000

INFO: [Common 17-1381] The checkpoint

'E:/img/Comp_4_Bit/Comp_4_Bit.runs/synth_1/Comp_4_Bit.dcp' has been
generated.

INFO: [runtcl-4] Executing : report_utilization -file

Comp_4_Bit_utilization_synth.rpt -pb

Comp_4_Bit_utilization_synth.pb

INFO: [Common 17-206] Exiting Vivado at Thu Feb 9 10:41:57 2023...