Release 14.7 par P.20131013 (nt64)

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DESKTOP-KU30KCB:: Thu Jun 21 17:34:16 2018

par -w -intstyle ise -ol high -mt off optimizedSourceFIRfilter\_map.ncd
optimizedSourceFIRfilter.ncd optimizedSourceFIRfilter.pcf

Constraints file: optimizedSourceFIRfilter.pcf.

Loading device for application Rf\_Device from file '6slx9.nph' in environment C:\xilinx\14.7\ISE DS\ISE\.

"optimizedSourceFIRfilter" is an NCD, version 3.2, device xc6slx9, package tqq144, speed -3

Initializing temperature to 85.000 Celsius. (default - Range: 0.000 to 85.000 Celsius)

Initializing voltage to 1.140 Volts. (default - Range: 1.140 to 1.260 Volts)

INFO:Par:282 - No user timing constraints were detected or you have set the option to ignore timing constraints ("par

-x"). Place and Route will run in "Performance Evaluation Mode" to automatically improve the performance of all

internal clocks in this design. Because there are not defined timing requirements, a timing score will not be

reported in the PAR report in this mode. The PAR timing summary will list the performance achieved for each clock.

Note: For the fastest runtime, set the effort level to "std". For best performance, set the effort level to "high".

Device speed data version: "PRODUCTION 1.23 2013-10-13".

## Device Utilization Summary:

## Slice Logic Utilization:

| Number of Slice Registers:              | 285   | out of | 11,440 | 2%  |
|---|-------|--------|--------|-----|
| Number used as Flip Flops:              | 285   |        |        |     |
| Number used as Latches:                 | 0     |        |        |     |
| Number used as Latch-thrus:             | 0     |        |        |     |
| Number used as AND/OR logics:           | 0     |        |        |     |
| Number of Slice LUTs:                   | 1,081 | out of | 5,720  | 18% |
| Number used as logic:                   | 1,002 | out of | 5,720  | 17% |
| Number using O6 output only:            | 966   |        |        |     |
| Number using 05 output only:            | 2     |        |        |     |
| Number using 05 and 06:                 | 34    |        |        |     |
| Number used as ROM:                     | 0     |        |        |     |
| Number used as Memory:                  | 7     | out of | 1,440  | 1%  |
| Number used as Dual Port RAM:           | 0     |        |        |     |
| Number used as Single Port RAM:         | 0     |        |        |     |
| Number used as Shift Register:          | 7     |        |        |     |
| Number using O6 output only:            | 3     |        |        |     |
| Number using O5 output only:            | 0     |        |        |     |
| Number using 05 and 06:                 | 4     |        |        |     |
| Number used exclusively as route-thrus: | 72    |        |        |     |
| Number with same-slice register load:   | 68    |        |        |     |
| Number with same-slice carry load:      | 4     |        |        |     |
| Number with other load:                 | 0     |        |        |     |

## Slice Logic Distribution:

Number of occupied Slices: 337 out of 1,430 23%

| Number of MUXCYs used:              | 1,140 out of | 2,860  | 39% |
|-------------------------------------|--------------|--------|-----|
| Number of LUT Flip Flop pairs used: | 1,172        |        |     |
| Number with an unused Flip Flop:    | 959 out of   | 1,172  | 81% |
| Number with an unused LUT:          | 91 out of    | 1,172  | 7%  |
| Number of fully used LUT-FF pairs:  | 122 out of   | 1,172  | 10% |
| Number of slice register sites lost |              |        |     |
| to control set restrictions:        | 0 out of     | 11,440 | 0%  |

A LUT Flip Flop pair for this architecture represents one LUT paired with

one Flip Flop within a slice. A control set is a unique combination of

clock, reset, set, and enable signals for a registered element.

The Slice Logic Distribution report is not meaningful if the design is

over-mapped for a non-slice resource or if Placement fails.

## IO Utilization:

| Number of bonded IOBs:                 | 36 out of | 102 | 35% |
|--|-----------|-----|-----|
|  |           |     |     |
| Specific Feature Utilization:          |           |     |     |
| Number of RAMB16BWERs:                 | 0 out of  | 32  | 0%  |
| Number of RAMB8BWERs:                  | 0 out of  | 64  | 0%  |
| Number of BUFIO2/BUFIO2_2CLKs:         | 0 out of  | 32  | 0%  |
| Number of BUFIO2FB/BUFIO2FB_2CLKs:     | 0 out of  | 32  | 0%  |
| Number of BUFG/BUFGMUXs:               | 1 out of  | 16  | 6%  |
| Number used as BUFGs:                  | 1         |     |     |
| Number used as BUFGMUX:                | 0         |     |     |
| Number of DCM/DCM_CLKGENs:             | 0 out of  | 4   | 0%  |
| Number of ILOGIC2/ISERDES2s:           | 0 out of  | 200 | 0%  |
| Number of IODELAY2/IODRP2/IODRP2 MCBs: | 0 out of  | 200 | 0%  |

| Number of OLOGIC2/OSERDES2s: | 0 out of | 200 | 0% |
|------------------------------|----------|-----|----|
| Number of BSCANs:            | 0 out of | 4   | 0% |
| Number of BUFHs:             | 0 out of | 128 | 0% |
| Number of BUFPLLs:           | 0 out of | 8   | 0% |
| Number of BUFPLL_MCBs:       | 0 out of | 4   | 0% |
| Number of DSP48A1s:          | 1 out of | 16  | 6% |
| Number of ICAPs:             | 0 out of | 1   | 0% |
| Number of MCBs:              | 0 out of | 2   | 0% |
| Number of PCILOGICSEs:       | 0 out of | 2   | 0% |
| Number of PLL_ADVs:          | 0 out of | 2   | 0% |
| Number of PMVs:              | 0 out of | 1   | 0% |
| Number of STARTUPs:          | 0 out of | 1   | 0% |
| Number of SUSPEND_SYNCs:     | 0 out of | 1   | 0% |

Overall effort level (-ol): High
Router effort level (-rl): High

Starting initial Timing Analysis. REAL time: 3 secs Finished initial Timing Analysis. REAL time: 3 secs

Starting Router

Phase 1 : 3810 unrouted; REAL time: 3 secs

Phase 2 : 3542 unrouted; REAL time: 4 secs

Phase 3: 472 unrouted; REAL time: 7 secs

Phase 4: 472 unrouted; (Par is working to improve performance) REAL time: 7 secs

Updating file: optimizedSourceFIRfilter.ncd with current fully routed design.

Phase 5: 0 unrouted; (Par is working to improve performance) REAL time: 8 secs

Phase 6: 0 unrouted; (Par is working to improve performance) REAL time: 8 secs

Phase 7: 0 unrouted; (Par is working to improve performance) REAL time: 8 secs

Phase 8: 0 unrouted; (Par is working to improve performance) REAL time: 8 secs

Phase 9:0 unrouted; (Par is working to improve performance) REAL time: 8 secs

Phase 10 : 0 unrouted; (Par is working to improve performance) REAL time: 9 secs

Total REAL time to Router completion: 9 secs

Total CPU time to Router completion: 9 secs

Partition Implementation Status

\_\_\_\_\_

No Partitions were found in this design.

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Generating "PAR" statistics.

INFO:Par:459 - The Clock Report is not displayed in the non timing-driven mode.

Timing Score: 0 (Setup: 0, Hold: 0)

Asterisk (\*) preceding a constraint indicates it was not met.

This may be due to a setup or hold violation.

| Constraint<br>  Best Case   Timing   Timing            | Check       | I | Worst Case |
|--|-------------|---|------------|
| Achievable   Errors   Score                            | I           | I | Slack      |
|  |             |   |            |
| Autotimespec constraint for clock net 27.462ns  N/A  0 | tem   SETUP | I | N/A        |
| p_BUFG<br>  0  0                                       | HOLD        | I | 0.317ns    |
|  |             |   |            |

All constraints were met.

INFO:Timing:2761 - N/A entries in the Constraints List may indicate that the

constraint is not analyzed due to the following: No paths covered by this

constraint; Other constraints intersect with this constraint; or This constraint was disabled by a Path Tracing Control. Please run the Timespec

Interaction Report (TSI) via command line (trce tsi) or Timing Analyzer GUI.

Generating Pad Report.

All signals are completely routed.

Total REAL time to PAR completion: 9 secs
Total CPU time to PAR completion: 9 secs

Peak Memory Usage: 4521 MB

Placer: Placement generated during map.

Routing: Completed - No errors found.

Number of error messages: 0

Number of warning messages: 0

Number of info messages: 2

Writing design to file optimizedSourceFIRfilter.ncd

PAR done!