

Release 14.7 - xst P.20131013 (nt64)
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--> Parameter TMPDIR set to xst/projnav.tmp

Total REAL time to Xst completion: 0.00 secs
Total CPU time to Xst completion: 0.21 secs

--> Parameter xsthdmdir set to xst

Total REAL time to Xst completion: 0.00 secs
Total CPU time to Xst completion: 0.21 secs

--> Reading design: mux_proper.prj

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* Synthesis Options Summary *

---- Source Parameters

Input File Name : "mux_proper.prj"
Ignore Synthesis Constraint File : NO

---- Target Parameters

Output File Name : "mux_proper"
Output Format : NGC
Target Device : xc7a100t-3-csg324

---- Source Options

Top Module Name : mux_proper
Automatic FSM Extraction : YES
FSM Encoding Algorithm : Auto
Safe Implementation : No
FSM Style : LUT
RAM Extraction : Yes
RAM Style : Auto
ROM Extraction : Yes
Shift Register Extraction : YES
ROM Style : Auto

Resource Sharing : YES
Asynchronous To Synchronous : NO
Shift Register Minimum Size : 2
Use DSP Block : Auto
Automatic Register Balancing : No

---- Target Options

LUT Combining : Auto
Reduce Control Sets : Auto
Add IO Buffers : YES
Global Maximum Fanout : 100000
Add Generic Clock Buffer (BUFG) : 32
Register Duplication : YES
Optimize Instantiated Primitives : NO
Use Clock Enable : Auto
Use Synchronous Set : Auto
Use Synchronous Reset : Auto
Pack IO Registers into IOBs : Auto
Equivalent register Removal : YES

---- General Options

Optimization Goal : Speed
Optimization Effort : 1
Power Reduction : NO
Keep Hierarchy : No
Netlist Hierarchy : As_Optimized
RTL Output : Yes
Global Optimization : AllClockNets
Read Cores : YES
Write Timing Constraints : NO
Cross Clock Analysis : NO
Hierarchy Separator : /
Bus Delimiter : <>
Case Specifier : Maintain
Slice Utilization Ratio : 100
BRAM Utilization Ratio : 100
DSP48 Utilization Ratio : 100
Auto BRAM Packing : NO
Slice Utilization Ratio Delta : 5

=====

=====

* HDL Parsing *

=====

Analyzing Verilog file "D:\BRB\dds-mini\W4_1.v" into library work
Parsing module <mux_proper>.

=====

* HDL Elaboration *

=====

Elaborating module <mux_proper>.

[WARNING](#):HDLCompiler:413 - "D:\BRB\dds-mini\W4_1.v" Line 10: Result of 2-bit expression is truncated to fit in 1-bit target.

[WARNING](#):HDLCompiler:413 - "D:\BRB\dds-mini\W4_1.v" Line 12: Result of 32-bit expression is truncated to fit in 1-bit target.

[WARNING](#):HDLCompiler:413 - "D:\BRB\dds-mini\W4_1.v" Line 13: Result of 32-bit expression is truncated to fit in 1-bit target.

```
=====
*                               HDL Synthesis                               *
=====
```

```
Synthesizing Unit <mux_proper>.
  Related source file is "D:\BRB\dds-mini\W4_1.v".
  Summary:
    no macro.
Unit <mux_proper> synthesized.
```

```
=====
HDL Synthesis Report
```

```
Found no macro
=====
```

```
=====
*                               Advanced HDL Synthesis                               *
=====
```

```
=====
Advanced HDL Synthesis Report
```

```
Found no macro
=====
```

```
=====
*                               Low Level Synthesis                               *
=====
```

```
Optimizing unit <mux_proper> ...

Mapping all equations...
Building and optimizing final netlist ...
Found area constraint ratio of 100 (+ 5) on block mux_proper, actual ratio is 0.

Final Macro Processing ...
```

```
=====
Final Register Report
```

```
Found no macro
=====
```

```
=====
*                               Partition Report                               *
=====
```

```
Partition Implementation Status
-----
```

```
  No Partitions were found in this design.
-----
```

```
=====
*                               Design Summary                               *
=====
```

```
Top Level Output File Name      : mux_proper.ngc
```

Primitive and Black Box Usage:

```
-----
# BELS                      : 3
#      GND                   : 1
#      LUT2                   : 1
#      VCC                    : 1
# IO Buffers                  : 12
#      IBUF                   : 3
#      OBUF                   : 9
```

Device utilization summary:

Selected Device : 7a100tcsg324-3

Slice Logic Utilization:

Number of Slice LUTs:	1	out of	63400	0%
Number used as Logic:	1	out of	63400	0%

Slice Logic Distribution:

Number of LUT Flip Flop pairs used:	1			
Number with an unused Flip Flop:	1	out of	1	100%
Number with an unused LUT:	0	out of	1	0%
Number of fully used LUT-FF pairs:	0	out of	1	0%
Number of unique control sets:	0			

IO Utilization:

Number of IOs:	12			
Number of bonded IOBs:	12	out of	210	5%

Specific Feature Utilization:

Partition Resource Summary:

No Partitions were found in this design.

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Timing Report

NOTE: THESE TIMING NUMBERS ARE ONLY A SYNTHESIS ESTIMATE.
FOR ACCURATE TIMING INFORMATION PLEASE REFER TO THE TRACE REPORT
GENERATED AFTER PLACE-and-ROUTE.

Clock Information:

No clock signals found in this design

Asynchronous Control Signals Information:

No asynchronous control signals found in this design

Timing Summary:

Speed Grade: -3

Minimum period: No path found
Minimum input arrival time before clock: No path found
Maximum output required time after clock: No path found
Maximum combinational path delay: 0.765ns

Timing Details:

All values displayed in nanoseconds (ns)

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Timing constraint: Default path analysis

Total number of paths / destination ports: 8 / 6

Delay: 0.765ns (Levels of Logic = 3)
Source: I1 (PAD)
Destination: out<8> (PAD)

Data Path: I1 to out<8>

Cell:in->out	fanout	Gate Delay	Net Delay	Logical Name (Net Name)
IBUF:I->O	2	0.001	0.383	I1_IBUF (out_1_OBUF)
LUT2:I0->O	2	0.097	0.283	_n00231 (out_6_OBUF)
OBUF:I->O		0.000		out_8_OBUF (out<8>)
Total		0.765ns (0.098ns logic, 0.667ns route) (12.8% logic, 87.2% route)		

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Cross Clock Domains Report:

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Total REAL time to Xst completion: 14.00 secs
Total CPU time to Xst completion: 14.81 secs

-->

Total memory usage is 4616540 kilobytes

Number of errors : 0 (0 filtered)
Number of warnings : 3 (0 filtered)
Number of infos : 0 (0 filtered)