

Map Report

Sun Aug 2 12:22:26 2020

Release 14.7 Map P.20131013 (nt64)
 Xilinx Mapping Report File for Design 'cordic'
 Design Information

 Command Line : map -intstyle ise -p xc7a100t-csg324-3 -w -logic_opt off -ol
 high -t 1 -xt 0 -register_duplication off -r 4 -mt off -ir off -pr off -lc off
 -power off -o cordic_map.ncd cordic.ngd cordic.pcf
 Target Device : xc7a100t
 Target Package : csg324
 Target Speed : -3
 Mapper Version : artix7 -- \$Revision: 1.55 \$
 Mapped Date : Sun Aug 02 12:19:11 2020
 Design Summary

Number of errors: 0
 Number of warnings: 85
 Slice Logic Utilization:

Number of Slice Registers:	472 out of 126,800	1%
Number used as Flip Flops:	472	
Number used as Latches:	0	
Number used as Latch-thrus:	0	
Number used as AND/OR logics:	0	
Number of Slice LUTs:	3,611 out of 63,400	5%
Number used as logic:	3,429 out of 63,400	5%
Number using O6 output only:	2,274	
Number using O5 output only:	97	
Number using O5 and O6:	1,058	
Number used as ROM:	0	
Number used as Memory:	0 out of 19,000	0%
Number used exclusively as route-thrus:	182	
Number with same-slice register load:	0	
Number with same-slice carry load:	182	
Number with other load:	0	

Slice Logic Distribution:

Number of occupied Slices:	986 out of 15,850	6%
Number of LUT Flip Flop pairs used:	3,618	
Number with an unused Flip Flop:	3,177 out of 3,618	87%
Number with an unused LUT:	7 out of 3,618	1%
Number of fully used LUT-FF pairs:	434 out of 3,618	11%
Number of unique control sets:	2	
Number of slice register sites lost to control set restrictions:	8 out of 126,800	1%

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.
 OVERMAPPING of BRAM resources should be ignored if the design is over-mapped for a non-BRAM resource or if placement fails.

IO Utilization:

Number of bonded IOBs:	83 out of 210	39%
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 Specific Feature Utilization:

Number of RAMB36E1/FIFO36E1s:	0 out of 135	0%
Number of RAMB18E1/FIFO18E1s:	0 out of 270	0%
Number of BUFGB/BUFGCTRLs:	1 out of 32	3%
Number used as BUFGBs:	1	
Number used as BUFGCTRLs:	0	
Number of IDELAYE2/IDELAYE2_FINEDELAYS:	0 out of 300	0%
Number of ILOGICE2/ILOGICE3/ISERDESE2s:	0 out of 300	0%
Number of ODELAYE2/ODELAYE2_FINEDELAYS:	0	
Number of OLOGICE2/OLOGICE3/OSERDESE2s:	0 out of 300	0%
Number of PHASER_IN/PHASER_IN_PHYS:	0 out of 24	0%
Number of PHASER_OUT/PHASER_OUT_PHYS:	0 out of 24	0%
Number of BSCANS:	0 out of 4	0%
Number of BUFHCEs:	0 out of 96	0%
Number of BUFGBs:	0 out of 24	0%
Number of CAPTUREs:	0 out of 1	0%
Number of DNA_PORTS:	0 out of 1	0%
Number of DSP48E1s:	0 out of 240	0%
Number of EFUSE_USRs:	0 out of 1	0%
Number of FRAME_ECCs:	0 out of 1	0%
Number of IBUFDS_GTE2s:	0 out of 4	0%
Number of ICAPS:	0 out of 2	0%
Number of IDELAYCTRLs:	0 out of 6	0%
Number of IN_FIFOs:	0 out of 24	0%
Number of MMCME2_ADVs:	0 out of 6	0%
Number of OUT_FIFOs:	0 out of 24	0%
Number of PCIE_2_1s:	0 out of 1	0%
Number of PHASER_REFS:	0 out of 6	0%
Number of PHY_CONTROLS:	0 out of 6	0%
Number of PLLE2_ADVs:	0 out of 6	0%
Number of STARTUPs:	0 out of 1	0%
Number of XADCs:	0 out of 1	0%

Average Fanout of Non-Clock Nets: 3.68

Peak Memory Usage: 5082 MB

Total REAL time to MAP completion: 1 mins 32 secs

Total CPU time to MAP completion: 1 mins 31 secs

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file:///C:/Xilinx/verilog2/cordic map mrp.html

file:///C:/Xilinx/verilog2/cordic map mrp.html

(IOSTANDARD). This condition may seriously affect the device and will be an error in bitstream creation. It should be corrected by properly specifying the pin location and I/O Standard.

WARNING:PhysDesignRules:2452 - The IOB x_or_phase_out<8> is either not constrained (LOC) to a specific location and/or has an undefined I/O Standard (IOSTANDARD). This condition may seriously affect the device and will be an error in bitstream creation. It should be corrected by properly specifying the pin location and I/O Standard.

WARNING:PhysDesignRules:2452 - The IOB x_or_phase_out<7> is either not constrained (LOC) to a specific location and/or has an undefined I/O Standard (IOSTANDARD). This condition may seriously affect the device and will be an error in bitstream creation. It should be corrected by properly specifying the pin location and I/O Standard.

WARNING:PhysDesignRules:2452 - The IOB x_or_phase_out<6> is either not constrained (LOC) to a specific location and/or has an undefined I/O Standard (IOSTANDARD). This condition may seriously affect the device and will be an error in bitstream creation. It should be corrected by properly specifying the pin location and I/O Standard.

WARNING:PhysDesignRules:2452 - The IOB x_or_phase_out<5> is either not constrained (LOC) to a specific location and/or has an undefined I/O Standard (IOSTANDARD). This condition may seriously affect the device and will be an error in bitstream creation. It should be corrected by properly specifying the pin location and I/O Standard.

WARNING:PhysDesignRules:2452 - The IOB x_or_phase_out<9> is either not constrained (LOC) to a specific location and/or has an undefined I/O Standard (IOSTANDARD). This condition may seriously affect the device and will be an error in bitstream creation. It should be corrected by properly specifying the pin location and I/O Standard.

Section 3 - Informational

INFO:LIT:244 - All of the single ended outputs in this design are using slew rate limited output drivers. The delay on speed critical single ended outputs can be dramatically reduced by designating them as fast outputs.

INFO:Pack:1716 - Initializing temperature to 85.000 Celsius. (default - Range: 0.000 to 85.000 Celsius)

INFO:Pack:1720 - Initializing voltage to 0.950 Volts. (default - Range: 0.950 to 1.050 Volts)

INFO:Map:215 - The Interim Design Summary has been generated in the MAP Report (.mrp).

INFO:Pack:1650 - Map created a placed design.

Section 4 - Removed Logic Summary

2 block(s) optimized away

Section 5 - Removed Logic

Optimized Block(s):

TYPE BLOCK
GND XST_GND
VCC XST_VCC

To enable printing of redundant blocks removed and signals merged, set the detailed map report option and rerun map.

Section 6 - IOB Properties

IOB Name	Type	Direction	IO Standard	Diff Term	Drive Strength	Slew Rate	Reg (s)	Resist
clock	IOB	INPUT	LVC MOS18					
op_mode	IOB	INPUT	LVC MOS18					
reset	IOB	INPUT	LVC MOS18					
rotate_amount<0>	IOB	INPUT	LVC MOS18					
rotate_amount<1>	IOB	INPUT	LVC MOS18					
rotate_amount<2>	IOB	INPUT	LVC MOS18					
rotate_amount<3>	IOB	INPUT	LVC MOS18					
rotate_amount<4>	IOB	INPUT	LVC MOS18					
rotate_amount<5>	IOB	INPUT	LVC MOS18					
rotate_amount<6>	IOB	INPUT	LVC MOS18					
rotate_amount<7>	IOB	INPUT	LVC MOS18					
rotate_amount<8>	IOB	INPUT	LVC MOS18					
rotate_amount<9>	IOB	INPUT	LVC MOS18					
rotate_amount<10>	IOB	INPUT	LVC MOS18					
rotate_amount<11>	IOB	INPUT	LVC MOS18					
rotate_amount<12>	IOB	INPUT	LVC MOS18					
rotate_amount<13>	IOB	INPUT	LVC MOS18					
rotate_amount<14>	IOB	INPUT	LVC MOS18					
rotate_amount<15>	IOB	INPUT	LVC MOS18					
x_coordinate<0>	IOB	INPUT	LVC MOS18					
x_coordinate<1>	IOB	INPUT	LVC MOS18					
x_coordinate<2>	IOB	INPUT	LVC MOS18					
x_coordinate<3>	IOB	INPUT	LVC MOS18					
x_coordinate<4>	IOB	INPUT	LVC MOS18					
x_coordinate<5>	IOB	INPUT	LVC MOS18					
x_coordinate<6>	IOB	INPUT	LVC MOS18					
x_coordinate<7>	IOB	INPUT	LVC MOS18					
x_coordinate<8>	IOB	INPUT	LVC MOS18					
x_coordinate<9>	IOB	INPUT	LVC MOS18					
x_coordinate<10>	IOB	INPUT	LVC MOS18					
x_coordinate<11>	IOB	INPUT	LVC MOS18					
x_coordinate<12>	IOB	INPUT	LVC MOS18					
x_coordinate<13>	IOB	INPUT	LVC MOS18					
x_coordinate<14>	IOB	INPUT	LVC MOS18					
x_coordinate<15>	IOB	INPUT	LVC MOS18					
x_or_phase_out<0>	IOB	OUTPUT	LVC MOS18		12	SLOW		
x_or_phase_out<1>	IOB	OUTPUT	LVC MOS18		12	SLOW		
x_or_phase_out<2>	IOB	OUTPUT	LVC MOS18		12	SLOW		
x_or_phase_out<3>	IOB	OUTPUT	LVC MOS18		12	SLOW		
x_or_phase_out<4>	IOB	OUTPUT	LVC MOS18		12	SLOW		
x_or_phase_out<5>	IOB	OUTPUT	LVC MOS18		12	SLOW		
x_or_phase_out<6>	IOB	OUTPUT	LVC MOS18		12	SLOW		
x_or_phase_out<7>	IOB	OUTPUT	LVC MOS18		12	SLOW		

x_or_phase_out<8>	IOB	OUTPUT	LVC MOS18		12	SLOW	
x_or_phase_out<9>	IOB	OUTPUT	LVC MOS18		12	SLOW	
x_or_phase_out<10>	IOB	OUTPUT	LVC MOS18		12	SLOW	
x_or_phase_out<11>	IOB	OUTPUT	LVC MOS18		12	SLOW	
x_or_phase_out<12>	IOB	OUTPUT	LVC MOS18		12	SLOW	
x_or_phase_out<13>	IOB	OUTPUT	LVC MOS18		12	SLOW	
x_or_phase_out<14>	IOB	OUTPUT	LVC MOS18		12	SLOW	
x_or_phase_out<15>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_coordinate<0>	IOB	INPUT	LVC MOS18				
y_coordinate<1>	IOB	INPUT	LVC MOS18				
y_coordinate<2>	IOB	INPUT	LVC MOS18				
y_coordinate<3>	IOB	INPUT	LVC MOS18				
y_coordinate<4>	IOB	INPUT	LVC MOS18				
y_coordinate<5>	IOB	INPUT	LVC MOS18				
y_coordinate<6>	IOB	INPUT	LVC MOS18				
y_coordinate<7>	IOB	INPUT	LVC MOS18				
y_coordinate<8>	IOB	INPUT	LVC MOS18				
y_coordinate<9>	IOB	INPUT	LVC MOS18				
y_coordinate<10>	IOB	INPUT	LVC MOS18				
y_coordinate<11>	IOB	INPUT	LVC MOS18				
y_coordinate<12>	IOB	INPUT	LVC MOS18				
y_coordinate<13>	IOB	INPUT	LVC MOS18				
y_coordinate<14>	IOB	INPUT	LVC MOS18				
y_coordinate<15>	IOB	INPUT	LVC MOS18				
y_or_size_out<0>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<1>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<2>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<3>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<4>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<5>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<6>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<7>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<8>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<9>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<10>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<11>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<12>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<13>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<14>	IOB	OUTPUT	LVC MOS18		12	SLOW	
y_or_size_out<15>	IOB	OUTPUT	LVC MOS18		12	SLOW	

Section 7 - RPMs

Section 8 - Guide Report

Guide not run on this design.

Section 9 - Area Group and Partition Summary

Partition Implementation Status

No Partitions were found in this design.

Area Group Information

No area groups were found in this design.

Section 10 - Timing Report

A logic-level (pre-route) timing report can be generated by using Xilinx static timing analysis tools, Timing Analyzer (GUI) or TRCE (command line), with the mapped NCD and PCF files. Please note that this timing report will be generated using estimated delay information. For accurate numbers, please generate a timing report with the post Place and Route NCD file.

For more information about the Timing Analyzer, consult the Xilinx Timing Analyzer Reference Manual; for more information about TRCE, consult the Xilinx Command Line Tools User Guide "TRACE" chapter.

Section 11 - Configuration String Details

Use the "-detail" map option to print out Configuration Strings

Section 12 - Control Set Information

Use the "-detail" map option to print out Control Set Information.

Section 13 - Utilization by Hierarchy

Use the "-detail" map option to print out the Utilization by Hierarchy section.