

Design Information

Command Line : map -intstyle ise -p xc6slx16-csg324-3 -w -logic_opt off -ol high -t 1 -xt 0 -register_duplication off -r 4 -global_opt off -mt off -ir off -pr off -lc off -power off -o BCD_vhdl1_map.ncd BCD_vhdl1.ngd BCD_vhdl1.pcf
Target Device : xc6slx16
Target Package : csg324
Target Speed : -3
Mapper Version : spartan6 -- \$Revision: 1.55 \$
Mapped Date : Wed May 28 14:33:52 2014

Design Summary

Number of errors: 0
Number of warnings: 0
Slice Logic Utilization:
Number of Slice Registers: 49 out of 18,224 1%
Number used as Flip Flops: 49
Number used as Latches: 0
Number used as Latch-thrus: 0
Number used as AND/OR logics: 0
Number of Slice LUTs: 77 out of 9,112 1%
Number used as logic: 76 out of 9,112 1%
Number using O6 output only: 14
Number using O5 output only: 30
Number using O5 and O6: 32
Number used as ROM: 0
Number used as Memory: 0 out of 2,176 0%
Number used exclusively as route-thrus: 1
Number with same-slice register load: 0
Number with same-slice carry load: 1
Number with other load: 0

Slice Logic Distribution:
Number of occupied Slices: 24 out of 2,278 1%
Number of MUXCYs used: 48 out of 4,556 1%
Number of LUT Flip Flop pairs used: 82
Number with an unused Flip Flop: 45 out of 82 54%
Number with an unused LUT: 5 out of 82 6%
Number of fully used LUT-FF pairs: 32 out of 82 39%
Number of unique control sets: 4
Number of slice register sites lost to control set restrictions: 15 out of 18,224 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.

IO Utilization:
Number of bonded IOBs: 14 out of 232 6%
Number of LOCed IOBs: 14 out of 14 100%

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	248	0%
Number of IODELAY2/IODRP2/IODRP2_MCBs:	0 out of	248	0%
Number of OLOGIC2/OSERDES2s:	0 out of	248	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:	0 out of	32	0%
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%

Average Fanout of Non-Clock Nets: 2.61

Peak Memory Usage: 370 MB

Total REAL time to MAP completion: 5 secs

Total CPU time to MAP completion: 4 secs

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Section 1 - Errors

Section 2 - Warnings

Section 3 - Informational

INFO:MapLib:562 - No environment variables are currently set.

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

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

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	Drive	Slew	Reg (s)		Resistor	IOB			
Term	Strength	Rate				Delay			
+-----+									
AN<0>				IOB		OUTPUT		LVCMOS33	
AN<1>	12	SLOW							
AN<1>	12	SLOW							
AN<2>	12	SLOW							
AN<2>	12	SLOW							
AN<3>	12	SLOW							
AN<3>	12	SLOW							
C<0>	12	SLOW							
C<0>	12	SLOW							
C<1>	12	SLOW							
C<1>	12	SLOW							
C<2>	12	SLOW							
C<2>	12	SLOW							
C<3>	12	SLOW							
C<3>	12	SLOW							
C<4>	12	SLOW							
C<4>	12	SLOW							
C<5>	12	SLOW							
C<5>	12	SLOW							
C<6>	12	SLOW							
C<6>	12	SLOW							
C<7>	12	SLOW							
C<7>	12	SLOW							
CLK							INPUT		
CLR							INPUT		
CLR									
+-----+									
+-----+									

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.