

Map Report

Sun Dec 11 14:52:56 2016

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Release 14.2 Map P.28xd (nt64)
Xilinx Mapping Report File for Design 'vga_module'
Design Information
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Command Line : map -intstyle ise -p xc7z020-clg484-3 -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 vga_module_map.ncd vga_module.ngd vga_module.pcf
Target Device : xc7z020
Target Package : clg484
Target Speed : -3
Mapper Version : zynq -- $Revision: 1.55 $
Mapped Date : Sun Dec 11 14:43:51 2016
Design Summary
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Number of errors: 0
Number of warnings: 115
Slice Logic Utilization:
  Number of Slice Registers: 32 out of 106,400 1%
  Number used as Flip Flops: 32
  Number used as Latches: 0
  Number used as Latch-thrus: 0
  Number used as AND/OR logics: 0
  Number of Slice LUTs: 815 out of 53,200 1%
  Number used as logic: 813 out of 53,200 1%
  Number using O6 output only: 726
  Number using O5 output only: 20
  Number using O5 and O6: 67
  Number used as ROM: 0
  Number used as Memory: 0 out of 17,400 0%
  Number used exclusively as route-thrus: 2
  Number with same-slice register load: 0
  Number with same-slice carry load: 2
  Number with other load: 0
Slice Logic Distribution:
  Number of occupied Slices: 355 out of 13,300 2%
  Number of LUT Flip Flop pairs used: 816
  Number with an unused Flip Flop: 784 out of 816 96%
  Number with an unused LUT: 1 out of 816 1%
  Number of fully used LUT-FF pairs: 31 out of 816 3%
  Number of unique control sets: 6
  Number of slice register sites lost
  to control set restrictions: 32 out of 106,400 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: 113 out of 200 56%
Specific Feature Utilization:
  Number of RAMB36E1/FIFO36E1s: 0 out of 140 0%
  Number of RAMB18E1/FIFO18E1s: 0 out of 280 0%
  Number of BUFG/BUFGCTRLs: 2 out of 32 6%
  Number used as BUFGs: 2
  Number used as BUFGCTRLs: 0
  Number of IDELAYE2/IDELAYE2_FINEDELAYS: 0 out of 200 0%
  Number of ILOGICE2/ILOGICE3/ISERDESE2s: 0 out of 200 0%
  Number of ODELAYE2/ODELAYE2_FINEDELAYS: 0
  Number of OLOGICE2/OLOGICE3/OSERDESE2s: 0 out of 200 0%
  Number of PHASER_IN/PHASER_IN_PHYS: 0 out of 16 0%
  Number of PHASER_OUT/PHASER_OUT_PHYS: 0 out of 16 0%
  Number of BSCANS: 0 out of 4 0%
  Number of BUFHCEs: 0 out of 72 0%
  Number of BUFHCEs: 0 out of 16 0%
  Number of CAPTUREs: 0 out of 1 0%
  Number of DNA_PORTS: 0 out of 1 0%
  Number of DSP48E1s: 0 out of 220 0%
  Number of EFUSE_USRs: 0 out of 1 0%
  Number of FRAME_ECCs: 0 out of 1 0%
  Number of ICAPs: 0 out of 2 0%
  Number of IDELAYCTRLs: 0 out of 4 0%
  Number of IN_FIFOs: 0 out of 16 0%
  Number of MMCME2_ADVs: 0 out of 4 0%
  Number of OUT_FIFOs: 0 out of 16 0%
  Number of PHASER_REFs: 0 out of 4 0%
  Number of PHY_CONTROLS: 0 out of 4 0%
  Number of PLLE2_ADVs: 0 out of 4 0%
  Number of PS7s: 0 out of 1 0%
  Number of STARTUPs: 0 out of 1 0%
  Number of XADCs: 0 out of 1 0%
Average Fanout of Non-Clock Nets: 4.43
Peak Memory Usage: 776 MB
Total REAL time to MAP completion: 31 secs
Total CPU time to MAP completion: 29 secs
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file:///X:/EC551/EC551_Project/Final1/vga_module_map_mrp.html

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bitstream creation. It should be corrected by properly specifying the pin location and I/O Standard.

WARNING:PhysDesignRules:2452 - The IOB seq2<10> 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 seq2<12> 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 seq2<11> 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 seq2<14> 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 seq2<13> 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 seq2<4> 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 seq2<3> 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 seq2<2> 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 seq2<1> 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 seq2<0> 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 seq2<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.

WARNING:PhysDesignRules:2452 - The IOB seq2<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 seq2<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 seq2<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 seq2<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.

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_100	IOB	INPUT	LVC MOS18					
VGA_B<0>	IOB	OUTPUT	LVC MOS18		12	SLOW		
VGA_B<1>	IOB	OUTPUT	LVC MOS18		12	SLOW		
VGA_B<2>	IOB	OUTPUT	LVC MOS18		12	SLOW		
VGA_B<3>	IOB	OUTPUT	LVC MOS18		12	SLOW		
VGA_G<0>	IOB	OUTPUT	LVC MOS18		12	SLOW		
VGA_G<1>	IOB	OUTPUT	LVC MOS18		12	SLOW		
VGA_G<2>	IOB	OUTPUT	LVC MOS18		12	SLOW		
VGA_G<3>	IOB	OUTPUT	LVC MOS18		12	SLOW		
VGA_HS	IOB	OUTPUT	LVC MOS18		12	SLOW		
VGA_R<0>	IOB	OUTPUT	LVC MOS18		12	SLOW		
VGA_R<1>	IOB	OUTPUT	LVC MOS18		12	SLOW		
VGA_R<2>	IOB	OUTPUT	LVC MOS18		12	SLOW		
VGA_R<3>	IOB	OUTPUT	LVC MOS18		12	SLOW		
VGA_VS	IOB	OUTPUT	LVC MOS18		12	SLOW		
index10<0>	IOB	INPUT	LVC MOS18					
index10<1>	IOB	INPUT	LVC MOS18					
index10<2>	IOB	INPUT	LVC MOS18					
index10<3>	IOB	INPUT	LVC MOS18					
index1<0>	IOB	INPUT	LVC MOS18					
index1<1>	IOB	INPUT	LVC MOS18					
index1<2>	IOB	INPUT	LVC MOS18					
index1<3>	IOB	INPUT	LVC MOS18					
seq1<0>	IOB	INPUT	LVC MOS18					
seq1<1>	IOB	INPUT	LVC MOS18					
seq1<2>	IOB	INPUT	LVC MOS18					
seq1<3>	IOB	INPUT	LVC MOS18					
seq1<4>	IOB	INPUT	LVC MOS18					
seq1<5>	IOB	INPUT	LVC MOS18					
seq1<6>	IOB	INPUT	LVC MOS18					
seq1<7>	IOB	INPUT	LVC MOS18					
seq1<8>	IOB	INPUT	LVC MOS18					
seq1<9>	IOB	INPUT	LVC MOS18					
seq1<10>	IOB	INPUT	LVC MOS18					
seq1<11>	IOB	INPUT	LVC MOS18					
seq1<12>	IOB	INPUT	LVC MOS18					
seq1<13>	IOB	INPUT	LVC MOS18					
seq1<14>	IOB	INPUT	LVC MOS18					
seq1<15>	IOB	INPUT	LVC MOS18					
seq1<16>	IOB	INPUT	LVC MOS18					
seq1<17>	IOB	INPUT	LVC MOS18					
seq1<18>	IOB	INPUT	LVC MOS18					
seq1<19>	IOB	INPUT	LVC MOS18					
seq1<20>	IOB	INPUT	LVC MOS18					
seq1<21>	IOB	INPUT	LVC MOS18					
seq1<22>	IOB	INPUT	LVC MOS18					
seq1<23>	IOB	INPUT	LVC MOS18					
seq1<24>	IOB	INPUT	LVC MOS18					
seq1<25>	IOB	INPUT	LVC MOS18					
seq1<26>	IOB	INPUT	LVC MOS18					
seq1<27>	IOB	INPUT	LVC MOS18					
seq1<28>	IOB	INPUT	LVC MOS18					
seq1<29>	IOB	INPUT	LVC MOS18					
seq1<30>	IOB	INPUT	LVC MOS18					
seq1<31>	IOB	INPUT	LVC MOS18					
seq1<32>	IOB	INPUT	LVC MOS18					
seq1<33>	IOB	INPUT	LVC MOS18					
seq1<34>	IOB	INPUT	LVC MOS18					
seq1<35>	IOB	INPUT	LVC MOS18					
seq1<36>	IOB	INPUT	LVC MOS18					
seq1<37>	IOB	INPUT	LVC MOS18					
seq1<38>	IOB	INPUT	LVC MOS18					
seq1<39>	IOB	INPUT	LVC MOS18					
seq1<40>	IOB	INPUT	LVC MOS18					
seq1<41>	IOB	INPUT	LVC MOS18					
seq1<42>	IOB	INPUT	LVC MOS18					
seq1<43>	IOB	INPUT	LVC MOS18					
seq1<44>	IOB	INPUT	LVC MOS18					
seq2<0>	IOB	INPUT	LVC MOS18					
seq2<1>	IOB	INPUT	LVC MOS18					
seq2<2>	IOB	INPUT	LVC MOS18					
seq2<3>	IOB	INPUT	LVC MOS18					
seq2<4>	IOB	INPUT	LVC MOS18					
seq2<5>	IOB	INPUT	LVC MOS18					
seq2<6>	IOB	INPUT	LVC MOS18					
seq2<7>	IOB	INPUT	LVC MOS18					
seq2<8>	IOB	INPUT	LVC MOS18					
seq2<9>	IOB	INPUT	LVC MOS18					
seq2<10>	IOB	INPUT	LVC MOS18					
seq2<11>	IOB	INPUT	LVC MOS18					
seq2<12>	IOB	INPUT	LVC MOS18					
seq2<13>	IOB	INPUT	LVC MOS18					
seq2<14>	IOB	INPUT	LVC MOS18					
seq2<15>	IOB	INPUT	LVC MOS18					
seq2<16>	IOB	INPUT	LVC MOS18					
seq2<17>	IOB	INPUT	LVC MOS18					
seq2<18>	IOB	INPUT	LVC MOS18					
seq2<19>	IOB	INPUT	LVC MOS18					
seq2<20>	IOB	INPUT	LVC MOS18					
seq2<21>	IOB	INPUT	LVC MOS18					
seq2<22>	IOB	INPUT	LVC MOS18					
seq2<23>	IOB	INPUT	LVC MOS18					
seq2<24>	IOB	INPUT	LVC MOS18					

seq2<25>	IOB	INPUT	LVCMOS18						
seq2<26>	IOB	INPUT	LVCMOS18						
seq2<27>	IOB	INPUT	LVCMOS18						
seq2<28>	IOB	INPUT	LVCMOS18						
seq2<29>	IOB	INPUT	LVCMOS18						
seq2<30>	IOB	INPUT	LVCMOS18						
seq2<31>	IOB	INPUT	LVCMOS18						
seq2<32>	IOB	INPUT	LVCMOS18						
seq2<33>	IOB	INPUT	LVCMOS18						
seq2<34>	IOB	INPUT	LVCMOS18						
seq2<35>	IOB	INPUT	LVCMOS18						
seq2<36>	IOB	INPUT	LVCMOS18						
seq2<37>	IOB	INPUT	LVCMOS18						
seq2<38>	IOB	INPUT	LVCMOS18						
seq2<39>	IOB	INPUT	LVCMOS18						
seq2<40>	IOB	INPUT	LVCMOS18						
seq2<41>	IOB	INPUT	LVCMOS18						
seq2<42>	IOB	INPUT	LVCMOS18						
seq2<43>	IOB	INPUT	LVCMOS18						
seq2<44>	IOB	INPUT	LVCMOS18						

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.