



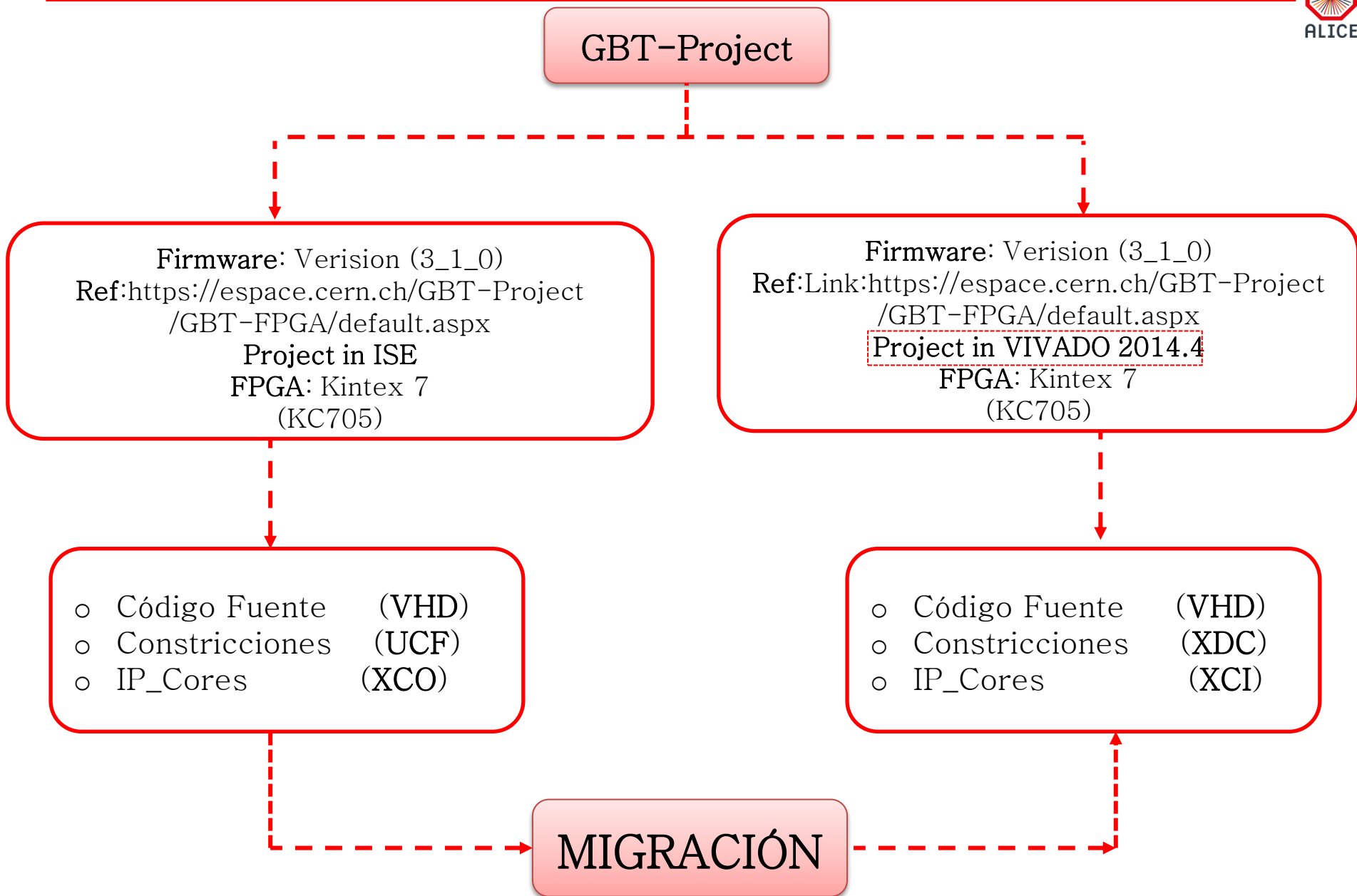
Reporte de Actividades GBT- Project

Luis Alberto Pérez Moreno

.

Febrero 28, 2015





Los archivos fuente fueron editados para que pueda operar con el dispositivo **Kintex 7**

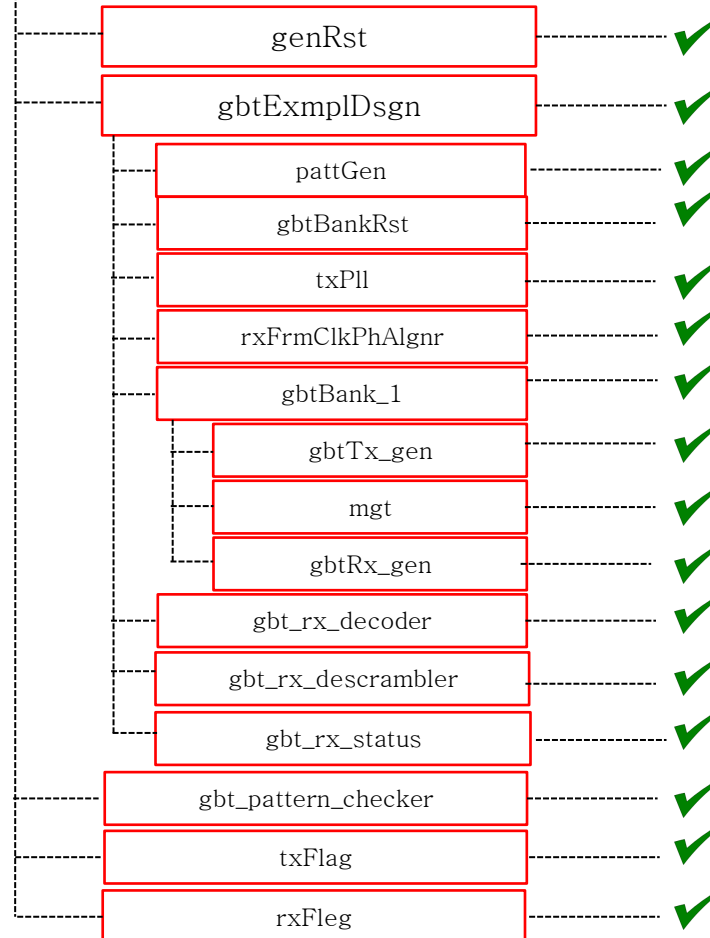
- Library **xil_defaultlib** --> (Work library in VIVADO)
- xil.defaultlib.xlx_k7v7....

(VIVADO_Project)
➤ xc7k325t-2ffg900
Core_Sources



(Syntesis & Implementation)
«Satisfactorio»

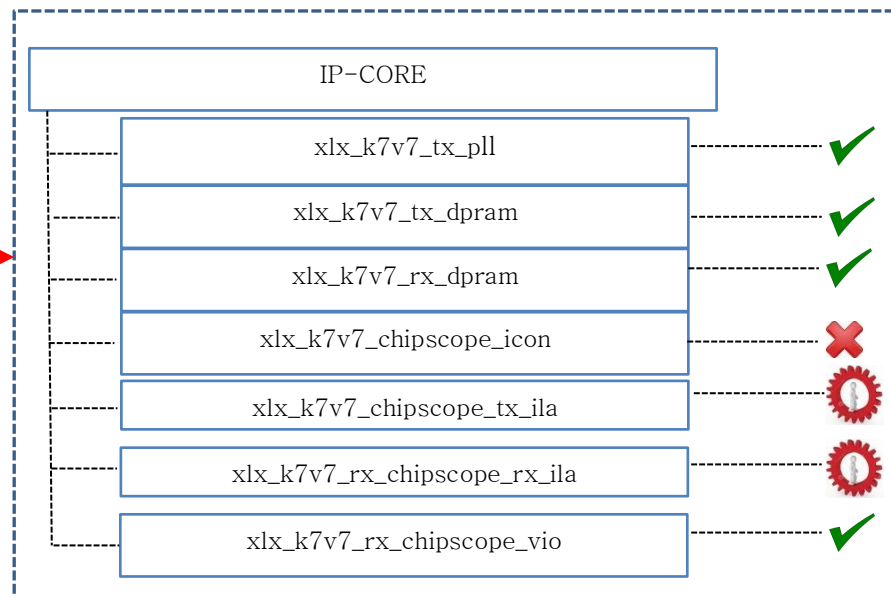
KC705_gbt_example



69 Código Fuente

(VIVADO_Project)

➤ xc7k325t-2ffg900
IP_CORE



T_3_1_0_VI/example_designs/xilinx_k7v7/kc705/project_1/project_1.xpr] - Vivado 2014.4

File View Help Search commands

Implementation Complete

Project Manager - project_1

IP Status - ip_status

4 Up-to-dates Hide All

Source File	IP Status	Recommendation	Change Log	Upgrade Log	IP Name	Current Version	Recommended Version	License	Current
vio_xlx_k7v7	Up-to-date	No changes required	More info		VIO (Virtual Input/Output)	3.0 (Rev. 5)	3.0 (Rev. 5)	Included	xc7k3
xlx_k7v7_rx_dpram	Up-to-date	No changes required	More info	More info	Block Memory Generator	8.2 (Rev. 3)	8.2 (Rev. 3)	Included	xc7k3
xlx_k7v7_tx_dpram	Up-to-date	No changes required	More info	More info	Block Memory Generator	8.2 (Rev. 3)	8.2 (Rev. 3)	Included	xc7k3
xlx_k7v7_tx_pll	Up-to-date	No changes required	More info	More info	Clocking Wizard	5.1 (Rev. 5)	5.1 (Rev. 5)	Included	xc7k3



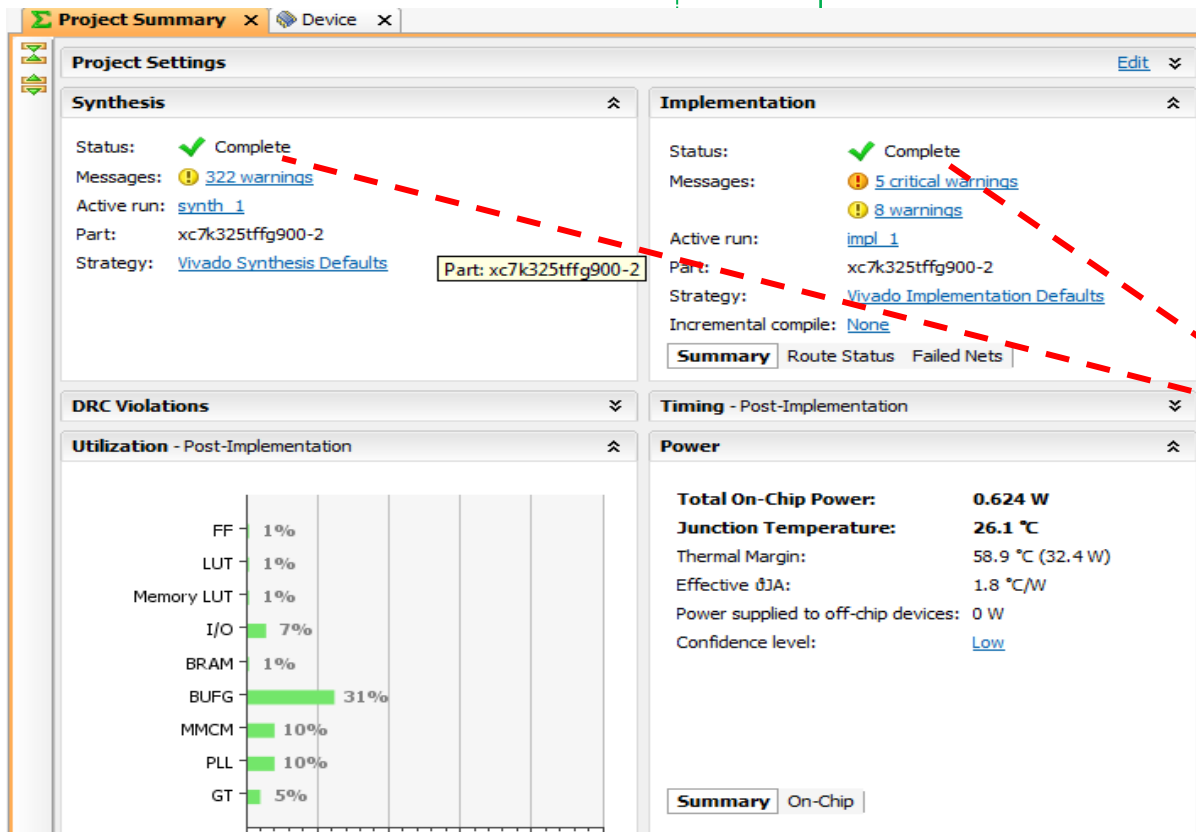
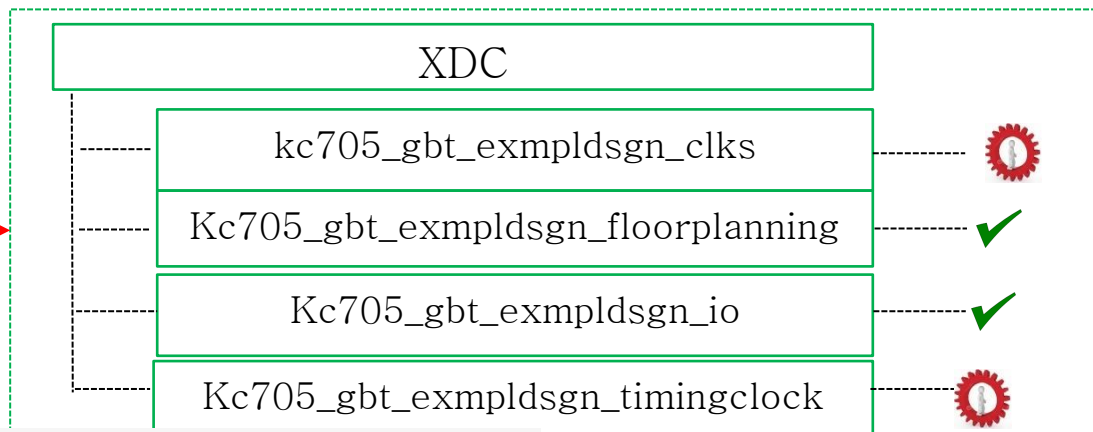
(Syntesis & Implementation) «Satisfactorio»

En proceso

No disponible en VIVADO

(VIVADO_Project)

➤ xc7k325t-2ffg900
Xilinx Constraints



 Synthesis & Implementation) «Satisfactorio»
En proceso

(Synthesis & Implementation)
Complete

Warnings -> Solo en
timing constraints

Place Design (2 critical warnings)

-  [Timing 38-249] Generated clock gbtExmplDsgn/from_gbtBank_1_clks_mgt_clks_tx_wordClk_noBuff[1] has no logical paths from master clock SMA_MGT_REFCLK_P.
 [Timing 38-249] Generated clock gbtExmplDsgn/from_gbtBank_1_clks_mgt_clks_tx_wordClk_noBuff[1] has no logical paths from master clock SMA_MGT_REFCLK_P.

Generated Clocks Constraints

UCF Example `NET "gen_clk" TNM_NET = "gen_clk";`
 `TIMESPEC "TS_gen_clk" = PERIOD "gen_clk" "TS_clk_a" * 0.500`
 `HIGH 50.00%;`

XDC Example `create_generated_clock -source [get_ports clk_a] -name`
 `gen_clk -multiply_by 2 [get_ports gen_clk]`

Referencia

Revisión: Tal vez este warning pueda ser ignorado

lock Summary

Name	Waveform	Period (ns)	Frequency (MHz)
SMA_MGT_REFCLK_P	{0.000 4.167}	8.333	120.005
CLK_OUT1_xlx_k7v7_tx_pll	{0.000 12.500}	24.999	40.002
clkfbout_xlx_k7v7_tx_pll	{0.000 12.500}	24.999	40.002
gbtExmplDsgn/from_gbtBank_1_clks_mgt_clks_tx_wordClk_noBuff[1]	{0.000 4.167}	8.333	120.005
USER_CLOCK_P	{0.000 3.200}	6.400	156.250
dbg_hub/inst/bscan_inst/SERIES7_BSCAN.bscan_inst/DRCK	{0.000 15.000}	30.000	33.333
dbg_hub/inst/bscan_inst/SERIES7_BSCAN.bscan_inst/UPDATE	{0.000 30.000}	60.000	16.667
gbtExmplDsgn/from_gbtBank_1_clks_mgt_clks_rx_wordClk_noBuff[1]	{0.000 4.167}	8.333	120.005
clkfbout	{0.000 4.167}	8.333	120.005
clkout0	{0.000 12.500}	24.999	40.002

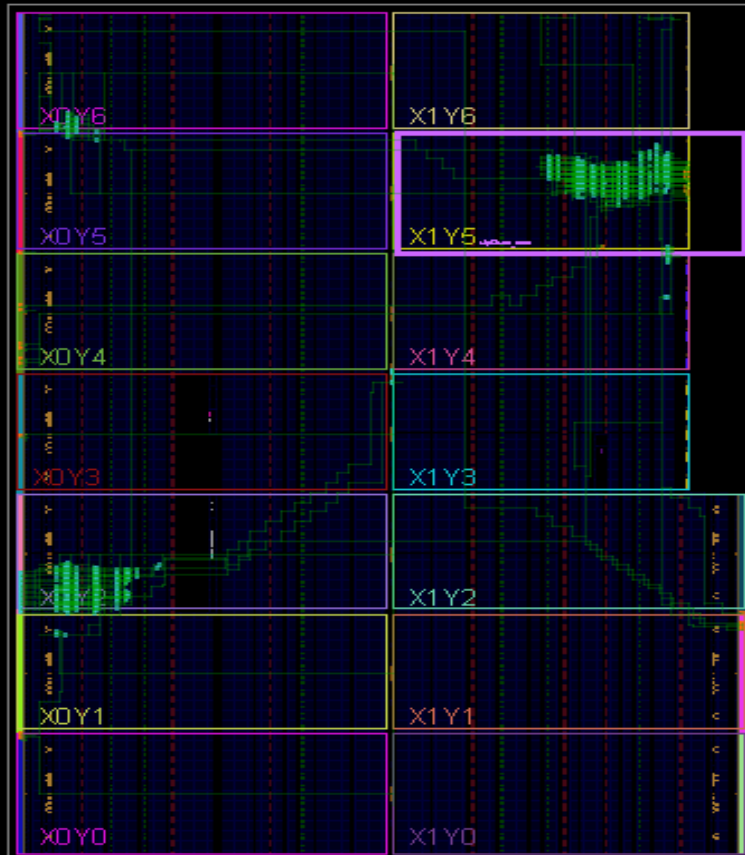


Setup	Hold	Pulse Width
Worst Negative Slack (WNS): <u>1.973 ns</u>	Worst Hold Slack (WHS): <u>0.067 ns</u>	Worst Pulse Width Slack (WPWS): <u>0.686 ns</u>
Total Negative Slack (TNS): 0.000 ns	Total Hold Slack (THS): 0.000 ns	Total Pulse Width Negative Slack (TPWS): 0.000 ns
Number of Failing Endpoints: 0	Number of Failing Endpoints: 0	Number of Failing Endpoints: 0
Total Number of Endpoints: 3723	Total Number of Endpoints: 3723	Total Number of Endpoints: 1809

All user specified timing constraints are met.

Design Timing Summary

“Solo falta por definir la
constricción. “Directed
Routing Stringt”



ROUTE

Applied To	Nets
Constraint Values	Directed Routing String (DIRT)
UCF Example	NET n85 ROUTE={2;1;-4!-1;-53320; . . .16;-8!};
XDC Example	set_property FIXED_ROUTE {EE2BEG0 NR1BEG0 CLBL_L_L_AX} [get_nets n85]

Note: ISE Design Suite directed routing strings and Vivado Design Suite net route properties are incompatible. Vivado uses a unique, un-encoded format

- Depurar las constricciones
- Incorporar todas las IP_core
- Realizar las primeras pruebas físicas

- El avance del proyecto GBT-VIVADO se encuentra en 80%

➤ Runs Calificadas

211264	210986
211248	210983
211238	210974
211231	210934
211158	
211121	
211106	
211104	
211068	
211037	
211026	
211023	
211009	
211005	

Gracias por su atención !!