

Project 2 - [P:/StudentDocuments/Projects/project\_2.xpr] - Vivado 2017.2

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write\_bitstream Complete

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Open Block Design

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Edit Timing Constraints

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Report Timing Summary

Report Clock Networks

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PROGRAM AND DEBUG

Generate Bitstream

Open Hardware Manager

Open Target

Program Device

Add Configuration Memory Device

HARDWARE MANAGER - localhost:xilinx\_tcf/Digilent003017A4CF0AA

Hardware

localhost (1)

xilinx\_tcf/Digilent003017A4CF...

arm\_dap\_0 (0)

xc7z020\_1 (2)

XADC (System Monitor)

hw\_ila\_1 (u\_ila\_0)

Connected

N/A

Programmed

Idle

Debug Probe Properties

x\_coord[7:0]

Source: NETLIST

Type: ILA

Probe type: Data and Trigger

Width: 8

Display Name

Long name: x\_coord

Short name: x\_coord

Custom name:

General

Properties

Enumeration

hw\_ila\_1

Waveform - hw\_ila\_1

ILA Status: Idle

Name

Value

btn\_IBUF[1:0]

0

btn\_IBUF\_1[3:3]

0

channel\_OBUF[7:0]

00000000

x\_coord[7:0]

10

sb\_OBUF

1

s\_sda\_OBUF

0

s\_rst\_OBUF

1

s\_clk\_OBUF

0

rst\_n\_IBUF

1

frame\_done

0

Enable

1

clk\_IBUF

0

Updated at: 2022-Dec-02 14:41:24

Settings - hw\_ila\_1

Status - hw\_ila\_1

Core status

Idle

Waiting for Trigger

Post-Trigger

Full

Capture status

Window 1 of 1

Window sample 0 of 1024

Total sample 0 of 1024

Idle

Idle

Idle

Trigger Setup - hw\_ila\_1

Capture Setup - hw\_ila\_1

Name

Operator

Radix

Value

Port

frame\_done

==

[B]

probe8[0]

Tcl Console

Messages

Serial I/O Links

Serial I/O Scans

INFO: [Labtools 27-1964] The ILA core 'hw\_ila\_1' trigger was armed at 2022-Dec-02 14:41:24

wait\_on\_hw\_ila [get\_hw\_ilas -of\_objects [get\_hw\_devices xc7z020\_1] -filter {CELL\_NAME=="u\_ila\_0"}]

display\_hw\_ila\_data [upload\_hw\_ila\_data [get\_hw\_ilas -of\_objects [get\_hw\_devices xc7z020\_1] -filter {CELL\_NAME=="u\_ila\_0"}]]

INFO: [Labtools 27-1966] The ILA core 'hw\_ila\_1' triggered at 2022-Dec-02 14:41:24

INFO: [Labtools 27-3304] ILA Waveform data saved to file P:/StudentDocuments/Projects/project\_2/hw/backup/hw\_ila\_data\_1.ila. Use Tcl command 'import\_hw\_ila\_data' or Vivado File->Import->Import ILA Data menu item to import the previously saved data.

Type a Tcl command here

Type here to search

14.41

2.12.2022



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localhost (1)

xilinx\_tcf/Digilent/003017A4CF...

arm\_dap\_0 (0)

xc7z020\_1 (2)

XADC (System Monitor)

hw\_ila\_1 (u\_ila\_0)

Connected

Open

N/A

Programmed

Idle

ILA Core Properties

hw\_ila\_1

Name: hw\_ila\_1

Cell: u\_ila\_0

Device: xc7z020\_1

HW core: core\_2

Capture sample count: 0 of 1024

Core status: Idle

hw\_ila\_1

Waveform - hw\_ila\_1

ILA Status: Idle

Name	Value
btn_IBUF[1:0]	1
btn_IBUF[1:3-3]	0
channel_OBUF[7:0]	00000000
x_coord[7:0]	08
sb_OBUF	1
s_sda_OBUF	0
s_rst_OBUF	1
s_clk_OBUF	0
rst_n_IBUF	1
frame_done	1
Enable	0
clk_IBUF	0

Updated at: 2022-Dec-02 15:24:33

Settings - hw\_ila\_1

Status - hw\_ila\_1

Core status

IdleWaiting for TriggerPost-TriggerFull

Capture status

Window 1 of 1IdleWindow sample 0 of 1024IdleTotal sample 0 of 1024Idle

Trigger Setup - hw\_ila\_1

Capture Setup - hw\_ila\_1

Name	Operator	Radix	Value	Port
frame_done	==	[B]	R	probe5[0]

Tcl Console

Messages

Serial I/O Links

Serial I/O Scans

INFO: [Labtools 27-1964] The ILA core 'hw\_ila\_1' trigger was armed at 2022-Dec-02 15:24:13

wait\_on\_hw\_ila [get\_hw\_ilas -of\_objects [get\_hw\_devices xc7z020\_1] -filter {CELL\_NAME=="u\_ila\_0"}]

display\_hw\_ila\_data [upload\_hw\_ila\_data [get\_hw\_ilas -of\_objects [get\_hw\_devices xc7z020\_1] -filter {CELL\_NAME=="u\_ila\_0"}]]

INFO: [Labtools 27-1966] The ILA core 'hw\_ila\_1' triggered at 2022-Dec-02 15:24:33

INFO: [Labtools 27-3304] ILA Waveform data saved to file P:/StudentDocuments/Projects/project\_2\hw\_ila\_data\_1.ila. Use Tcl command 'import\_hw\_ila\_data' or Vivado File->Import->Import ILA Data menu item to import the previously saved data.

Type a Tcl command here

1,024

1,024

15:26

2.12.2022

Project 2 - [P:/StudentDocuments/Projects/project\_2/project\_2.xpr] - Vivado 2017.2

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HARDWARE MANAGER - localhost:xilinx\_tcf/Digilent003017A4CF0AA

Hardware

Waveform - hw\_ila\_1

ILA Core Properties

Settings - hw\_ila\_1

Capture Setup - hw\_ila\_1

Tcl Console

localhost (1)

xilinx\_tcf/Digilent003017A4CF...

arm\_dap\_0 (0)

xc7z020\_1 (2)

XADC (System Monitor)

hw\_ila\_1 (u\_ila\_0)

Connected

Open

N/A

Programmed

Idle

ILA Core Properties

hw\_ila\_1

Name: hw\_ila\_1

Cell: u\_ila\_0

Device: xc7z020\_1

HW core: core\_2

Capture sample count: 0 of 1024

Core status: Idle

Core status

Idle

Waiting for Trigger

Post-Trigger

Full

Capture status

Window 1 of 1

Window sample 0 of 1024

Total sample 0 of 1024

Idle

Idle

Idle

Tcl Console

INFO: [Labtools 27-1964] The ILA core 'hw\_ila\_1' trigger was armed at 2022-Dec-02 15:26:52

wait\_on\_hw\_ila [get\_hw\_ilas -of\_objects [get\_hw\_devices xc7z020\_1] -filter {CELL\_NAME=="u\_ila\_0"}]

display\_hw\_ila\_data [upload\_hw\_ila\_data [get\_hw\_ilas -of\_objects [get\_hw\_devices xc7z020\_1] -filter {CELL\_NAME=="u\_ila\_0"}]]

INFO: [Labtools 27-1966] The ILA core 'hw\_ila\_1' triggered at 2022-Dec-02 15:26:57

INFO: [Labtools 27-3304] ILA Waveform data saved to file P:/StudentDocuments/Projects/project\_2/project\_2/backup/hw\_ila\_data\_1.ila. Use Tcl command 'import\_hw\_ila\_data' or Vivado File->Import->Import ILA Data menu item to import the previously saved data.

hw\_ila\_1

Waveform - hw\_ila\_1

ILA Status: Idle

Name

Value

btn\_IBUF[1:0]

1

0

00000000

channel\_OBUF[7:0]

04

00000000

00000001

00000000

00000010

00000000

00000100

00000000

00001000

00000000

sb\_OBUF

1

s\_sda\_OBUF

0

s\_rst\_OBUF

1

s\_clk\_OBUF

0

rst\_n\_IBUF

1

frame\_done

1

Enable

0

clk\_IBUF

0

Trigger Setup - hw\_ila\_1

Capture Setup - hw\_ila\_1

Name

Operator

Radix

Value

Port

frame\_done

==

[B]

R

probe5[0]

Type here to search

15:27 2.12.2022

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localhost (1)

xc7z020\_1 (2)

hw\_ila\_1 (u\_ila\_0)

Connected

Open

Programmed

ILA Core Properties

hw\_ila\_1

Name: hw\_ila\_1

Cell: u\_ila\_0

Device: xc7z020\_1

HW core: core\_2

Capture sample count: 0 of 1024

Core status: Idle

hw\_ila\_1

Waveform - hw\_ila\_1

ILA Status: Idle

Name	Value
btn_IBUF[1:0]	0
btn_IBUF[1:3-3]	0
channel_OBUF[7:0]	00010000
x_coord[7:0]	10
sb_OBUF	1
s_sda_OBUF	0
s_rst_OBUF	1
s_clk_OBUF	1
rst_n_IBUF	1
frame_done	1
Enable	0
clk_IBUF	0

Settings - hw\_ila\_1

Status - hw\_ila\_1

Core status

IdleWaiting for TriggerPost-TriggerFull

Capture status

Window 1 of 1IdleWindow sample 0 of 1024IdleTotal sample 0 of 1024Idle

Trigger Setup - hw\_ila\_1

Capture Setup - hw\_ila\_1

Name	Operator	Radix	Value	Port
frame_done	==	[B]	R	probe5[0]

Tcl Console

INFO: [Labtools 27-1964] The ILA core 'hw\_ila\_1' trigger was armed at 2022-Dec-02 15:27:24

wait\_on\_hw\_ila [get\_hw\_ilas -of\_objects [get\_hw\_devices xc7z020\_1] -filter {CELL\_NAME=="u\_ila\_0"}]

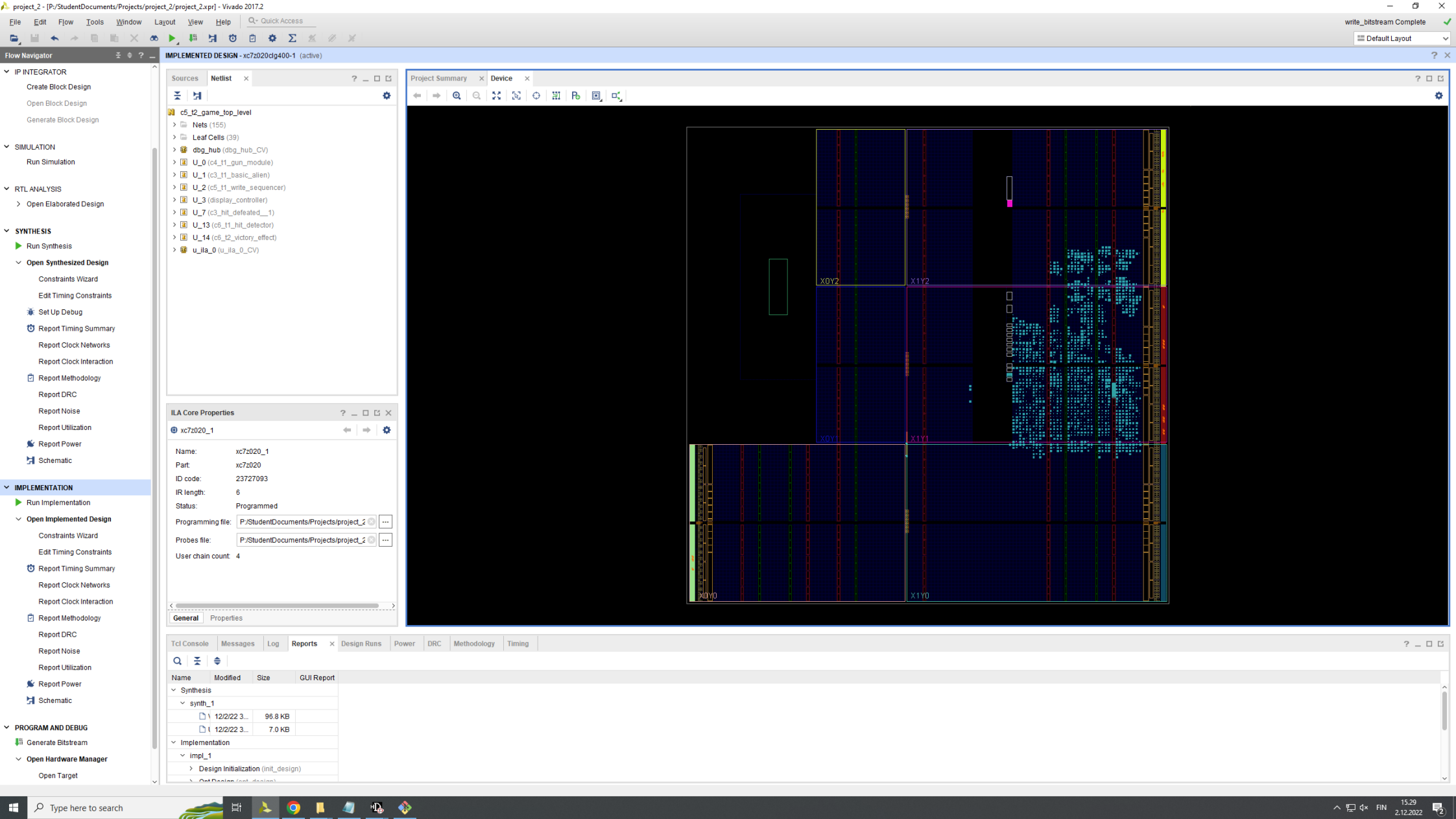
display\_hw\_ila\_data [upload\_hw\_ila\_data [get\_hw\_ilas -of\_objects [get\_hw\_devices xc7z020\_1] -filter {CELL\_NAME=="u\_ila\_0"}]]

INFO: [Labtools 27-1966] The ILA core 'hw\_ila\_1' triggered at 2022-Dec-02 15:27:24

INFO: [Labtools 27-3304] ILA Waveform data saved to file P:/StudentDocuments/Projects/project\_2\hw\_ila\_data\_1.ila. Use Tcl command 'import\_hw\_ila\_data' or Vivado File->Import->Import ILA Data menu item to import the previously saved data.

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arm\_dap\_0 (0)

xc7z020\_1 (2)

XADC (System Monitor)

hw\_ila\_1 (u\_ila\_0)

Connected

Open

N/A

Programmed

Idle

Debug Probe Properties

x\_coord[7:0]

Source: NETLIST

Type: ILA

Probe type: Data and Trigger

Width: 8

Display Name

Long name: x\_coord

Short name: x\_coord

Custom name:

hw\_ila\_1

Waveform - hw\_ila\_1

ILA Status: Idle

Name

Value

btn\_IBUF[1:0]

0

btn\_IBUF\_1[3:3]

0

channel\_OBUF[7:0]

00100000

x\_coord[7:0]

04

sb\_OBUF

1

s\_sda\_OBUF

0

s\_rst\_OBUF

1

rst\_n\_IBUF

1

frame\_done

0

Enable

0

clk\_IBUF

0

Settings - hw\_ila\_1

Status - hw\_ila\_1

Core status

Idle

Waiting for Trigger

Post-Trigger

Full

Capture status

Window 1 of 1

Window sample 0 of 1024

Total sample 0 of 1024

Idle

Idle

Idle

Trigger Setup - hw\_ila\_1

Capture Setup - hw\_ila\_1

Name

Operator

Radix

Value

Port

frame\_done

==

[B]

R

probe8[0]

Tcl Console

Messages

Serial I/O Links

Serial I/O Scans

INFO: [Labtools 27-1964] The ILA core 'hw\_ila\_1' trigger was armed at 2022-Dec-02 14:34:55

wait\_on\_hw\_ila [get\_hw\_ilas -of\_objects [get\_hw\_devices xc7z020\_1] -filter {CELL\_NAME==u\_ila\_0}]

display\_hw\_ila\_data [upload\_hw\_ila\_data [get\_hw\_ilas -of\_objects [get\_hw\_devices xc7z020\_1] -filter {CELL\_NAME==u\_ila\_0}]]

INFO: [Labtools 27-1966] The ILA core 'hw\_ila\_1' triggered at 2022-Dec-02 14:34:55

INFO: [Labtools 27-3304] ILA Waveform data saved to file P:/StudentDocuments/Projects/project\_2/project\_2/backup/hw\_ila\_data\_1.ila. Use Tcl command 'import\_hw\_ila\_data' or Vivado File->Import->Import ILA Data menu item to import the previously saved data.

Type a Tcl command here

2022-12-02 14:38

2.12.2022