**Submission Sheet - Lab 4**

Name:

Kyle

Jaru**)**

Section:

104

Scan this file and submit it on Canvas with the required images properly labeled in one file. Also include the required code. Every sign off requires either code or an image for points to be awarded.

1. TAs initials for the completion of the functional simulation for Part 1.1

(10 Points)

Initials: s

Date: 02-02-

12-2024

2. For each value of **X** make note of what the least significant bit in the

number assigned to the LEDR you are able to observe as changing. (10) Points)

**X**

LEDR Bit

5,000

LEOR [**8]**

25,000

LEDR[S]

100,000 LEOR [3]

3. What is the frequency you determined in the prelab for **"CLOCK\_50**"?

SO MHZ

4. What is the largest decimal value that "**[16:0] count**" can hold? (10

Points)

131, 071

**Last** Revised: 09/25/2021

Page 1 of 2

5. What is the value for **X** that allows you to see LEDR[0] blink at a rate of 1

Hz? (10 Points)

50,

000*,* 000

[32:0]

6. TAS initials for the completion of the physical implementation for Part 1.2

(10 Points) Initials:

chs

Date: 09-02-2024

7. TAs initials for the completion of the demonstration for Part 2. (20 Points)

Initials:

As Date: 07-02-2024

8. TAs initials for the completion of the demonstration for Part 3. (30 Points)

lly Date: Initials:

02-02-202y

9. Visual diagram for planning the implementation of Part 4. (10 Points).

Use code

from *PT* 3 for display

1-9 A-F

(cove from

PT.1J

Need [3210] for 50,000,000 HE

For

1MZ rate

10. TAs initials for the completion of the demonstration for Part 4. (30 Points)

Initials: Date: 02-02-2024

C

**Last** Revised: 09/25/2021

Page 2 of 2

Help

File

Simulation Waveform **Editor** - C:/Users/eerc-622-lab/Desktop/Lab4/Lab4 - Lab4 - [Lab4\_20240207103606.sim.vwf (Read-Only)]

Edit View

Simulation

Search altera.com

**1**

2 XÌ XE

INV **XC** XX X? **XR**

商品:

Master Time Bar: 0 ps

Pointer: 384.26 ns

Interval: 384.26 ns

Start:

End:

Value at

0 ps

40.0 ns

80.0 ns 120,0 ns 160,0 ns 200,0 ns 240,0 ns 280,0 ns 320,0 ns

360,0 ns

400,0 ns 440,0 ns

480,0 ns 520,0 ns

560,0 ns

600,0 ns

640,0 ns

680,0 ns 720,0 ns

760,0 ns

800,0 ns 840,0 ns

880,0 ns

920,0 ns

960,0 ns 1.0 us

I

Name

0 ps

out

LEDR

CLOCK

B 00000000...

BO

0 ps

wwwwwwwwwwwwwww www

wwwwwwwwwwwwwwwwwww

0000000000

0000000001

wwwww wwww wwww wwww

wwww

0000000010

wwwwwwwww

wwwwwwwwwwwwwww

0000000011

www

0000000100

X