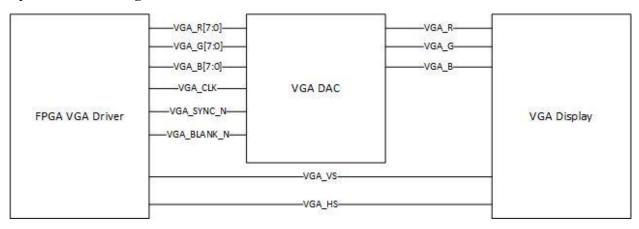
## Demonstration video link: https://youtu.be/v2KG8laFiuo

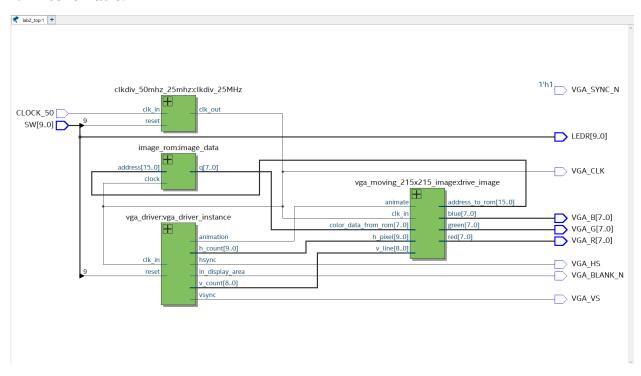
Timing calculations and data:

Resol-	Refresh	Pixel	Horizontal				Vertical			
ution	Rate	Clock	Display	Front	Sync	Back	Display	Front	Sync	Back
				Porch		Porch		Porch		Porch
640x480	60Hz	25MHz	640	16	96	48	480	10	2	33

## System block diagram:



## RTL schematic:



Zak Rowland CST351 April 29<sup>th</sup>, 2020 Lab 2 - Submission

What is the pixel clock required for 640 x 480 resolution at 60Hz?

• 25.175MHz or 25MHz

What is the pixel clock required for  $1920 \times 1080$  at 60 Hz?

• 148.5MHz