

COURSE PROJECT

PROJECT: GRAPHIC DISPLAY USING CRT

PROF: ANSHUL KUMAR

TA: SHRESHTH TULI

COURSE=COL215

EXECUTIVE SUMMARY:

This portion will give the basic idea what we have done till now and what we were thinking to do for given project "GRAPHIC DISPLAY". We are completed two different type of working of graphic display one is "CONTROL OF SQUARES BY SWITCHES" && other is "SCREEN SAVER". The project is course project of COL2015 given by Prof. Anshul Kumar. What we have planned is that we make something like paint means we will have pointer and by selecting that pointer and color we can draw the line and so on.

HOW WE REACHED HERE:

When project came to use firstly we were searching how it would work for that we have read so much and finally got it. Now second thing we were planning that anyhow we have to display color so that we would be sure that yups it is working, So display the color in whole screen. Now we have come to conclusion that we draw something so that idea can be extended for our desire purpose so we were trying to draw a rectangle or square for that we made a file which take the reference point and check that whole area is lying in display region or not if it is then it give a signal that yes we are in display region and we can the square.

WORKING:

Firstky we make a clock divider which give the 25MHz clock as a output. Now We have synchronize the horizontal and vertical signal so it display in 640*480 resolution display. Synchronizing the display means we have to take care when video signal will be on and when it will be off. As the horizontal counter and vertical counter in the display region we will allow the video signal to indicate that we in perfect region. Now our third file contain dimension of

square means how length and breadth are and if total square is in the region of display then there is output signal which indicates that we can draw the signal.

Now our main file contains the clk signal which is the main signal, Hsync and Vsync as output, Keys which take the four bit input and each bit is assigned for moving the square in right, left, up and down. There is also three bit input and each bit is assigned for choosing the color of square as we have color them.

ACHIEVEMENTS:

Here we have finally getting the two different things one is like a flag will go from left to right in continuous manner which is something like a screen saver and one thing is that we can also control it in the sense that we can move it in the direction of up, down and left.

Second thing we have implemented is that we have three squares which can move in the direction of left, right, up and down. We can also choose the different colours for them and choosing the colour for any square we will control that square.