NCTU-CS Digital System Lab

FPGA LAB 03

Design: VGA

Data Preparation

Extract LAB data from the Course Website.
The extracted LAB directory contains:
FPGA_Lab03/: top.v, top.ucf

Design Description

In this lab, we use FPGA board to implement Bouncing Ball behavior showing on the LCD. The behavior as following:
(1) The ball(radius:100-pixals) on the VGA screen slowly moving to the bottom of VGA screen.
(2) When touch the bottom of VGA screen, **it bounces back to the original path** and **bounces half length of the original path each time**.
(3) Repeat (1) and (2) until the ball is static.
(4) When the RESET was pressed, ball center relocate in (504,0) and repeat (1) and (2).