



Video Wall Project Overview

ELE 480/481

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Video Wall Project Overview Fall 2011, Spring 2012 Slide 1 of 6

Overview

- Design and test a system that receives DVI or DisplayPort or HDMI video signal and breaks it into 3x3 or 4x4 grid for display on a wall of video monitors.
 - Xilinx FPGA
 - Schematic Capture and Analysis
 - PCB layout and verification

Block Diagram



Project Goals

Use existing Xilinx "IP" as a base for development of a video wall processor

- Review Xilinx documentation
- Design circuitry schematic and PWB layout
 - RCVR
 - XMTR
- Develop VHDL code for Xilinx FPGA chips
- Test hardware and demonstrate generation of test signals

Project Status

This project is a completely new project

Functional Positions

- Circuit Designers (2) <RCVR and XMTR>
 - Review reference designs and current Xilinx designs to gain understanding of entire system
 - Utilize DipTrace to complete schematic capture and PCB layout, validate design, and define Bill of Materials
- VHDL Engineer (1)
 - Design and develop VHDL control code