

- Scan Logic
  - Address convention for reading from 1<sup>st</sup> ZBT and reading/writing to 2<sup>nd</sup> ZBT works.
  - Logic to read from 1<sup>st</sup> ZBT to create 6x3 and 8x5 windows for Harris and Sobel works.
  - Display module works.
  - 2<sup>nd</sup> ZBT set up properly
  
- Sobel Edge Detector
  - Properly calculates values as shown by “edge value” mode
  - Successfully convolutes 3x3 window of pixels with 3x3 gradient mask in the time domain.
  - Uses threshold to output black edges with a white background.
  - Also can use intensity of edge to output different levels of intensity depending on the edge.
  - Circular buffer of 6x3 local window of pixels works properly.
  - Calculates the likelihood that a pixel is an edge in batches of 4.
  
- Harris Corner Detector
  - Calculates 18 x and y pixel gradients per local window 8 x 5 window.
  - Pipelined using 4 stages to carry out calculation.
  - Finds corner value based on pixel gradients
  - Outputs whether a given pixel is a corner or not
  
- Histogram Equalizer
  - Properly increments counters for each CDF value
  - Makes CDF function for grayscale values in image
  - Makes look up table mapping old grayscale values to new ones
  
- System Integration
  - Merge edge detector and corner detector since they do redundant calculations
  - Have histogram equalizer feed equalized image into edge and corner detector