Image manipulation top

# Overall:

The top block using 5 data registers: zoom, sin\_teta, cos\_teta, x\_crop and y\_crop.

This data originate in the top GUI and through the wishbone protocol reaches the img\_manipulation\_top.

# Method:

The top block sends a (x,y) coordinate to the addr\_calc. (x,y) is one pixel in the output picture.

Addr\_calc sends back 4 pixels of the origin image with the weight.

The top block reads the 4 pixels from the memory

The bilinear interpolation is operating (bilinear interpolator- TBD)

The calculated value (color) will be written to the memory in the appropriate address.

Reading from bank "0"

Writing to bank "1"