

Read Image and Process in FPGA

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Implementation Details and Methods

- Reading:
Convert the file into bitmap and subsequently convert it into hexadecimal code with the help of MATLAB/OCTAVE and provide the output to FPGA via arduino.
- Processing:
We will be doing two types of processing :
 - i. Reduction in Brightness
 - ii. Color Inversion

Use Case

The image reading Verilog code will operate as a Verilog model of an image sensor/camera, which can be really helpful for functional verifications in real-time FPGA image processing projects. The image writing part is also extremely useful for testing as well when you want to see the output image in BMP or any format.

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