

Image processing using FPGA

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Introduction



ORIGINAL COLOR



HEX #f50057

RGB

R 245 G 0 B 87

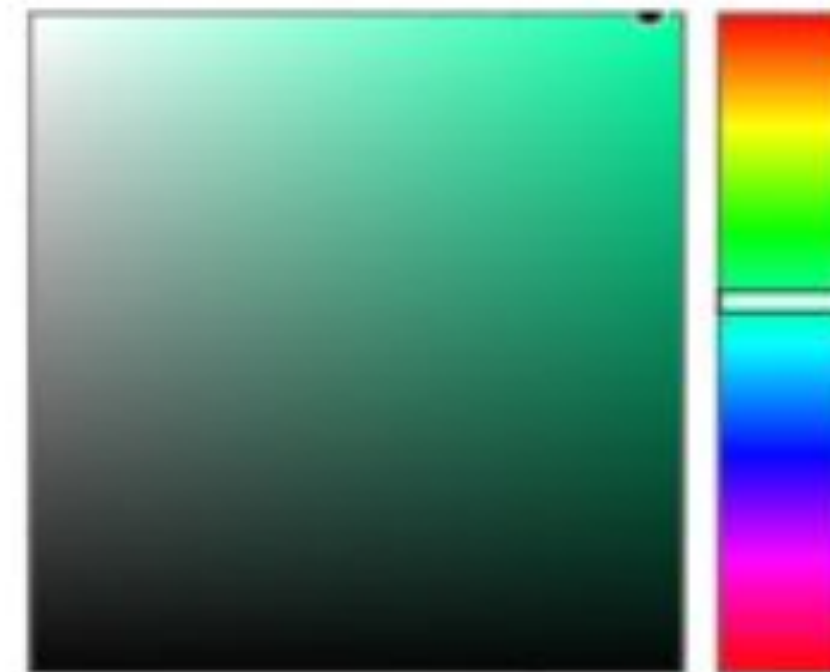
HSV

H 338.7 S 100 V 96

HSL

H 338.7 S 100 L 48

INVERTED COLOR



HEX #0affa8

RGB

R 10 G 255 B 168

HSV

H 158.7 S 96 V 100

HSL

H 158.7 S 100 L 52



Required Software and Installation



Hardware Required



Program Code Description



Verilog Code Description and Pin Connection



Project Demo



**For the processing it will
take around 3-4 Minutes**





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About

Important links:

GitHub Link: https://github.com/prabhatrai111/FPGA_LAB_EE5811

References/Citations:

1. M. I. AlAli, K. M. Mhaidat and I. A. Aljarrah, "Implementing image processing algorithms in FPGA hardware," 2013 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT), Amman, 2013, pp. 1-5.
2. <https://www.fpga4student.com/2016/11/image-processing-on-fpga-verilog.html>
3. Johnston, Christopher T., K. T. Gribbon and Donald G. Bailey. "Implementing Image Processing Algorithms on FPGAs." (2005).
4. <https://www.vision-systems.com/articles/print/volume-22/issue-8/features/cpu-or-fpga-for-image-processing-which-is-best.html>

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