

ECE270: Embedded Logic Design

Mock Exam

Date: 22-12-2021

Time Duration: 3 Hours (9:00 am to 11:59 am)

Submission Requirements: This is a mock exam and requires self-assessment. **No need to submit anything.** For any doubts and queries, ask the TAs during office hours.

Question 1. Design a system that reads an array of 8 integers from BRAM, converts it to single precision floating point, computes its square root, and writes the output back to BRAM. Simulate it and show the input data and output results in the simulation waveform. Use MicroBlaze to store the input array in BRAM.

IPs to be used:

MicroBlaze: As a processing system

DMA: For data transfer.

Floating-point IP: For data conversion and square root computation