MEMO: TSR-08
DATE: April 6, 2018
TO: EFC LaBerge
FROM: Sabbir Ahmed, Jeffrey Osazuwa, Howard To, Brian Weber
SUBJECT: Team Status Report

Introduction

The Galois Field Arithmetic Unit will accept two inputs a and b and determine the desired arithmetic result n, and to establish the field generating polynomial. The unit would serve as a computation engine for a relatively low-powered microcontroller, and would enable complex code and encryption algorithms. Project will include implementation of a Reed Solomon encoder and decoder using the GFAU. The purpose of this report is to detail the progress of the GFAU in the period of March 9, 2018 through April 6, 2018. This is the third status report for the second semester for the GFAU team.

Completed Tasks

During this work period, the team has continued to make progress on the GFAU. Including the following achievements:

1. Implemented 90% of the modules
2. Generated test benches for all the modules
3. Parameterized all existing modules
4. Optimized several modules to significantly reduce hardware

The team has also worked on preparing the poster presentation for URCAD.

Planned Tasks

1. Finish interfacing FPGA with memory
2. Finalize all VHDL modules
3. Interface FPGA with IO.
4. Present the poster in URCAD

Current Issues

No issues, whether team dynamics or lack of resources.