MEMO: TSR-03
DATE: December 10, 2017
TO: EFC LaBerge
FROM: Sabbir Ahmed, Jeffrey Osazuwa, Howard To, Brian Weber
SUBJECT: Team Status Report

1 Introduction

The Galois Field Arithmetic Unit will accept inputs to determine 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 November 17, 2017 through December 6, 2017. This is the fifth and final status report for the first semester for the GFAU team.

2 Completed Tasks

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

a) A final high level data flow diagram has been completed.

b) Our preliminary design review was presented on Wednesday 6th.

c) Multiplication module is completed.

d) Division module is nearing completion.

e) Term generation low level design is completed.

f) Incremental progress on the remaining modules has been made.

3 Planned Tasks

Before returning from break, our team will:

a) Complete all VHDL code.

b) Write test benches for all major modules to verify their functionality.

c) Make a more concrete plan for the the hardware section of our implementation to make sure the second semester goes smoothly.

4 Current Issues

No issues in team dynamics or lack of resources, exist in the team so far, however we are behind schedule. This should not be an issue however, as we will catch up over winter break, and our work load in other classes will be lighter next semester.