A Comparison of Implementations of the SAR Benchmark on C and ZPL

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Abstract
A real-time implementation of Synthetic Aperture Radar (SAR) in the C programming language is compared to an implementation in the ZPL programming language on an imbedded Mercury Race computer. The purpose of this research is to quantify the amount of performance lost as compared to the ease of development and to expose flaws in the ZPL programing language. An approach to improving ZPL is then proposed.

1 Introduction

2 Overview

2.1 Mercury’s RACE Architecture ???

2.2 SAR
Synthetic Aperature Radar (SAR) is a common radar processing bench mark created at MIT Lincoln Laboratories.

2.3 ZPL

3 Results

4 Discussion

5 Conclusion