EECS 690 Project 1 Report

Program Profiling on a TI Tiva C TI TM4C1294NCPDT using FreeRTOS

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1 Abstract

Many people write tasks for various computer systems every day without understanding how many resources that task will actually use. This report helps show how to calculate the amount of time each of those tasks will take, specifically on a TI TM4C1294NCPDT board using FreeRTOS.

2 Revision History

The following table lists the revision history for this document.

Table 2-1 Revision History

Date	Revision	Description
September 18, 2018	1.0	Initial Release

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Principles of Operation (POP)

The POP shall describe the architecture and design of your project; it should start with an overall prose description of the project and goal and include a top-level block diagram; you should then describe your project in detail; you should list all modules you used or adapted from other sources

6 Data Structure Descriptions

Table 6-1 Data Structures

Data Structure Name	Туре	Data Structure Description

7 Function Descriptions

Table 7-1 Functions

Function Name (Purpose)	Function Pseudo Code	Referenced External Functions
Task_ProgramTrace		
This task purpose.		

8 Parameters

Table 8-1 Parameters

Parameter Name	Parameter Type	Parameter Default Value	Parameter Description
Current_PC	uint32_t	0	Contains the current Program Counter.

9 Testing

10 Lessons Learned

Never write assembly, it is terrible...

Appendix A – Program Source Code