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MEMO Number: 002
DATE: 10-10-2014
TO: ACME Chief Engineer E.F. Charles Laberge, PhD
FROM: GuPS1 Team (Written by Natalie Morningstar)
SUBJECT: Team Status Report 1

1 Introduction

During the period September 1, 2012 - October 10, 2014 a number of preliminary tasks have either been completed or started. Such tasks include:

- Task 0.1 - completed by John
- Task 0.2 - completed by Matt
- Task 0.3 - completed by Natalie
- Task 1.0 - completed by John
- Task 1.1 - completed by all team members
- Task 1.2 - started by all team members
- Task 1.3 - started by all team members

2 Completed Work

A detailed breakdown of task is provided below.

- Task 0.1 - Created a System Boundary Diagram
- Task 0.2 - Created a Mission Scenario
- Task 0.3 - Created a Project Chart and Network Flow Diagram
- Task 1.0 - Synchronization of all team members' workspaces for revision control.
- Task 1.1 - Determined interface method between product and guitar. The decision at this time is to use a 1/4th inch to USB adaptor, which will complete the analogue to digital conversion and provide serial data for processing.

- Task 1.2 - Research has begun on the interface method between the product and the amplifier. This requires a knowledgeable decision, as it must handle the digital to analogue conversion.
- Task 1.3 - Explorative research has begun on developing the product on a Zynq 7020, which houses an Arm processor and Xilinx FPGA. There are a number of free IP Cores capable of several DSP functions. Developing in an environment that can be flexible has received favorable marks across the team members, but not all options have been explored. It is possible to develop completely in software or in other hardware devices. This will be a priority moving into the next reporting period.

3 Work Expected during Next Reporting Period

During the next period, unfinished tasks from the current period will be transferred. It is anticipated that the following tasks will be completed in the next reporting period.

- Task 0.4 - due October 24, 2014
- Task 0.7 - due October 24, 2014
- Task 1.2 - continue
- Task 1.3 - continue
- Task 1.4 - should be completed

4 ISSUES

Currently, the team has no urgent issues, but as time progress, anticipated issues are: digital to analogue implementation and interface method from product to amp