Interface Control Document

between
GPS Module
and
CSB377::GPS_Monitor

Channel: **RS232**

Project: **Location Aware Tourist System**

**REVISION 0.1**

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**SCOPE**

This document covers the interface between the GPS module and the GPS monitor daemon located in the software running on the CSB337. The RS232 interface is used for communication.

**SYSTEM OVERVIEW**

The systems involved include the Motorola FS Oncore GPS unit and the Atmel AT91RM9200 ARM microprocessor. The Motorola GPS unit outputs raw coordinate data which is fed into the microprocessor via the serial cable. The microprocessor, running μCLinux, is used to interpret the data and retrieve the longitude and latitude values.

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1. INTRODUCTION

The layout of this document is intended to help understand the interface between the GPS module and the microprocessor board. The document includes block diagrams of the systems/subsystems involved and the connections between them, a list of the protocols used in the communication and a definition of the interface used. A glossary of terms, references and appendix are also present.

2. BLOCK DIAGRAM

![Block Diagram](image)

Figure 1: Block diagram of subsystems, connections and interfaces involved.

3. LIST OF PROTOCOLS

1. RS232 (Serial)
   1.19200 baud
   2.1 stop bit
   3. no flow control

2. Motorola Binary Format

4. INTERFACE DEFINITION

1. Software interface definition
   Type: Stream structure

[More to come]
5. GLOSSARY

6. REFERENCES


7. APPENDIX