

Embedded Wireless Sensor Design for Long Term Structural Health Monitoring

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¹Finite Element Modelling

²Instrumentation Development

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I have read this paper in its entirety and approve it for submission.

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Contents

1	Introduction	6
1.1	Objectives	6
1.1.1	Phase One	6
1.1.2	Phase Two	6
1.2	Layout	6
2	Finite Element Model (FEM)	7
2.1	Introduction	7
2.1.1	Background of Claiborne Pell Bridge	7
2.1.2	Introduction of FEM	7
2.2	Abaqus FEM Verification	7
2.2.1	L Beam Analysis	7
2.3	Claiborne Pell Bridge Model	7
2.3.1	Modeling Large Suspension Bridges	7
2.3.2	Model Process	7
2.3.3	Limitations of Abaqus FEM	7
3	Instrumentation Package	8
3.1	Introduction	9
3.2	Microprocessor	9
3.2.1	Necessary Specifications	9
3.2.2	Platform Options	9
3.2.3	Final Platform	9
3.3	Sensors	9
3.3.1	Accelerometer	9
3.3.2	Strain Gauge	9
3.3.3	GPS Receiver	9
3.3.4	CORS	9
3.3.5	Analog to Digital Converter	9
3.4	Electronics Design	9
3.4.1	Introduction	9
3.4.2	Circuitry	9
3.4.3	Printed Circuit Board	10
3.5	Software Design	10
3.6	Package Power	10

3.6.1	Power Budget	10
3.6.2	Energy Scavenging Potential	10
3.6.3	Battery Selection	10
4	Data Collection	11
4.1	Phase One Data Collection	11
4.1.1	6g Tri-Axial Accelerometer Data	11
4.2	Phase Two Data Collection	11
4.2.1	6g Tri-Axial Accelerometer Data	11
4.2.2	1.5g Tri-Axial Accelerometer Data	11
4.2.3	Cell Phone Accelerometer	11
4.2.4	Battery Discharge Curve	11
4.2.5	Experimental Observed Efficiency	11
5	Data Analysis	12
5.1	Phase One Data Analysis	12
5.1.1	Comparison of Preliminary Abaqus Model and Preliminary Data . . .	12
5.2	Phase Two Data Analysis	12
5.2.1	Comparison of Developed Abaqus Model with Literature	12
5.2.2	Comparison of Developed Abaqus Model with Developed Abaqus Model	12
6	Future Development	13
6.1	Instrumentation	13
6.1.1	Integration of Strain Gauge	13
6.1.2	Wireless Transmission	13
6.1.3	GPS Time Synchronization	13
6.1.4	Package Assembly	13
6.2	FEM	13
6.2.1	Model Improvements	13
6.2.2	Dynamic Loading	13
7	Conclusion	14
A	Sensor Package Schematics	15

List of Figures

A.1	Schematic of BeagleBone Black	16
A.2	Schematic of Copernicus II GPS Receiver	17
A.3	Schematic of four ADS1113 ADC units in parallel	18
A.4	Schematic of 5V and 3.3V voltage regulator circuit	19
A.5	Schematic of MMA7361 $\pm 1.5g / \pm 6g$ Tri-Axial Accelerometer	20

List of Tables

Chapter 1

Introduction

1.1 Objectives

1.1.1 Phase One

1.1.2 Phase Two

1.2 Layout

Chapter 2

Finite Element Model (FEM)

2.1 Introduction

2.1.1 Background of Claiborne Pell Bridge

2.1.2 Introduction of FEM

2.2 Abaqus FEM Verification

2.2.1 L Beam Analysis

2.3 Claiborne Pell Bridge Model

2.3.1 Modeling Large Suspension Bridges

2.3.2 Model Process

2.3.3 Limitations of Abaqus FEM

Chapter 3

Instrumentation Package

3.1 Introduction

3.2 Microprocessor

3.2.1 Necessary Specifications

3.2.2 Platform Options

3.2.3 Final Platform

3.3 Sensors

3.3.1 Accelerometer

Necessary Specifications

Sensor Options

Sensor Selection

3.3.2 Strain Gauge

Necessary Specifications

Sensor Options

Sensor Selection

3.3.3 GPS Receiver

Necessary Specifications

Sensor Options

Sensor Selection

3.3.4 CORS

3.3.5 Analog to Digital Converter

Necessary Specifications

Platform Options

3.4.3 Printed Circuit Board

3.5 Software Design

3.6 Package Power

3.6.1 Power Budget

3.6.2 Energy Scavenging Potential

Wind Potential

Solar Potential

3.6.3 Battery Selection

Chapter 4

Data Collection

4.1 Phase One Data Collection

4.1.1 6g Tri-Axial Accelerometer Data

4.2 Phase Two Data Collection

4.2.1 6g Tri-Axial Accelerometer Data

4.2.2 1.5g Tri-Axial Accelerometer Data

4.2.3 Cell Phone Accelerometer

4.2.4 Battery Discharge Curve

4.2.5 Experimental Observed Efficiency

Chapter 5

Data Analysis

5.1 Phase One Data Analysis

5.1.1 Comparison of Preliminary Abaqus Model and Preliminary Data

5.2 Phase Two Data Analysis

5.2.1 Comparison of Developed Abaqus Model with Literature

5.2.2 Comparison of Developed Abaqus Model with Developed Abaqus Model

Chapter 6

Future Development

6.1 Instrumentation

6.1.1 Integration of Strain Gauge

6.1.2 Wireless Transmission

6.1.3 GPS Time Synchronization

6.1.4 Package Assembly

Fabrication of Circuit Board

Battery Integration

Package Enclosure

Power Management

Package Location

6.2 FEM

6.2.1 Model Improvements

6.2.2 Dynamic Loading

Chapter 7

Conclusion

Appendix A

Sensor Package Schematics

BeagleBone Black Block

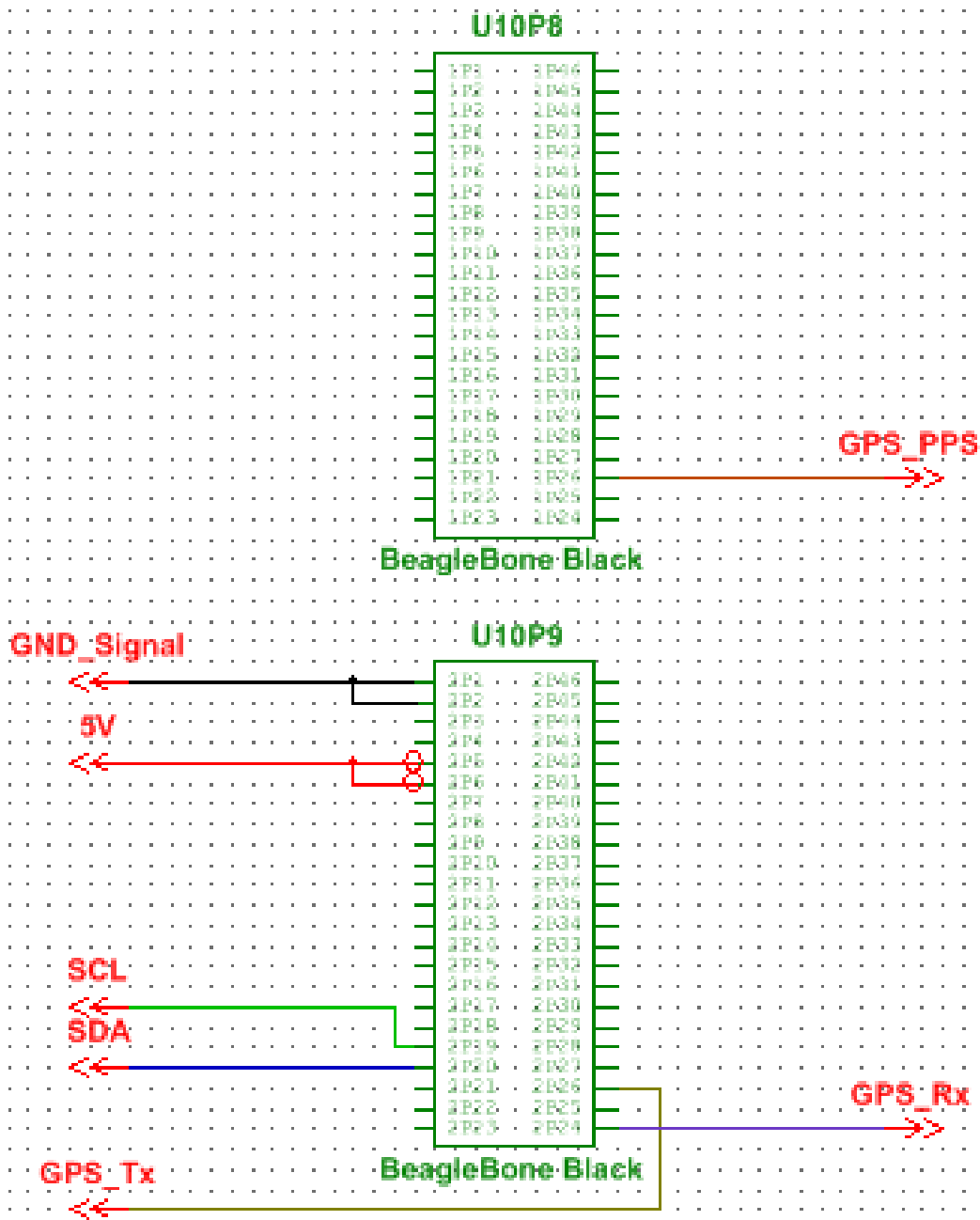


Figure A.1: Schematic of BeagleBone Black

Copernicus II GPS Block

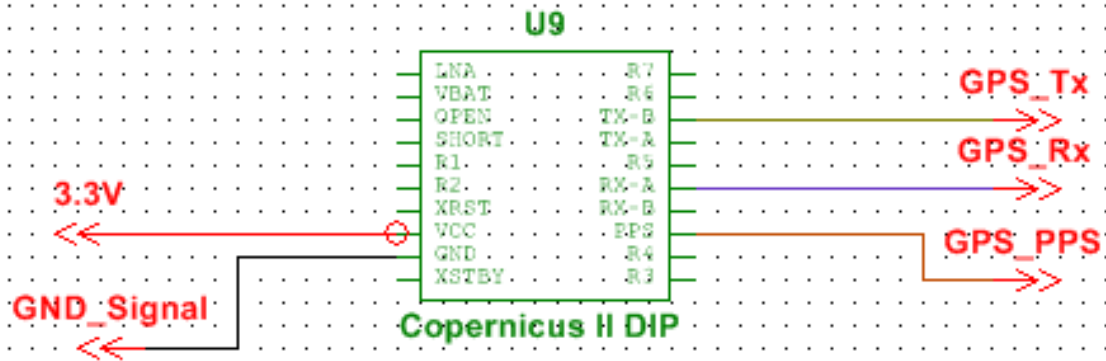


Figure A.2: Schematic of Copernicus II GPS Receiver

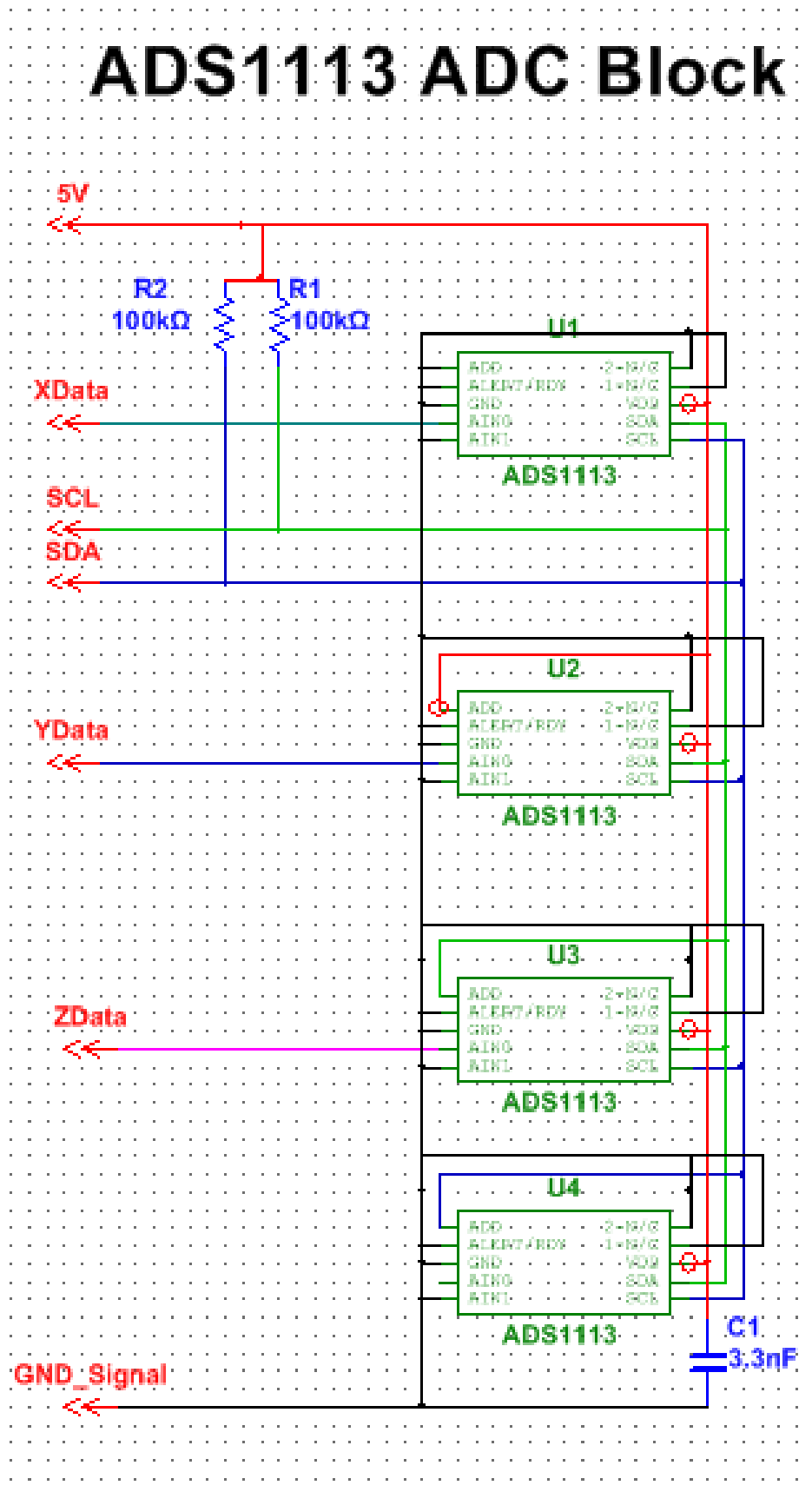


Figure A.3: Schematic of four ADS1113 ADC units in parallel

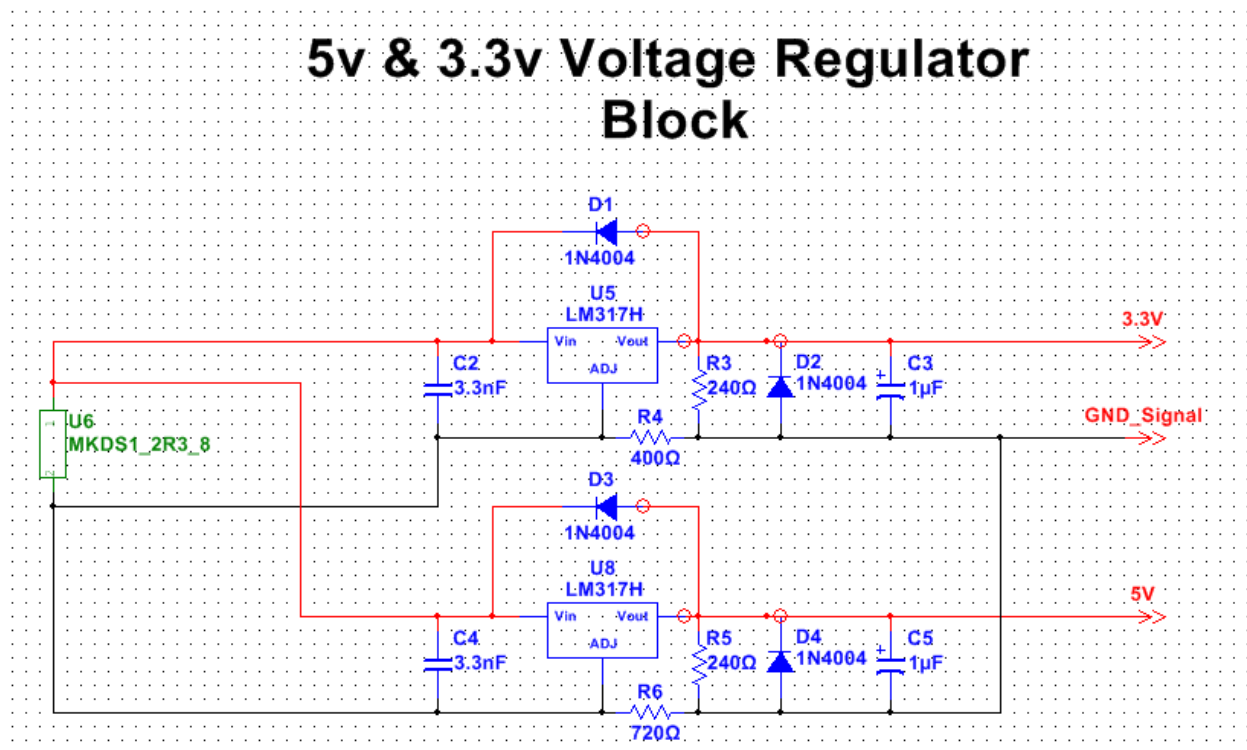


Figure A.4: Schematic of 5V and 3.3V voltage regulator circuit

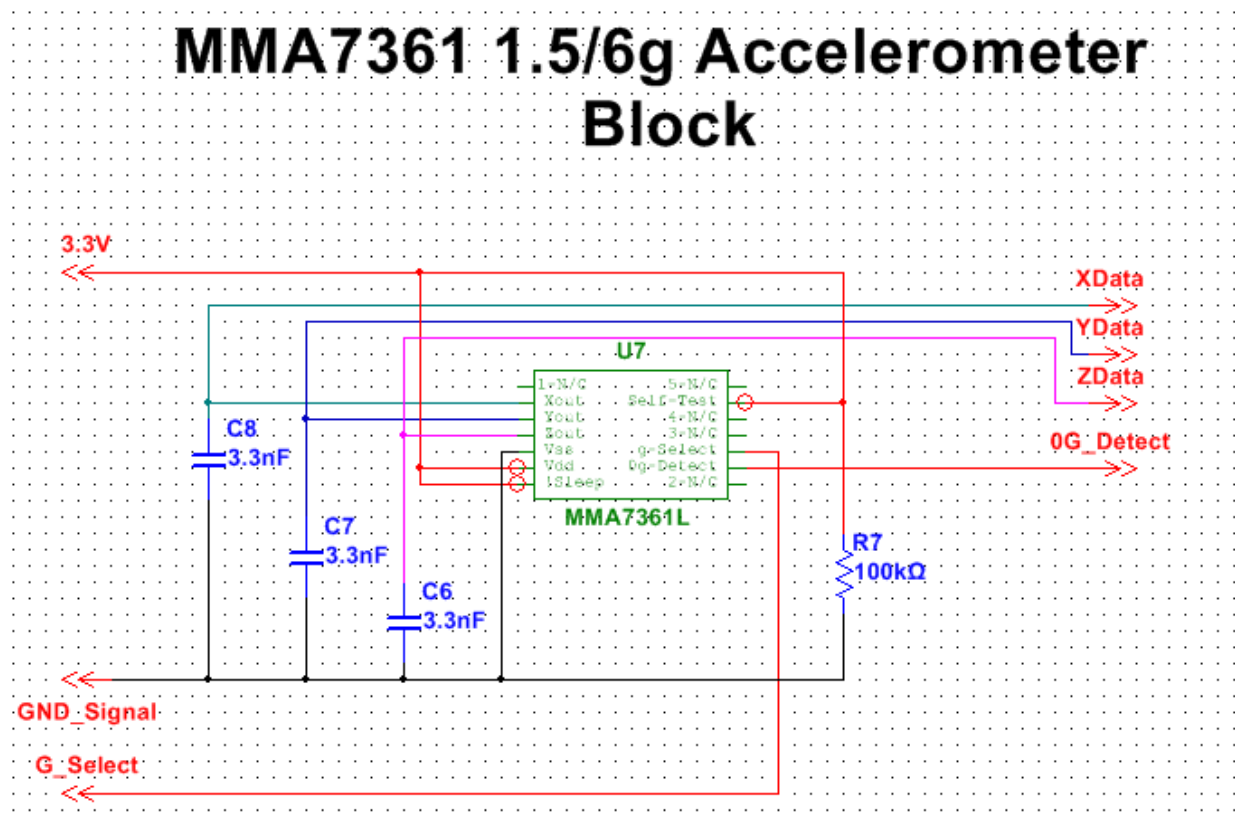


Figure A.5: Schematic of MMA7361 $\pm 1.5g / \pm 6g$ Tri-Axial Accelerometer