Intel Leap Ahead Logo

E3VB

**Engineering Engagement Electrical Validation Board**

**Project Proposal**

Revision 1.4

January 2015

Team 12

Owners: Kris Gibbs, Brandon Towell, Luis Santiago, Travis Berger

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# About this Document

## Introduction, Purpose and Scope

This document covers the project proposal.

## Document Revisions

|  |  |  |  |
| --- | --- | --- | --- |
| **Rev.** | **Date** | **Owner** | **Details** |
| **1.0** | 1/13/15 | Kris Gibbs | Initial doc with initial outline of project |
| **1.1** | 1/17/15 | Kris Gibbs | Added more detail to the documentation and added a new section for board improvements |
| **1.2** | 1/17/15 | Brandon Towell, Travis Berger, Luis Santiago | Group revisions and expansion to proposal points. Added team number to Title Page. |
| **1.3** | 1/24/15 | Travis Berger, Luis Santiago, Kris Gibbs | Added task breakdown and task timeline. |
| **1.4** | 1/26/15 | Dr. Morris | Edited experiments in timeline |
|  |  |  |  |
|  |  |  |  |

Table 1 – Document Revisions

## Abbreviations, Acronyms and Terminology

|  |  |  |
| --- | --- | --- |
| **Term** | **Acronym** | **Description** |
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Table 2 - Abbreviations, Acronyms and Terminology

## Reference Documents

|  |  |  |  |
| --- | --- | --- | --- |
| **Ref #** | **Document Name** | **Doc Ver.** | **Relevance** |
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Table 2 – Reference Documents

# Project Proposal

This section defines the projects key work items.

## Project Tasks

### Improve Project Documentation

* Give all Documents the same look and feel.
* Create a lab manual for the student and a separate lab manual for the Lab instructor with expected results and more detailed directions.
* Provide background theory before each experiment.
* Make experiments as clear as possible by improving setup procedure.

### Develop a User Friendly Website

* Post all experiment documentation to the website in a printer friendly format.
* Develop an interactive section of the website.

### Get the Word Out About the Board

* Develop a way to improve exposure of the board.

### Add Content to Board Experiments

* Add steps to current experiments.
* Possibly create new experiments.

### Improve the Board Documentation

* Provide clear concise locations for board experiments.
* Provide top down visual aids for various experiments.

## Task Breakdown

### Kris

##### Experiments

* Intersymbol Interference
* Simalutaneous Switching Outputs
* Crosstalk I & II

##### Website Development

* Hosting
* Learning Language
* Writing Code

### Luis

##### Experiments

* Intersymbol Interference
* Driver Circuit
* Crosstalk I & II

##### Website Development

* Support Kris

### Travis

##### Experiments

* LCR Transmission Line
* Corners and Vias
* Crosstalk I & II

##### Promotion

* Investigate Promotional Avenues
* Investigate Best Promotional Medium
* Create Promotional Project and Deliver Across Promotional Avenue

### Brandon

##### Experiments

* Mystery Traces
* Decoupling
* Crosstalk I & II

##### Promotion

* Investigate Promotional Avenues
* Investigate Best Promotional Medium

## Project Timeline

##### Experiments

1. Crosstalk I
   * One Week
2. Crosstalk II
   * One Week
3. Intersymbol Interference
   * Three Weeks
4. Simalutaneous Switching Outputs
   * Three Weeks
5. Intersymbol Interference
   * Three Weeks
6. Driver Circuit
   * Three Weeks
7. LCR Transmission Line
   * Three Weeks
8. Corners and Vias
   * Three Weeks
9. Mystery Traces
   * Three Weeks
10. Decoupling
    * Three Weeks

### Experiments Expected Completion:

1. **Preliminary Student Version: End of Febuary**
2. **Final Including Instructor Version: End of March**

##### Website Development

1. Hosting
   * **Expected Completion: End of March**
2. Learning Language
   * **Expected Completion: Mid April**
3. Writing Code
   * **Expected Completion: Mid May**

### Website Expected Completion: Mid May – End of May

##### Promotion

1. Investigate Promotional Avenues
   * **Expected Completion: End of March**
2. Investigate Best Promotional Medium
   * **Expected Completion: End of March**
3. Create Promotional Project and Deliver Across Promotional Avenue
   * **Expected Completion: Mid May**

### Promotion Expected Completion: Mid May