

# E3VB

Engineering Engagement Electrical Validation Board

# Project Proposal

**Revision 1.3** 

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Team 12

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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

**Table 2 - Abbreviations, Acronyms and Terminology** 



## **Reference Documents**

Ref#	Document Name	Doc Ver.	Relevance
Ref 1			
Ref 2			
Ref 3			
Ref 4			
Ref 5			
Ref 6			
Ref 7			

**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
  - o One Week
- 2. Crosstalk II
  - o One Week
- 3. Intersymbol Interference
  - Three Weeks
- 4. Simalutaneous Switching Outputs
  - o Three Weeks
- 5. Intersymbol Interference
  - Three Weeks
- 6. Driver Circuit
  - o Three Weeks
- 7. LCR Transmission Line
  - o Three Weeks
- 8. Corners and Vias
  - o Three Weeks
- 9. Mystery Traces
  - o Three Weeks
- 10. Decoupling
  - o 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
  - o Expected Completion: Mid April
- 3. Writing Code
  - Expected Completion: Mid May



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

#### **Promotion**

1. Investigate Promotional Avenues

o Expected Completion: End of March

2. Investigate Best Promotional Medium

o Expected Completion: End of March

3. Create Promotional Project and Deliver Across Promotional Avenue

o Expected Completion: Mid May

**Promotion Expected Completion: Mid May**