

# **DOPES**

**(DIAGNOSTICS OF POWER ELECTRONIC SYSTEMS)**

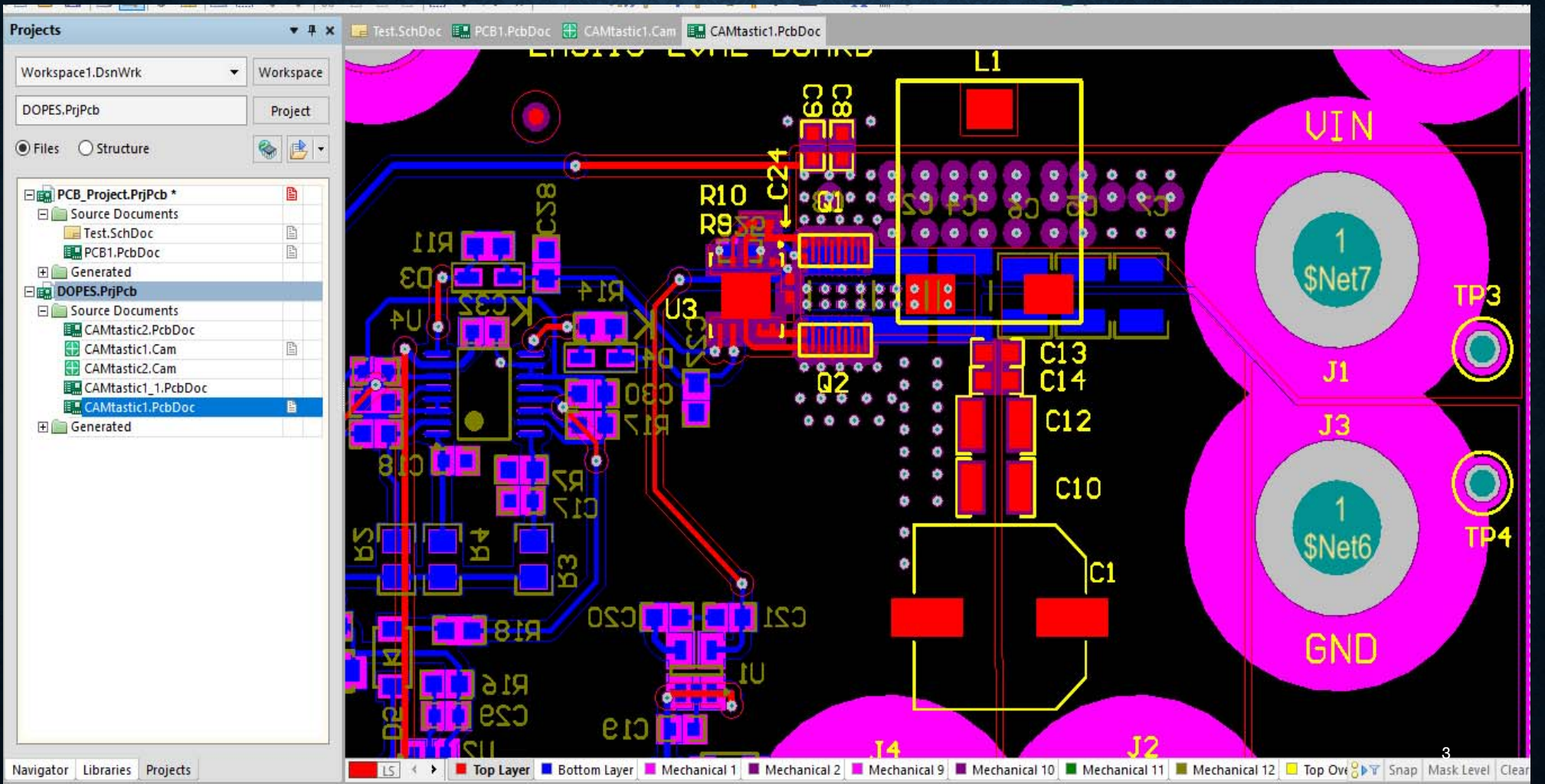
## **Progress Report 1**

2/13/2018

Shamar Christian

# MILESTONE SUMMARY

Month	Deliverable	Responsibility	Update
January – mid February	PCB Design Submission	Shamar Christian	Awaiting Status Update on manufacturing process



Projects

Workspace1.DsnWrk Workspace

Project

Files Structure

- PCB\_Project.PrjPcb \*
  - Source Documents
    - Test.SchDoc
    - PCB1.PcbDoc
  - Generated
  - DOPES.PrjPcb
    - Source Documents
      - CAMtastic2.PcbDoc
      - CAMtastic1.Cam
      - CAMtastic2.Cam
      - CAMtastic1\_1.PcbDoc
      - CAMtastic1.PcbDoc
    - Generated
  - Free Documents
    - Source Documents
      - DOPES\_1.0\_Design.PcbDoc

Navigator Libraries Projects

LS < > Top Layer Bottom Layer Mechanical 1 Mechanical 2 Mechanical 9 Mechanical 10 Mechanical 11 Mechanical 12 Top Over Snap Mask Level Clear

# ACTIVITY SUMMARY

## Highlights

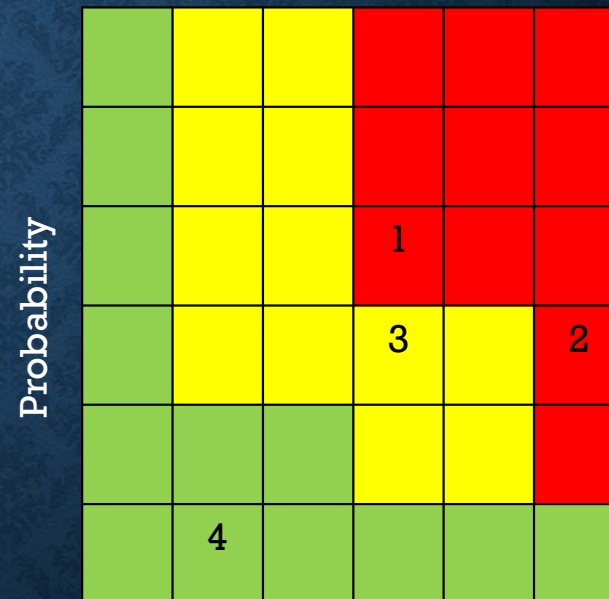
- Completed Circuit Redesign
- Successfully sent design to PCB mill
- Progress made in data analysis towards failure “definition”

## Lowlights

- Waiting for new PCB to arrive
- Research into mitigation techniques depending on PCB mill instructions on redesign (if needed)
- No verification method

# RISK MANAGEMENT

Rank	Risk	Approach
1	Incorrect Copper Pour in Design	Redesign Copper Pour
2	Altered Circuit functionality	Simulate and modify design
3	Insufficient Data transported for PCB fabrication	Send entirety of exportation files to PCB mill
4	Low accuracy data yield	Modify Sensor z position



Impact

## PLANNED ACTIVITY FOR NEXT PERIOD

- Anticipated feedback of circuit redesign
- Assistance in further data processing
- LabView set up and manipulation for impedance spectroscopy
- Full implementation of redesigned circuit in current experimental setup