ZUWEE TECHNOLOGIES

Dotslash Home

MISSION

- Create a framework called ‘Dotslash’ that can securely and reliably control a set of nodes wirelessly, over local network or internet, with help of a central hub.
- Use this framework to design, produce and market a range of integrated modern smart home solution.

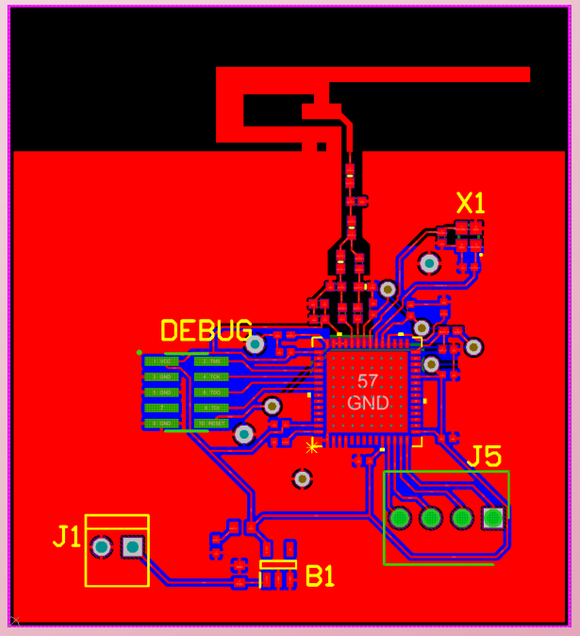
OUR TIMELINE

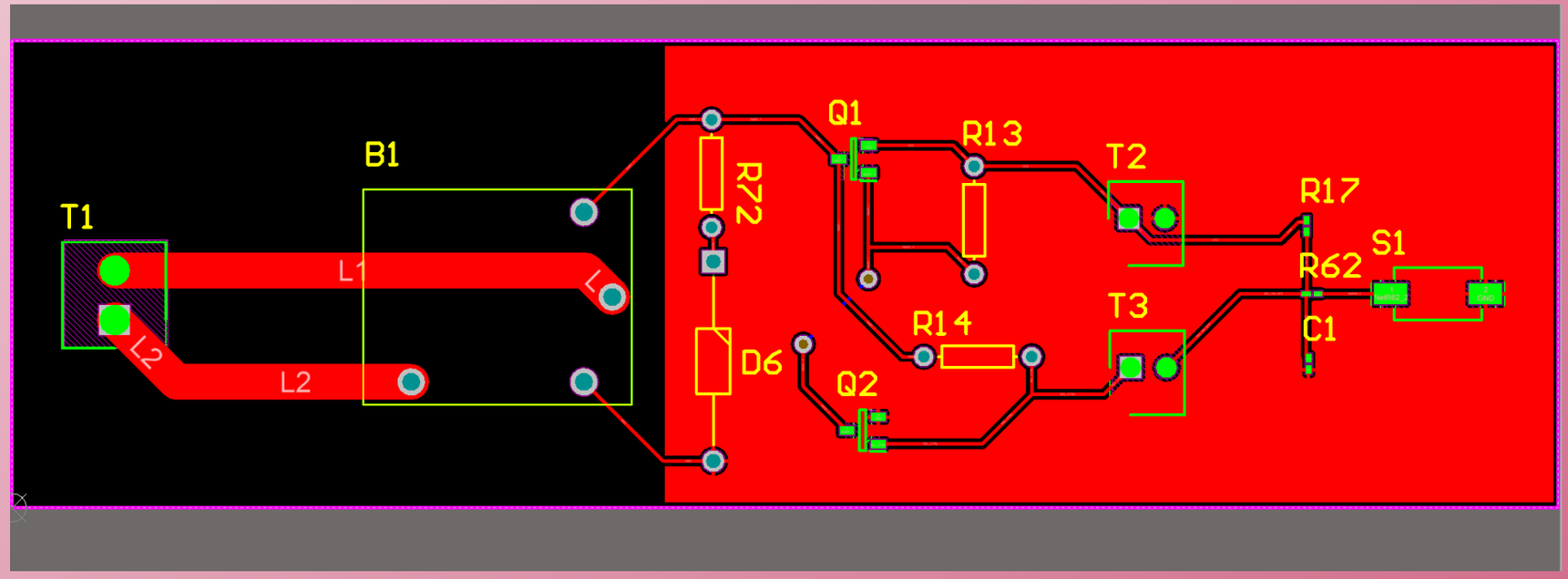
STATUS BEFORE MAKERVILLAGE (NOVEMBER 2ND WEEK,2017)

- BASIC SOFTWARE FRAMEWORK INCLUDING FIRMWARE FOR ZIGBEE CHIPS, CLOUD SERVER AND CLIENT BINARIES FOR HUB
- SOFTWARE DEVELOPMENT WAS TAKING PLACE ON CC2538 DEVLOPMENT KIT FROM TI, RASPBERRY PI AND HEROKU AS CLOUD PLATFORM
- HARDWARE DEVELOPMENT IN SIMULATION PHASE

STATUS ON FIRST REVIEW (FEBRUARY 6TH, 2018)

- DESIGNED CC2538 BRINGUP BOARD, SMPS AND LATCH-RELAY CIRCUIT
- FABRICATED CC2538 BRINGUP BOARD, PROCURED COMPONENTS
- ON THE SOFTWARE SIDE, DEVELOPED A CONFIGURATION SERVER TO CONNECT HUB TO WI-FI , AS WELL AS BARE MINIMAL ANDROID AND IOS APPS.



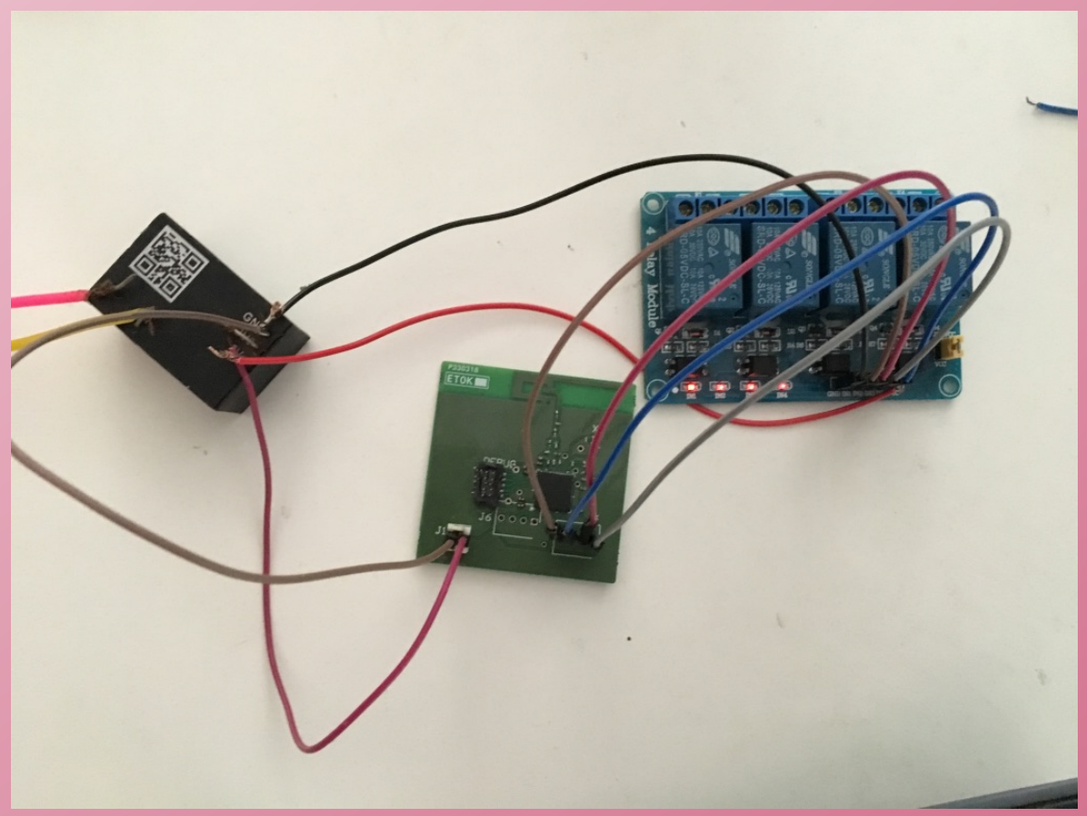


CURRENT STATUS (AS OF APRIL 11 , 2018)

- PROTOTYPE - ASSEMBLED THE BOARD AT MAKERVILLAGE. ABLE TO BRINGUP THE BOARD.
- MVP SWITCH MODULE - DESIGN FOR 4 PORT SWITCHBOARD WITH CURRENT AND VOLTAGE SENSING COMPLETED. FABRICATION PENDING. PROCURED COMPONENTS
- CASE DESIGN - A MINIMAL 3D DESIGN FOR SWITCH BOARD IS COMPLETED. PENDING FABRICATION
- SOFTWARE - WORK ON LOCAL-SERVER TO ROUTE THE REQUESTS IN THE ABSENCE OF CLOUD-SERVER. COMPLETED.

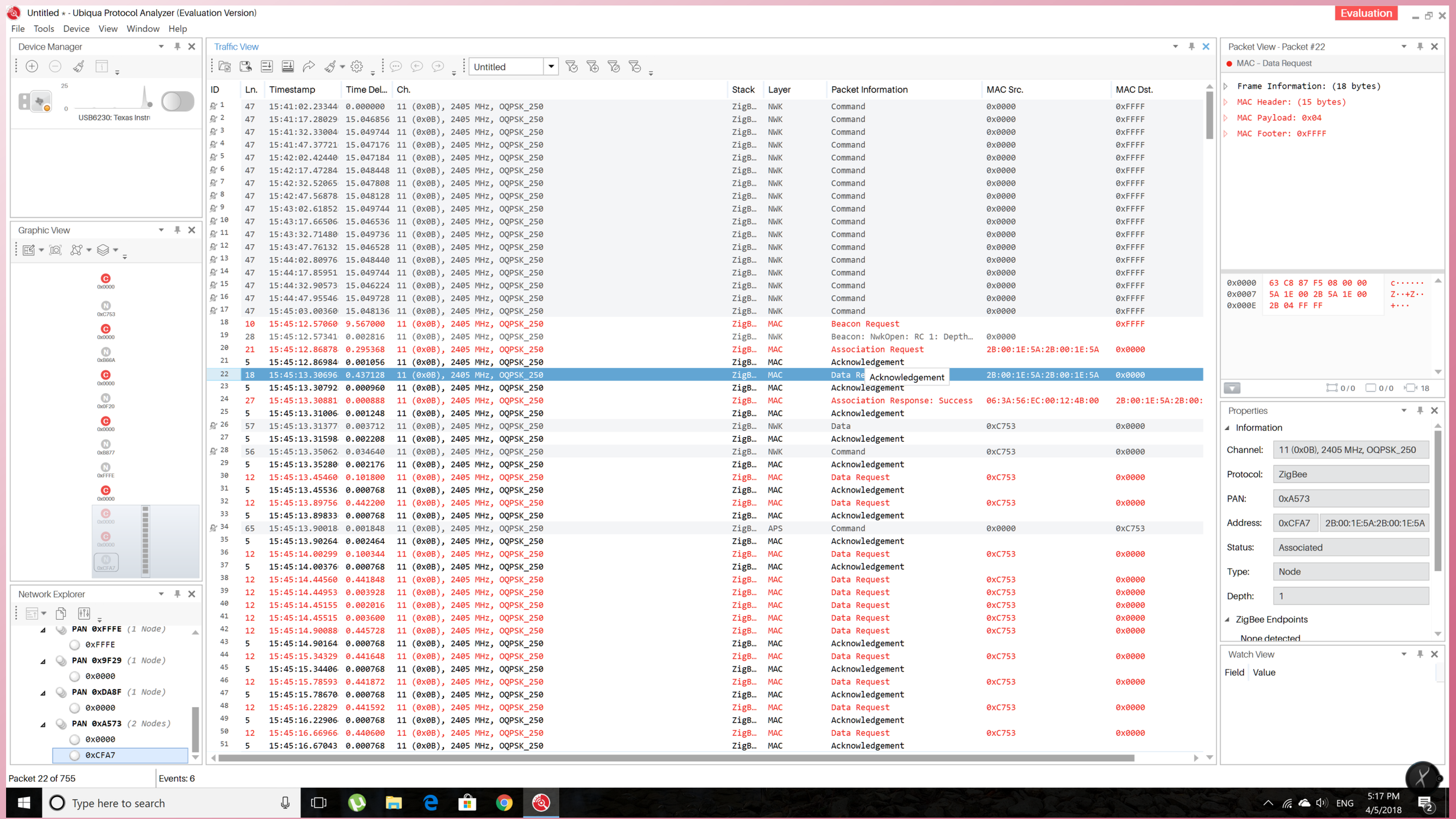
PROTOYPE

- AFTER A COUPLE OF FAILED ATTEMPTS TO ASSEMBLE CC2538 BRINGUP BOARD, WAS ABLE TO BRINGUP THE BOARD SUCCESSFULLY.
- USING POWER SUPPLY MODULE FROM THIRD PARTY (BRIDGETHINGS) TO POWER THE MODULE.
- ABLE TO FLASH THE FIRMWARE WE DEVELOPED ON DEVELOPMENT KIT ON TO OUR CUSTOM BOARD.
- INVERTED F ANTENNA ON OUR CUSTOM BOARD IS WORKING PROPERLY
- ABLE TO CONTROL THE INPUT/OUTPUT ON GPIO PINS ON OUR CUSTOM BOARD



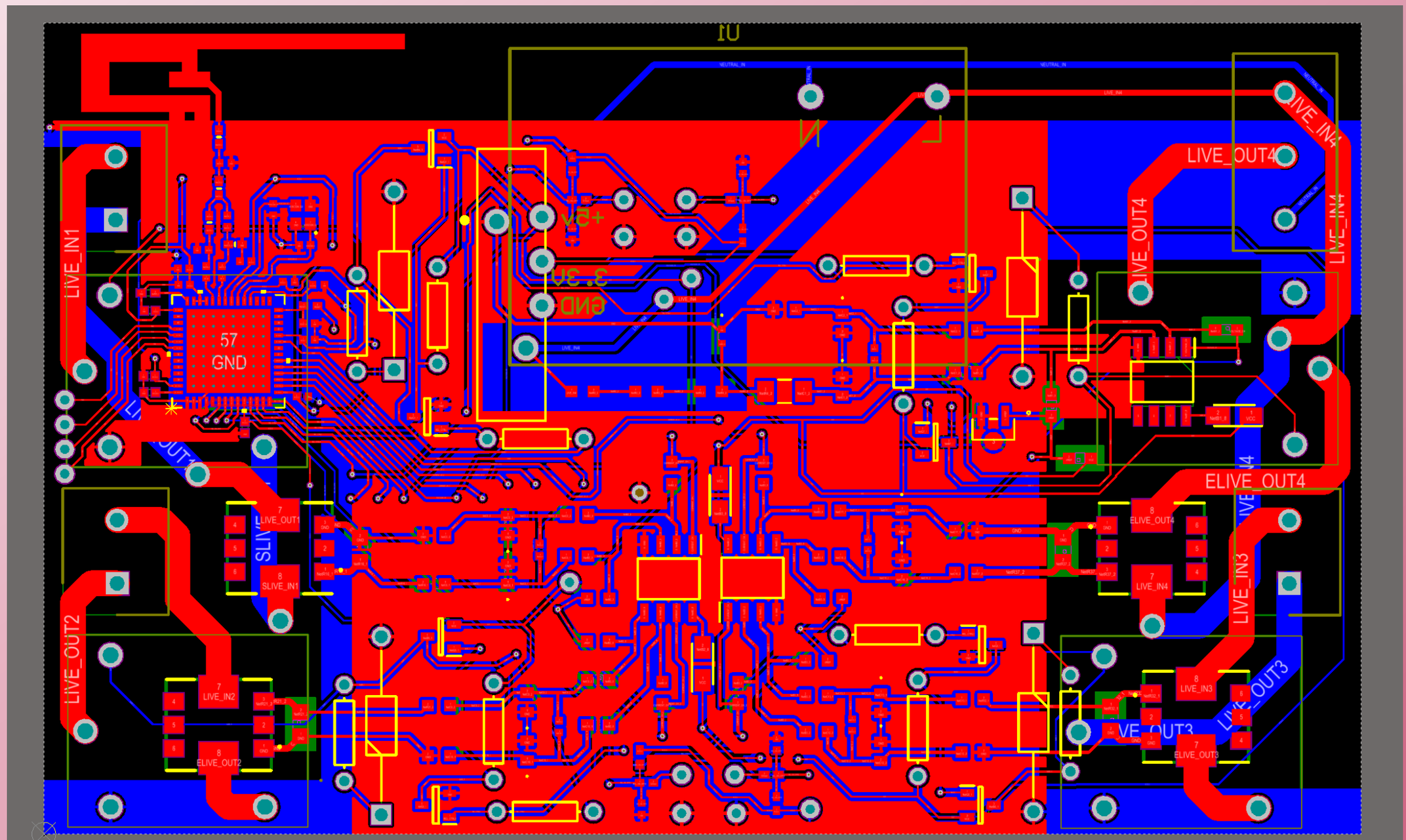
PROTOYPE – ISSUE

- OUR BOARD IS UNABLE TO JOIN THE ROUTER OVER ZIGBEE. NEED TO DEBUG THIS SOFTWARE ISSUE.



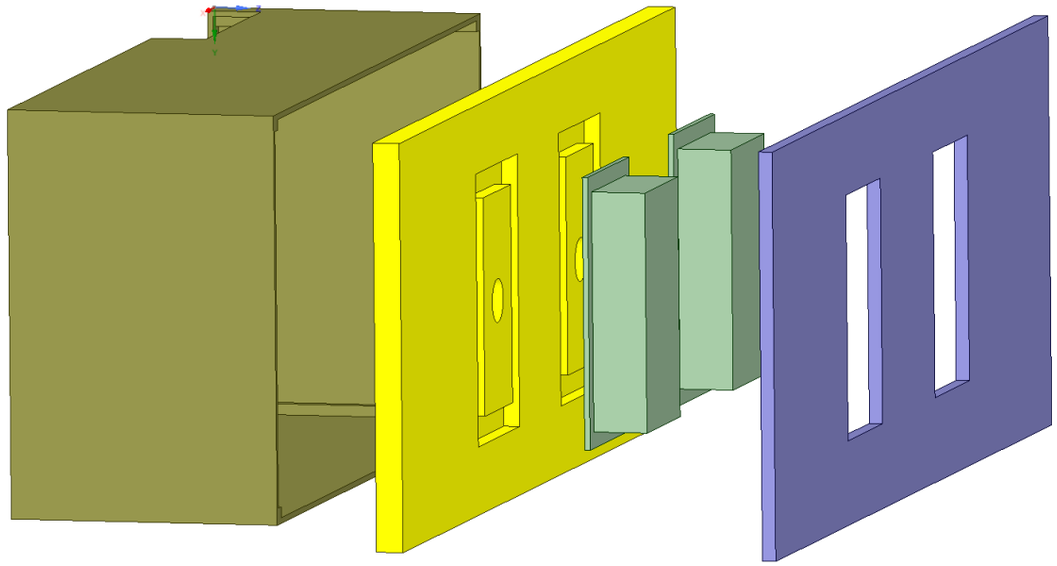
MVP SWITCHBOARD ELECTRONIC DESIGN

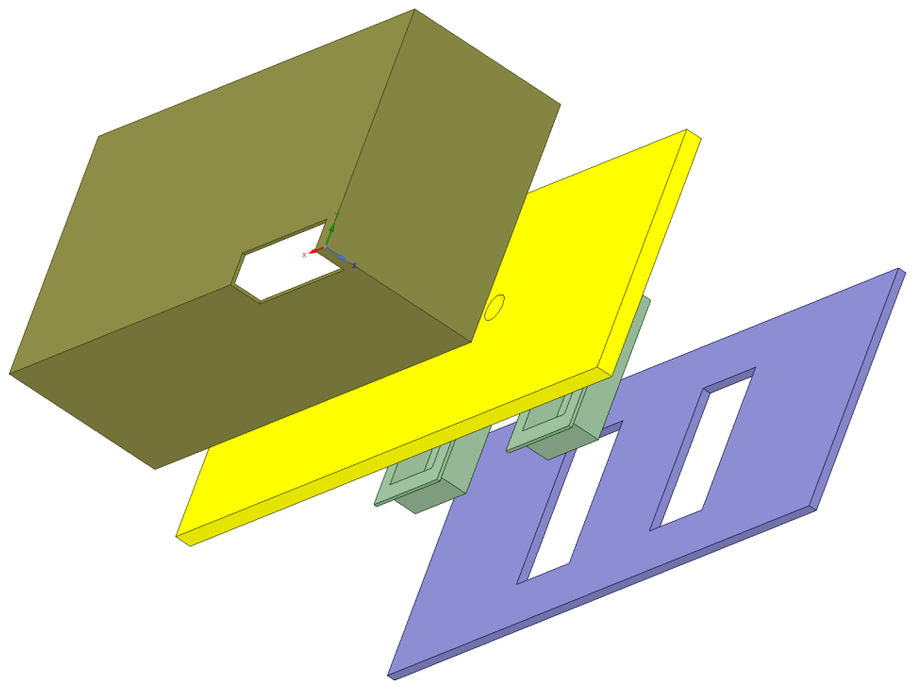
- DESIGN FOR SWITCHBOARD MOUDLE THAT CAN CONTROL 4 DEVICES AND ALSO SENSE CURRENT AND VOLTAGE IS COMPLETED. PROCURED THE COMPONENTS. PENDING FABRICATION.



MVP SWITCHBOARD CASE DESIGN

- 3D DESIGN FOR A MINIMAL SWITCHBOARD CASE IS COMPLETED. PENDING FABRICATION.





LOCAL SERVER

- PURPOSE - TO ENABLE THE USER TO CONTROL AND MONITOR DEVICES IN THE ABSENCE OF CONNECTION TO CLOUD SERVER.
- HUB NOW RUNS A LOCAL-SERVER WHICH IS A MINIMAL VERSION OF THE CLOUD SERVER.
- THIS LOCAL SERVER ACTS AS A BRIDGE BETWEEN CLIENT PROGRAM ON HUB AND THE CLOUD SERVER.
- THIS CAN ENABLE RENDERING OF USER-INTERFACES AS WELL(WEB AND APPS)

WHERE ARE WE SUPPOSED TO BE ON APRIL 15, 2018

- WE WERE EXPECTED TO COMPLETE PROTOTYPE BOARD WITHOUT CURRENT AND VOLTAGE SENSING CAPACITY BY APRIL 15 2018.
- IS IT COMPLETED YET ? NO
- WHAT IS PENDNG? WE WERE UNABLE TO CONNECT OUR PROTOTYPE BOARD WITH CO-ORDINATOR CHIP ON RASPBERRY PI.

THANKS