CC3501 Weekly Report

**Group number:** 2 **Team members:** Ethan Waters, Lachlan Pryce  
**Week number:** 9

**Progress this week**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task** | **Who did it?** | **What were the outcomes?** | **Who did the peer review?** | **What did you learn?** |
| Full Schematic Review | Lachlan & Ethan | Identified incorrect netnames for pins on rp2040 | Lachlan & Ethan |  |
| Implement Level Shifting for CAN bus transceiver output | Ethan | Appropriate voltage input for ESP32-S3 and MCP2515 controller | Lachlan |  |
| Investigate resistor in series with crystal oscillator for MCP2515 | Lachlan | Resistor not required for MCP2515 | Ethan |  |
| Investigate USB terminating resistors for ESP32 | Ethan | Resistors not required | Lachlan |  |
| Remove MCP2515 resistor at NC pin | Ethan | Remove unnecessary resistor |  |  |
| Generate Fabrication files | Ethan & Lachlan | Ready for Fabrication | Ethan & Lachlan | This was done by Lachlan then a small change was made so re done by Ethan. Complete design 100% before generating files |
| Generate Pick and place file | Ethan & Lachlan | Ready for Fabrication | Ethan & Lachlan | Completed by both of us separately to ensure same output |
| Generate BOM | Ethan & Lachlan | Ready for Fabrication | Ethan & Lachlan | Completed by both of us separately to ensure same output |

**Overall project tracking:** [fill this in at the beginning of the project and update weekly based on actual progress]

|  |  |
| --- | --- |
| **Week number** | **Milestones** |
| 1 | Confirm project topic and begin |
| 2 |  |
| 3 | Arm can move with an input from a socket. The input is an automated test script executed by a client to mimic the embedded system output |
| 4 | Select components & review datasheets |
| 5 | Begin schematic |
| 6 | Complete Schematic, forward to Bronson for feedback. |
| 7 | Submit complete schematic to Bronson for feedback. Complete PCB design for feedback, |
| 8 | Submit board for manufacture. |
| 9 |  |
| LR | Work on vision based movement with PI while waiting for embedded systems. Work on sensor calibration and Kalman filter code. |
|  |  |
| 11 |  |
| 12 |  |
| 13 | Demo day during Friday lab |