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 | Ethan & Lachlan | Identified several errors that could have been detrimental to achieving a functional PCB. | Lachlan & Ethan | Importance of performing detailed design review in a systematic fashion. |
| Investigate crystal oscillator solutions for CAN interface controller based on design feedback. | Lachlan | Found an existing design with BOM that could be used as reference for crystal oscillator circuit. | Ethan | Importance of crystal oscillators and getting the design correct. How to calculate series resistance if required. |
| Addition of level shift IC to PCB. | Lachlan & Ethan | Level shifter incorporated into design to step 5v down to 3v3 for interfacing with 3v3 devices. | Ethan | Various methods of level shifting to address voltage incompatibility between devices. |
| Development of BOM and other fabrication files for manufacturing. | Lachlan | Files ready for submission. | Ethan | How to create the BOM, address pick & place orientation issues. |
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**Overall project tracking:** [fill this in at the beginning of the project and update weekly based on actual progress]

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| **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 | Work on vision based movement with PI while waiting for embedded systems | Any other code that can be done before |
| LR | Begin vision based movement code. Begin sensor read/calibration code. |
| 10 |  |
| 11 |  |
| 12 |  |
| 13 | Demo day during Friday lab |