

# CC3501 weekly report template

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**Group number:** 2

**Team members:** Hunter Kruger-Ilingworth, Quentin Bouet, Thomas Mehes

**Week number:** 5

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Progress this week:

[Identify at least one small task per person that you completed this week, and have it reviewed by someone else on your team. Write 1-2 sentences about each task. For evidence of hardware design, attach a PDF file exported from Altium. For evidence of software, invite the Github user "bronsopn" to view your repository and refer to commits you have made.]

Task	Who did it?	What were the outcomes?	Who did the peer review?	What did you learn?
Create the Github repository @ <a href="#">this link</a>	Hunter	A place to go for all code and report work + template files as a jumping off point	Thomas	My first time using Latex for report writting. Familiarising myself with the space and seeing the benefits compared to word
Begin the report with diagrams. (screenshot of SDI-12 datasheet and tikz block diagram of the hardware we intend to make)	Quentin	Description defining the hardware structure was commenced (block diagram). Diagram for SDI-12 circuit was added.	Hunter	In order to make the body of the report easier to edit, the tikz figure (which is still a work in progress) was extracted into a file of its own, we discussed the components with each other, realising the block diagram's discrete ADC can be implemented in real life through simply using one of the RP2040's ADC pins
Research into interfacing with SDI12 sensors	Thomas	Found relavent datasheets for each sensor. Allowing for experimentation next week	Quentin	Checked the datasheet that was found. It was noted that SDI-12 "is designed to be used with microprocessor-controlled instruments" "The data line is a bi-directional, 3 state, data transfer line. The data line uses negative logic."

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Overall project tracking:

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

Week number	Milestones
4	Confirm project topic
5	Project begins
6	Finalise design specifications and objectives
7	Preliminary testing and experimenting with Sensors
8	Submit draft schematic to Laurance for review
9	Final PCB design submitted on Friday to Terence for manufacturing
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10	
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12	
13	Demo day during Friday lab