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| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Writer | | Daniel Henderson | | | | | |
| Test Case Name | | Controls Board | | | | Test ID# | C-AT-1 |
| Description | | Verify the CT board works in system | | | | Type |  |
| Test Information | | | | | | | |
| Name of Tester | |  | | | | Date |  |
| Hardware Version | |  | | | | Time |  |
| Setup | | Slot Controls Board into backplane. Slot in merge board (switched off) and connect LiPo batteries. Slot in power board. On CT Board, connect to PC terminal via USB (use a serial terminal, 8N1, 9600 baud), ensure most up-to-date code is loaded onto Board via JTAG (in the SW4STM IDE, use the project called STM32F767ZI\_Nucleo\_AXIM\_Flash - just click the ‘run’ button) and load Robosub software on PC\*. | | | | | |
| Step | Action | Expected Results | Pass | Fail | N/A | Comments | |
| 1 | Send strings from terminal | USB LEDs blink. Terminal prints returned output. |  |  |  |  | |
| 2 | Send control strings from terminal (see main.h) | PWM can be observed by probing the labeled headers on backplane.\*\* |  |  |  |  | |
| 3\* | IFF RoboSub software is ready: connect CT Board to RoboSub PC with simulated sensor data | PWM can be observed by probing the labeled headers on Board or backplane.\*\* |  |  |  |  | |
| Overall Results | | |  |  |  |  | |

\*Optional, if the RoboSub software is completed and ready to send sensor data (real or simulated) to the CT Board.

\*\*Optionally, if all is ready to be in the water, observe the sub move/motors operate correctly.