Assumptions made for the Window Lifter Application

1. Automatic modes shall be active until window is completely closed/opened. No other signal shall stop automatic window movement.

Why this way? “Don’t code anything you aren’t explicitly asked to through the requirements”. Engineering hours shouldn’t be “wasted” developing features you aren’t sure that will be used.

It is understood that in a real-world project any ambiguous requirement should be corrected with the client before actually starting to code (certain requirements were marked properly in the Traceability Matrix).

Notes

1. I did not make an assumption about tolerance times, but I explicitly noted in the documents that they should be discussed with the client.
2. Several more tests could be proposed:
   1. One test could be designed for every input signal to verify the 5-second block after opening the window in a pinch situation. The same to verify it does recognize them after these 5 seconds.
   2. Automatic tests, e.g. program another MCU to generate pulses of different lengths to test Invalid Input Detection and Valid Input behavior.
3. For me, a requirement can be checked by more than one test, so in the “Document/Test ID” field of the Testing Traceability part of the Traceability Matrix, I listed every test that would be related to each requirement.