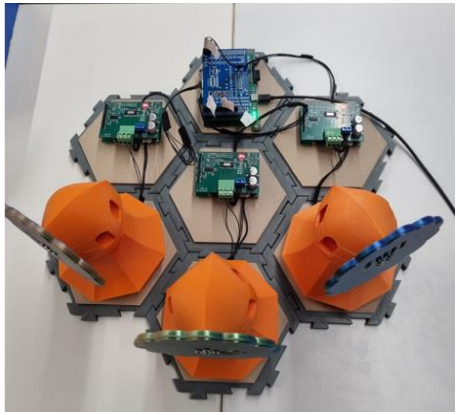


Coisa

10/11/2025

Agenda

1 Goals and Timeline

2 PC control software

3 Physical system

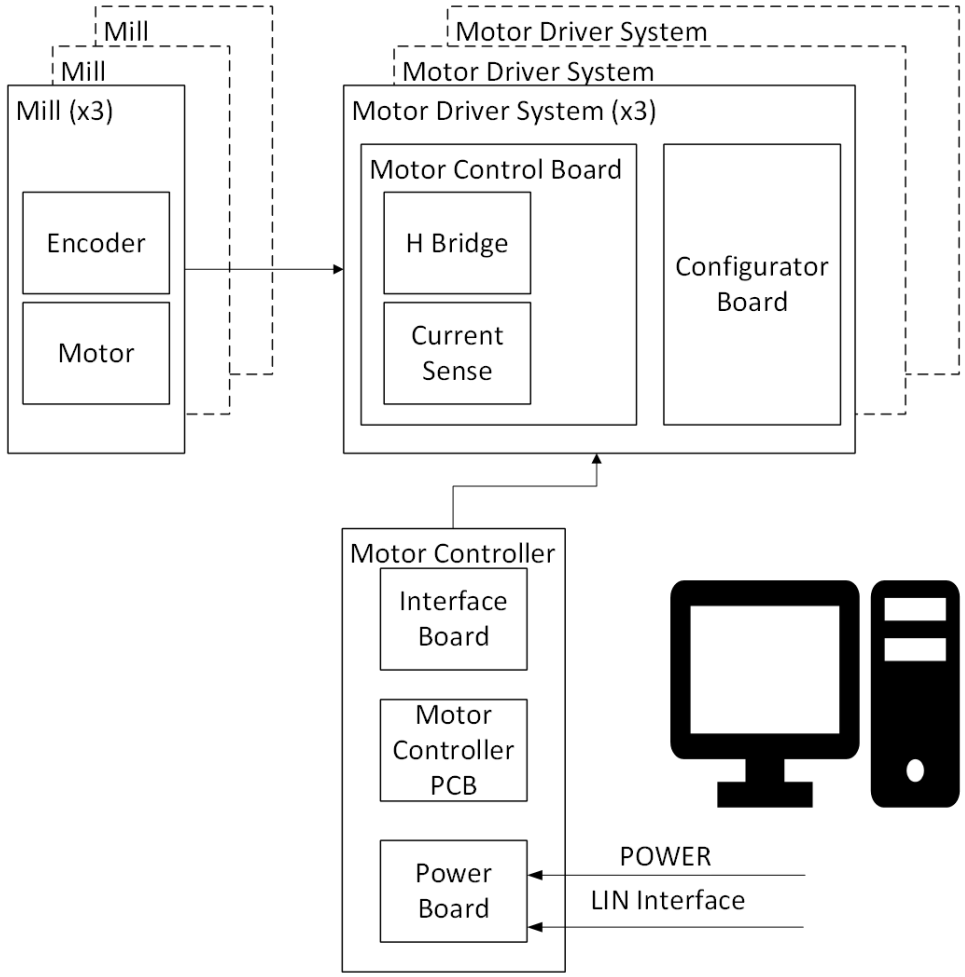
Lessons learned

Goals

- Coisa shall present some type of physical movement;
- A user shall be able to interact with Coisa;
- Coisa shall atract the atention;
- Coisa shall present SWJ capabilities.

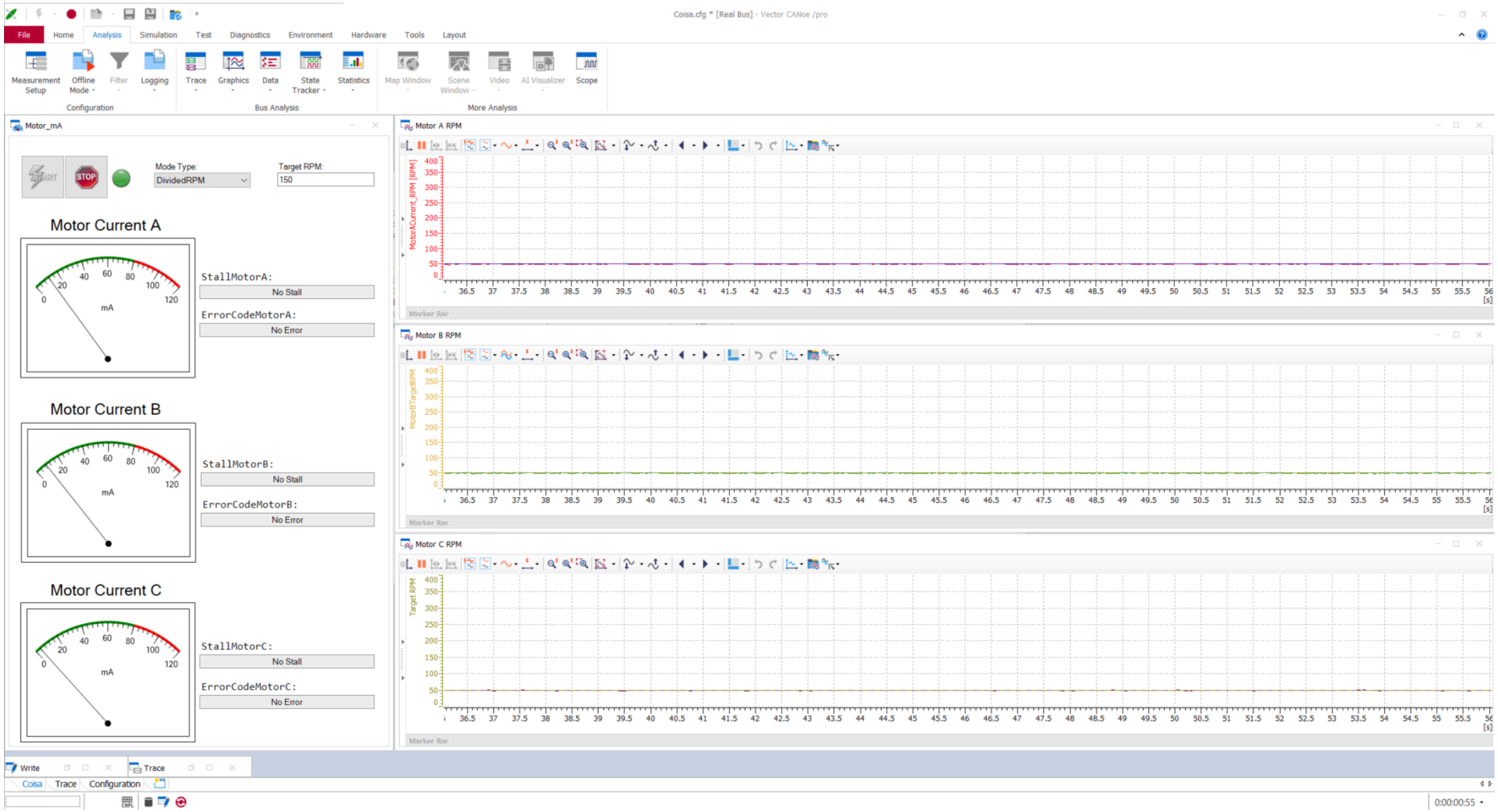
Timeline

Overall system

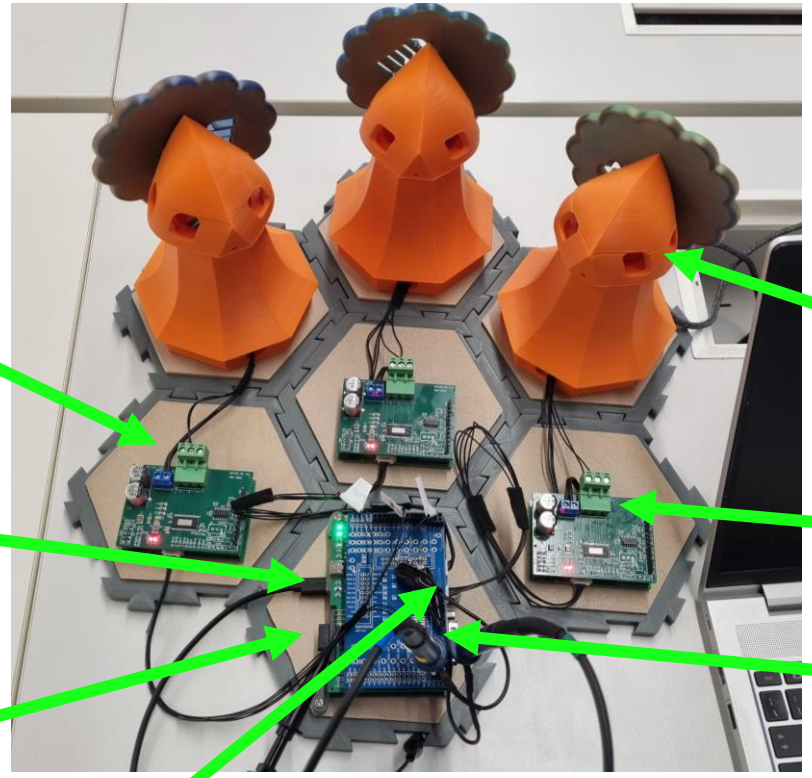


- The visitor is invited to touch the mills to test the system response;
- PC controls the high level behavior, mills interaction;
- The motor controller controls each mill individualy to a setpoint of speed.

PC Software



Physical System



Motor connection
2 cables

USB on the bottom board
Leave middle one disconnected
(From USB adapter)
⚠Don't power from PC

Lin connection
From CANOE Adapter CHA

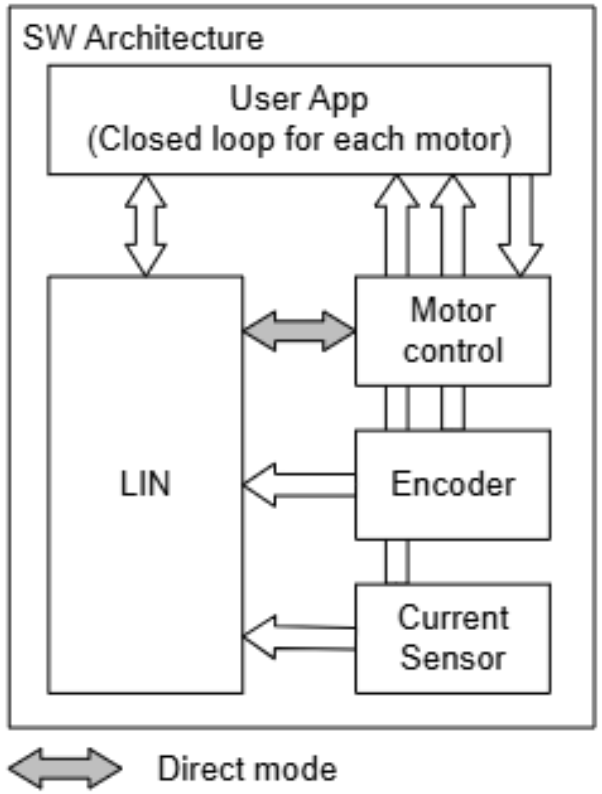
Motors A to C labeled

Mills

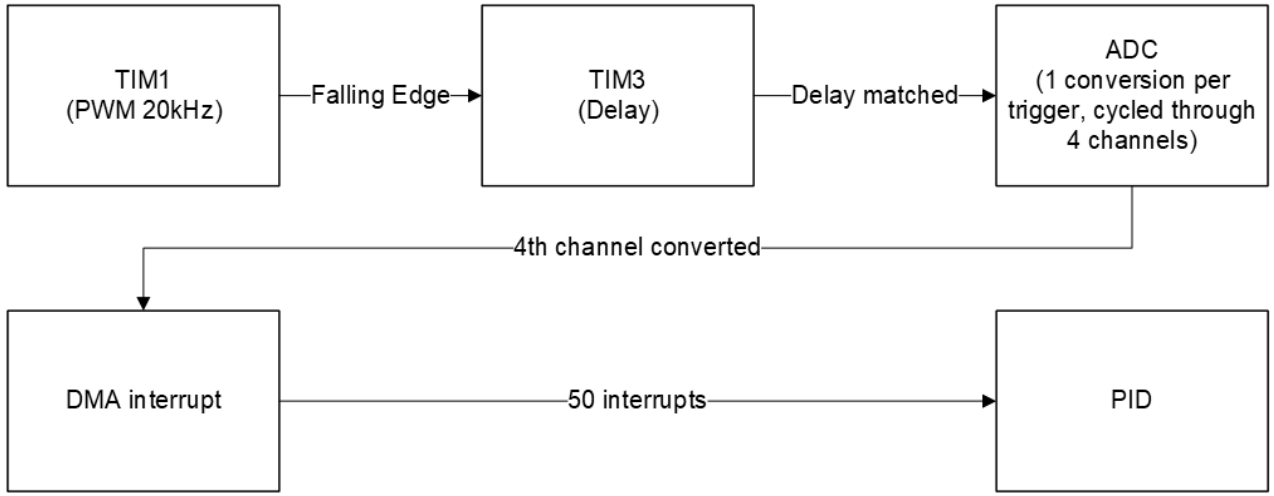
Motor Driver

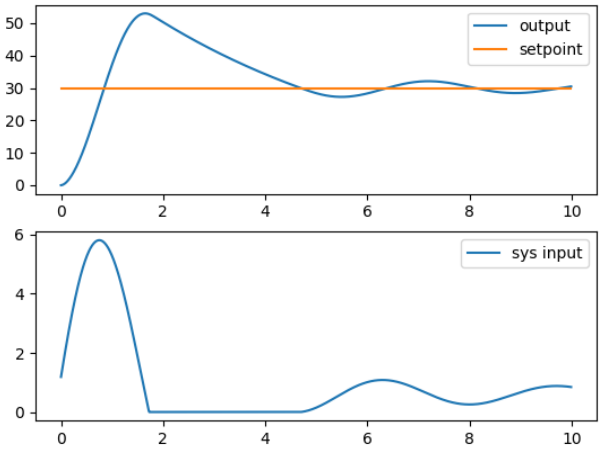
Motor Controller

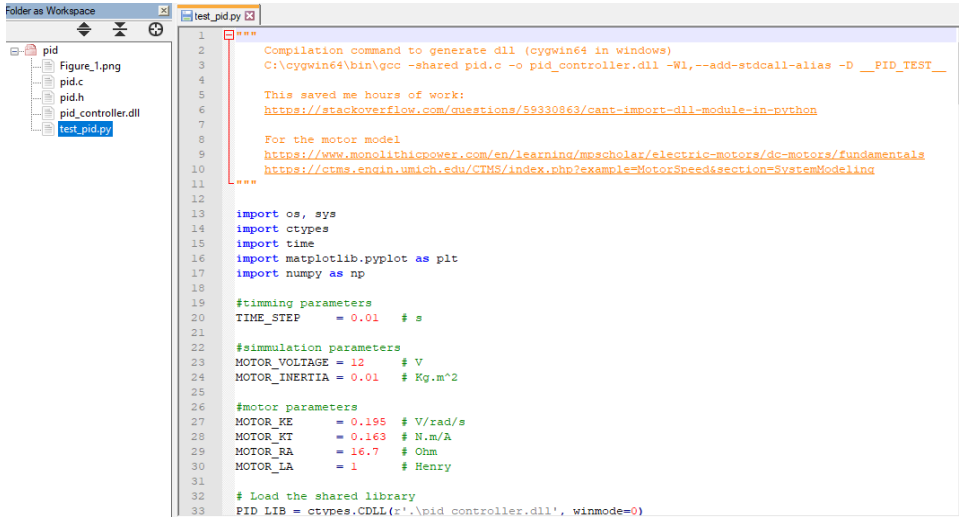
Embedded Software Architecture



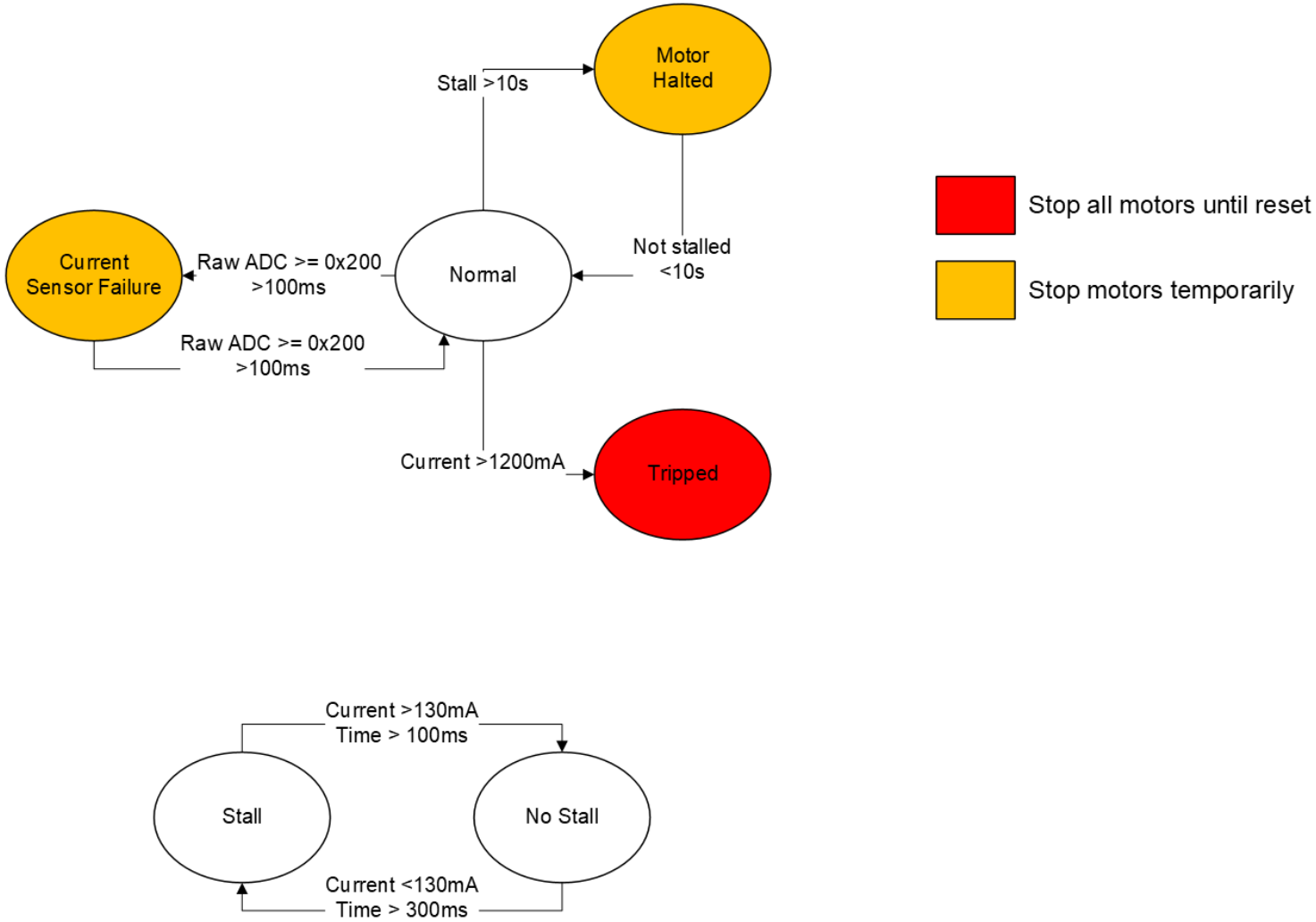
Timming and controller







State machine



Lessons Learned

- Hardware
  - Usage of protection mechanisms.

Thank you for your attention!