Lab2 Presentation

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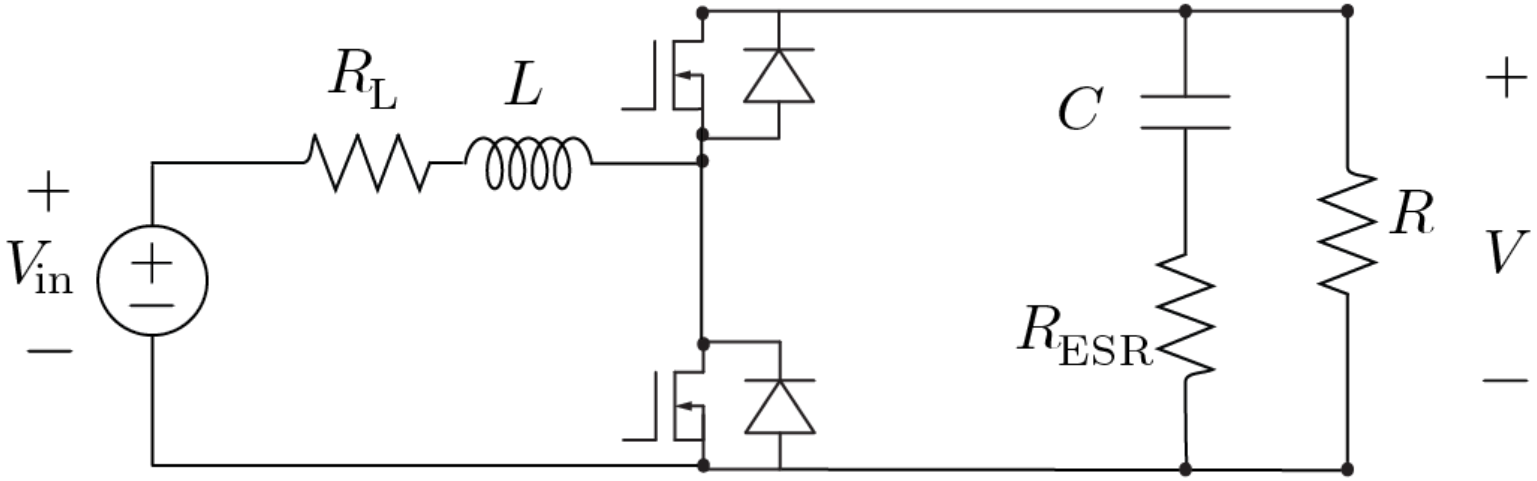
Main theme

RT-Box Preliminaries

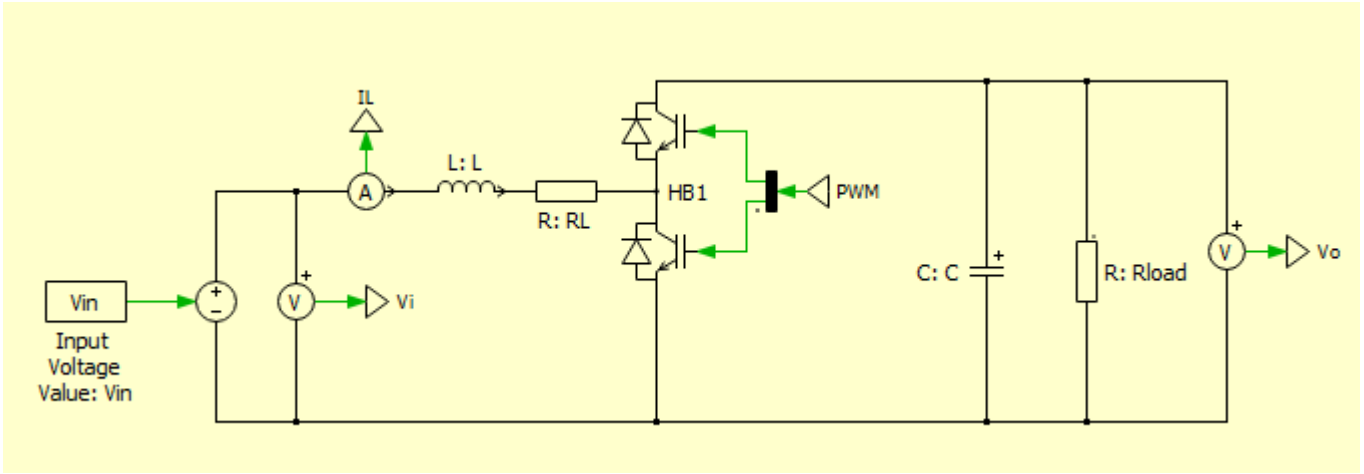
- Build an PLECS boost converter model
- Learn how to make it compatible with RT-Box simulation
- Run in open loop using PWM. Use ADC to only sense the voltages and currents but not do any actual control

Circuit



Making it compatible with RT-Box

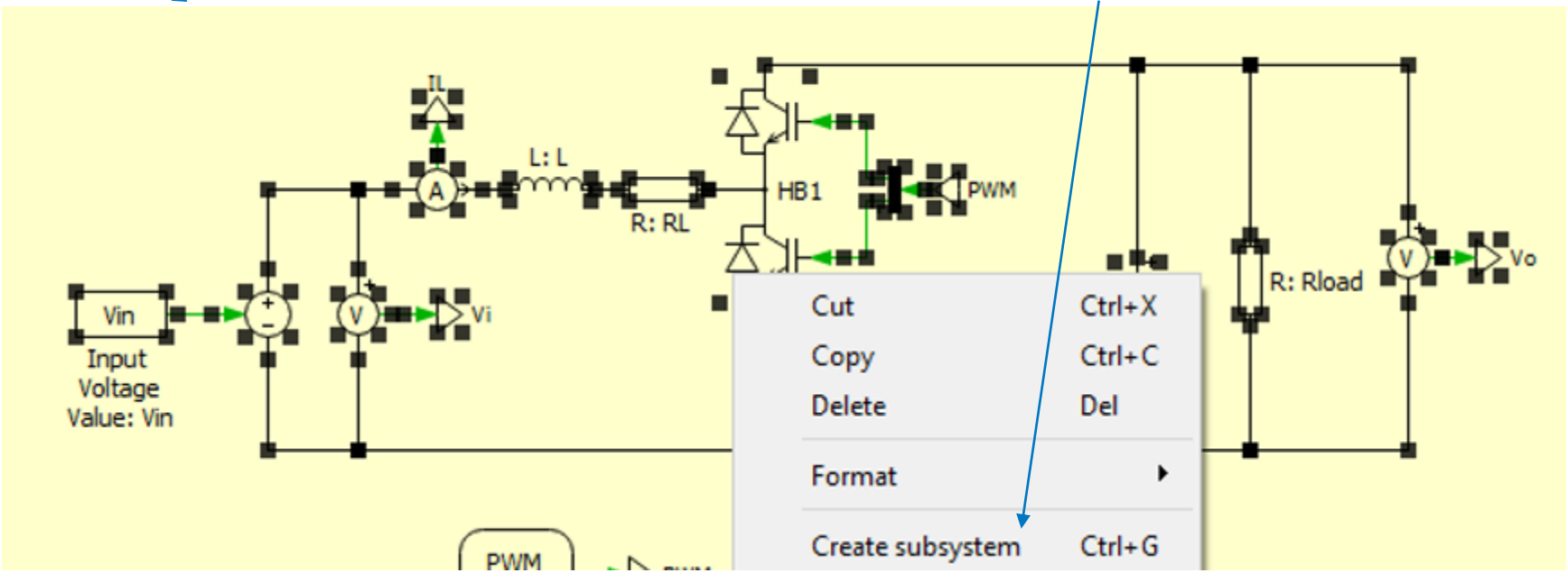
The PLECS model



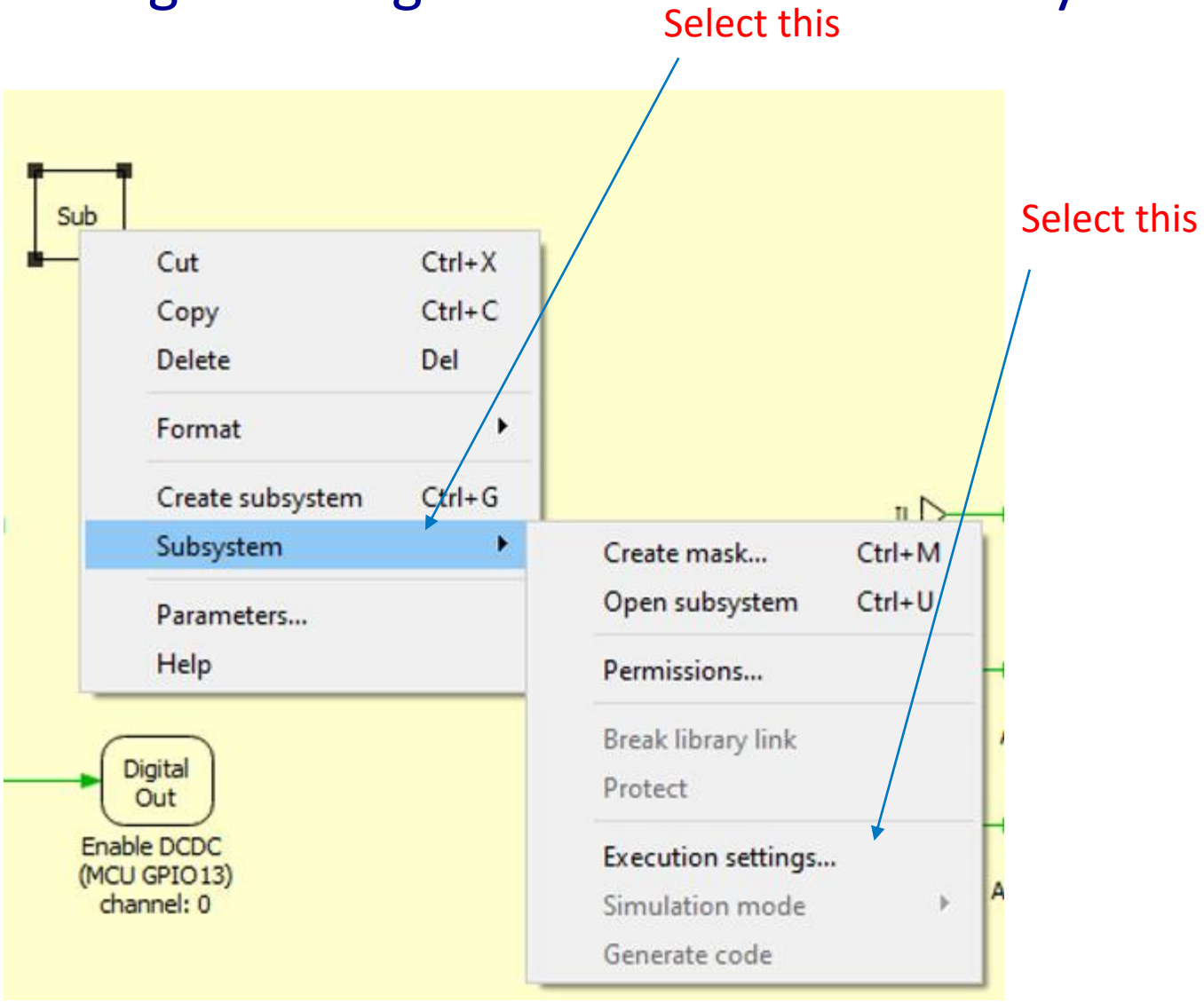
Making a code-generation enabled subsystem

Select all of the circuit

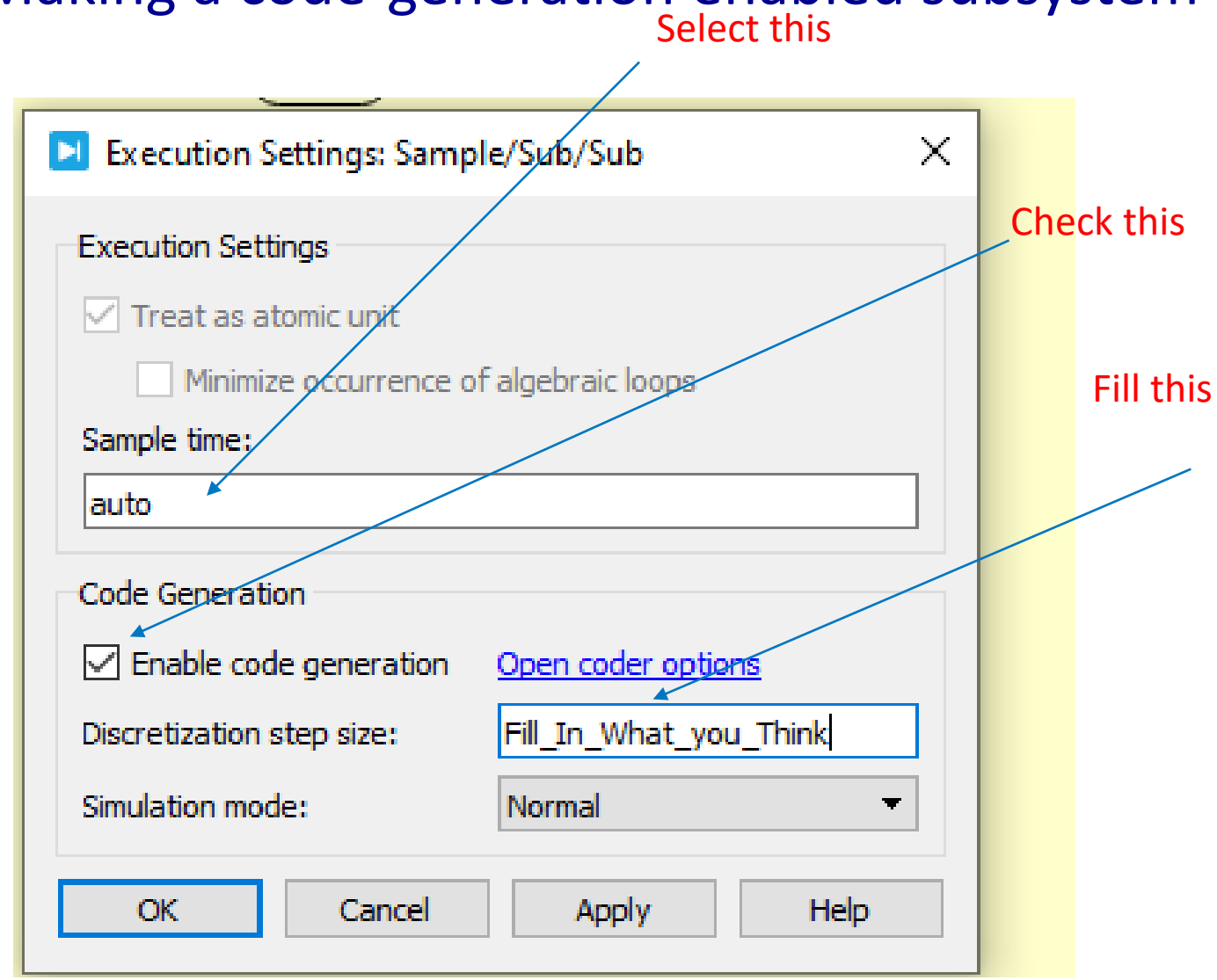
Create a subsystem



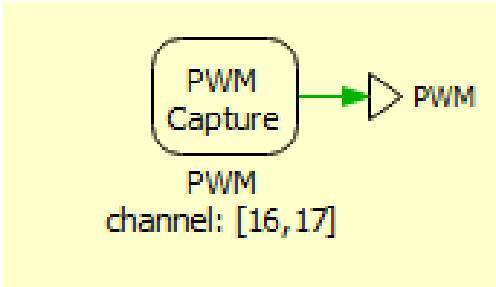
Making a code-generation enabled subsystem

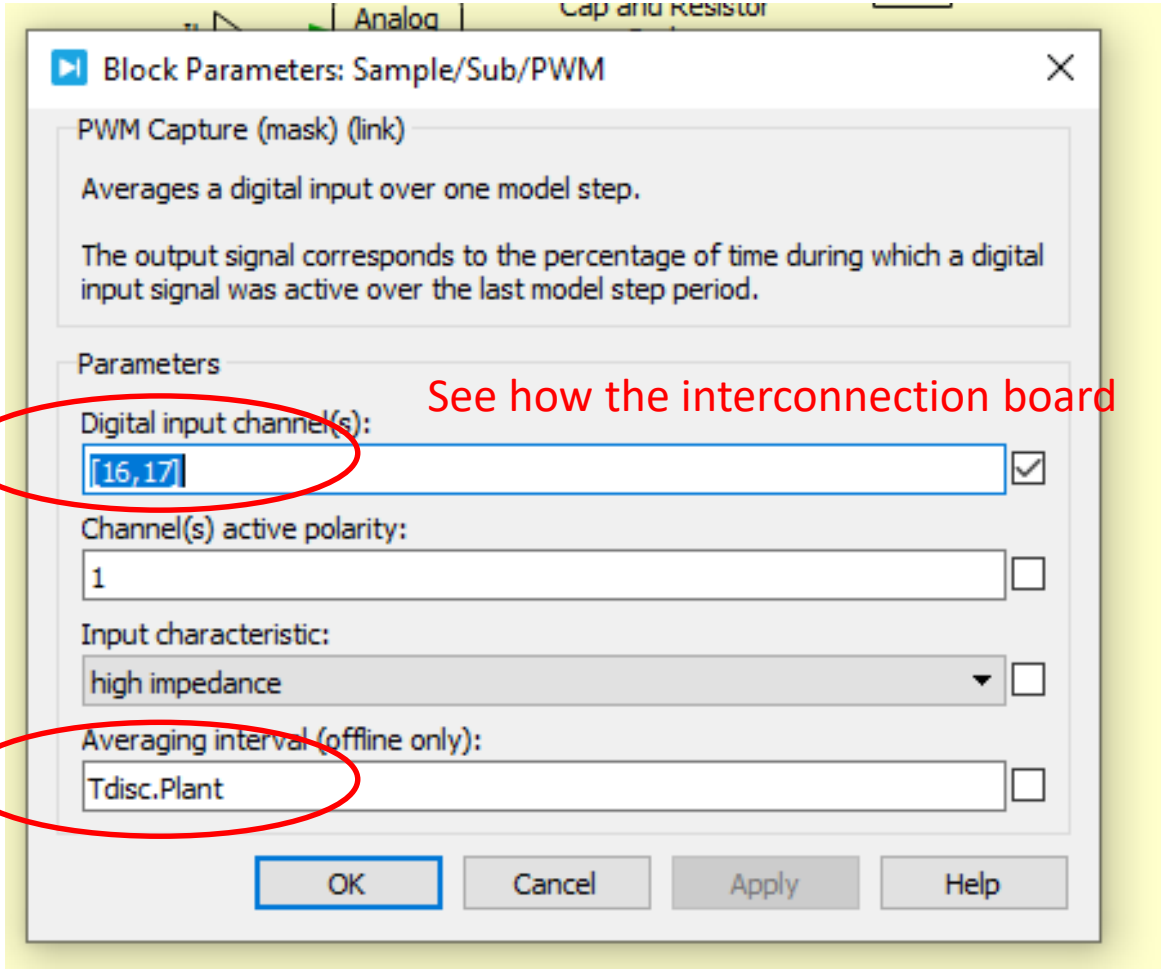


Making a code-generation enabled subsystem



PWM capture

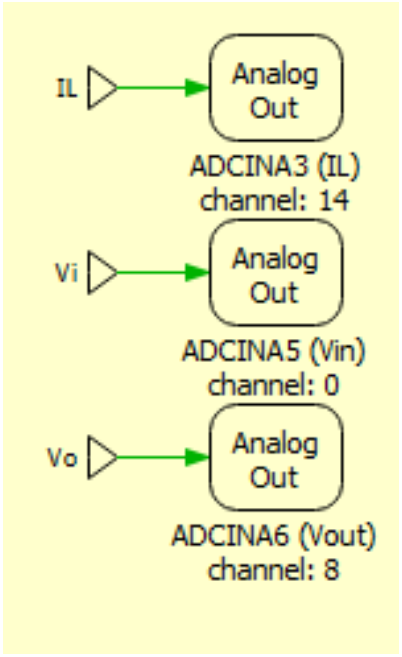


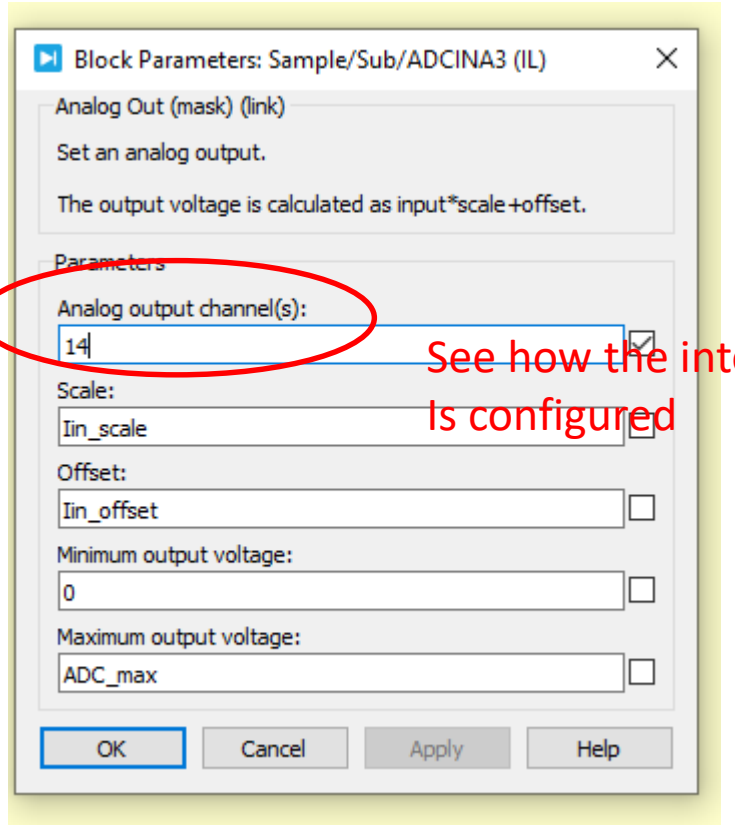


See how the interconnection board

This is the real time discretization paper

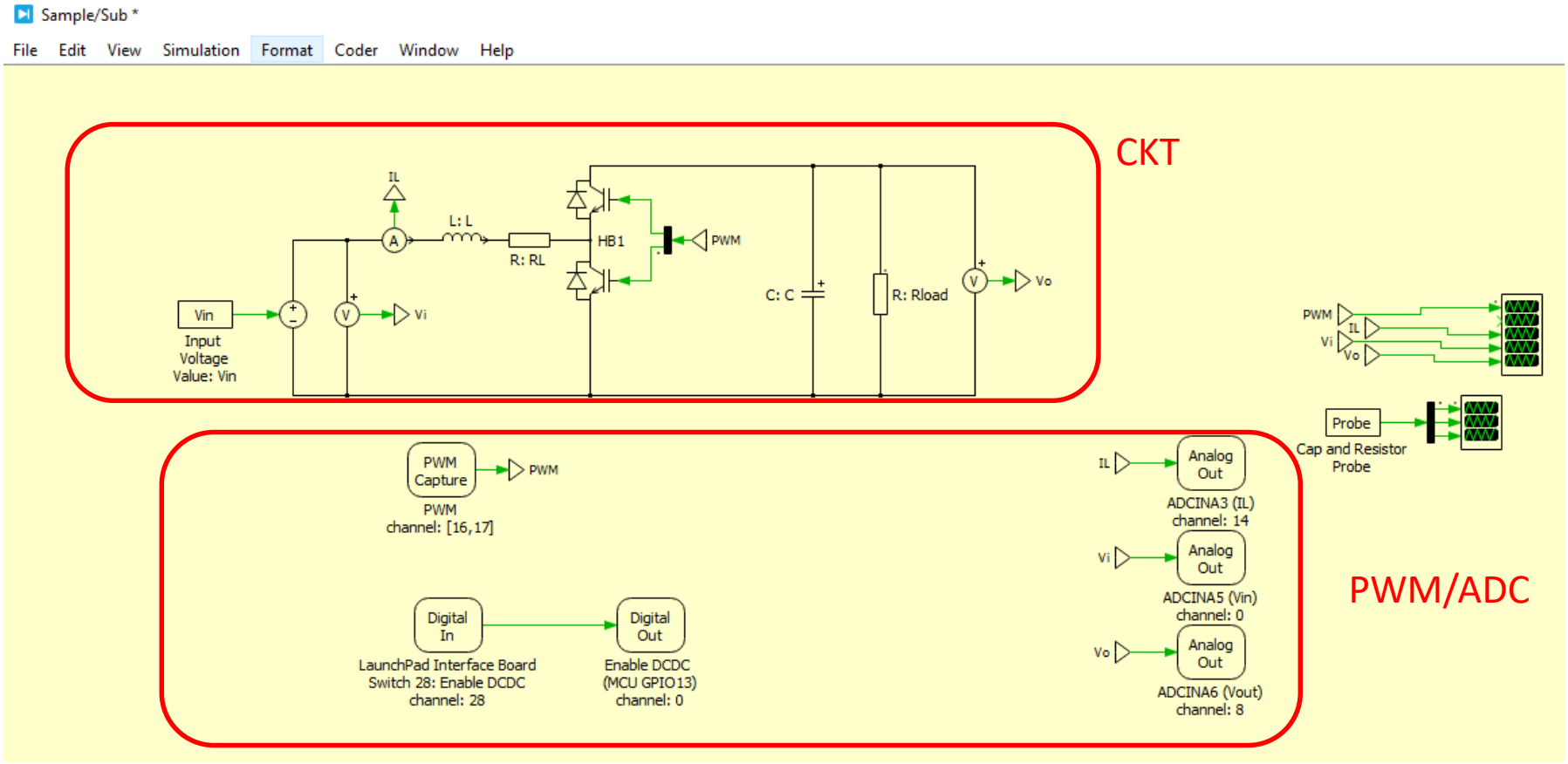
ADC Block





See how the interconnection board Is configured

The whole system



Go to “Coder” Tab on the menu bar at top and get this