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```

Chapter 3

Delay variable design on MATLAB and Ltspice

Software to run:

- MATLAB 2017b or later. Run **variable_delay.slx** file then run **plot.m** file to plot the output figure
- Ltspice: open **.asc* files

DC Motor controller

Model files includes

- MATLAB script

- Simulink file to model the motor controller
- Step to run:
    - Install library in lib folder. Instruction can be found here
    - Run the script **motor_PI_Controller.m**
    - Run Simulink file **Motor_Model_full.slx**
    - Plot output response by run "**Plot_output_response.m**". This script can be modify to choose task jitter pattern to display

Hardware implementation

- Read the instruction part at the beginning of the file **OUSB_motor_PI_controller.c**
- OUSB Board document
- Motor hardware

Chapter 4

Code for running the envelop responses.

The step to run the script is describe in file **"script.m"** and **"script_20180930.m"**

Chapter 5

Task jitter measurement

- Arduino file code for measure task jitter : **task-jitter-measurement.ino**
- Python code to save data from Arduino to csv file on PC: **"serial3.py"**

Stress-ng python code

This stress function is written in Python and should be run on target platform such as Orange Pi or BeagleBone black

MATLAB code and scripts.

MATLAB scripts for experiment in section 5.6