

Software Development Tasks

- (#1) Create initial project
- (#2) Create basic software architecture template
 - Req: #1
- Establish PWM output
 - (#3) Add PWM config steps to PWMDriver
 - Req: #2
 - (#4) Implement PWMConfig structure
 - Req: #2
 - (#5) Tie together PWM Module with PWMConfig structure
 - Req: #4
- Establish Current inputs
 - (#6) Current Input: Add ADC config steps to MeasurementDriver
 - Req: #2
 - (#16) Current Input: Fix capped value of ADC result
 - Req: #6
 - (#7) Config Measurement Timer
 - Req: #2
 - (#8) Implement System Measurement struct
 - Req: #2
 - (#9) Implement measurement ISR in MeasurementDriver
 - Req: #7, #8
- Establish Voltage inputs
 - (#10) Voltage Input: Add ADC config steps to MeasurementDriver
 - Req: #2
 - (#11) Add voltage readings to measurement ISR
 - Req: #9
- (#12) Finish start-up routines
 - Req: #3, #6, #10
- Implement SmoothingComponent
 - (#13) Get SmoothingComponent to retrieve system measurements
 - Req: #9, #11
 - (#14) SmoothingComponent post PWM configurations
 - Req: #4
 - (#15) Implement Smoothing logic
 - Req: #2

Schedule Table

Month	Week	Development Plan	Test & Demo Plan
Feb.	3	<ul style="list-style-type: none"> Analysis and Requirements 	
	10	<ul style="list-style-type: none"> (#1) Create initial project 	
	17	<ul style="list-style-type: none"> (#2) Create basic software architecture template (#3) Add PWM config steps to PWMDriver 	<ul style="list-style-type: none"> Demo initial project
	24	<ul style="list-style-type: none"> (#4) Implement PWMConfig structure (#5) Tie together PWM Module with PWMConfig structure 	<ul style="list-style-type: none"> Demo initial PWM signal
Mar.	2	<ul style="list-style-type: none"> (#6) Add ADC config steps to MeasurementDriver (#7) Config Measurement Timer 	<ul style="list-style-type: none"> Test accuracy of PWM signal Demo basic ADC functionality
	16	<ul style="list-style-type: none"> (#8) Implement System Measurement struct (#16) Current Input: Fix capped value of ADC result (#9) Implement measurement ISR in MeasurementDriver (#10) Add ADC config steps to MeasurementDriver (#11) Add voltage readings to measurement ISR (#12) Finish start-up routines 	<ul style="list-style-type: none"> Test ADC readings Demo full ADC functionality
	23	<ul style="list-style-type: none"> (#18) Enable CLA programming in project (#17) Fix pins B5 and C2 mix-up in ADC 	<ul style="list-style-type: none"> Test ADC to PWM operation with dummy smoothing functionality
	30	<ul style="list-style-type: none"> (#19) Add PI calculation using CLA (#13) Get Smoothing Component to retrieve system measurements (#14) Smoothing Component post PWM configurations 	<ul style="list-style-type: none"> Demo CLA

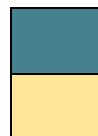
Updated: 03/02/2020

Apr.	6	<ul style="list-style-type: none"> (#15) Implement Smoothing logic 	<ul style="list-style-type: none"> Demo PI controller
	13	<ul style="list-style-type: none"> (#20) Add battery shut-off 	<ul style="list-style-type: none"> Demo Smoothing logic
	20	<ul style="list-style-type: none"> Deadline buffer/additional features 	<ul style="list-style-type: none"> Demo Battery shut-off

Timeline

	February								March						April					
Task	3-9		10-16		17-23		24-1		2-9		10-16		17-23		24-30		31-6		7-13	
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Current Task:



Deadline Buffer:

Updated: 03/02/2020