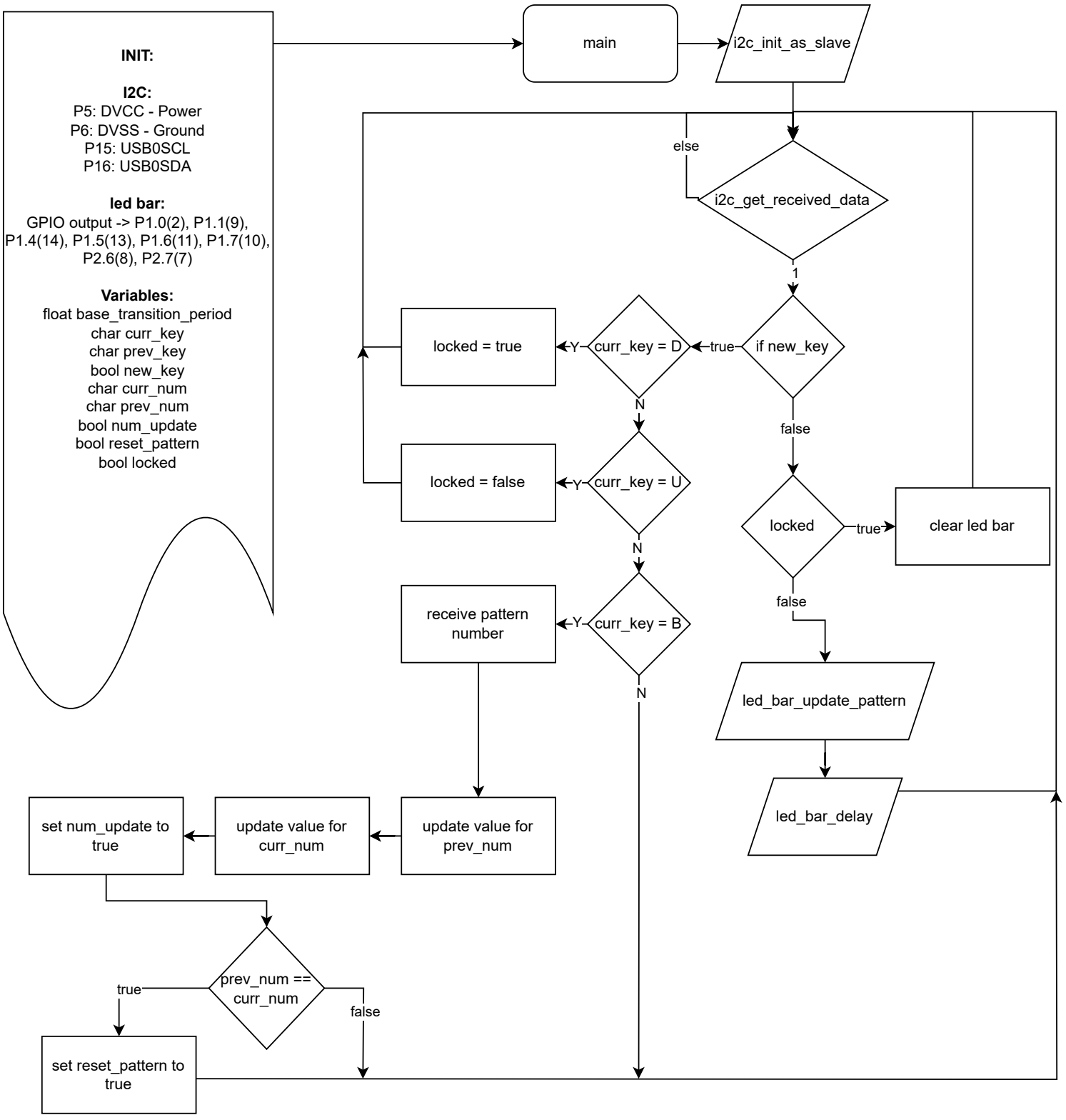
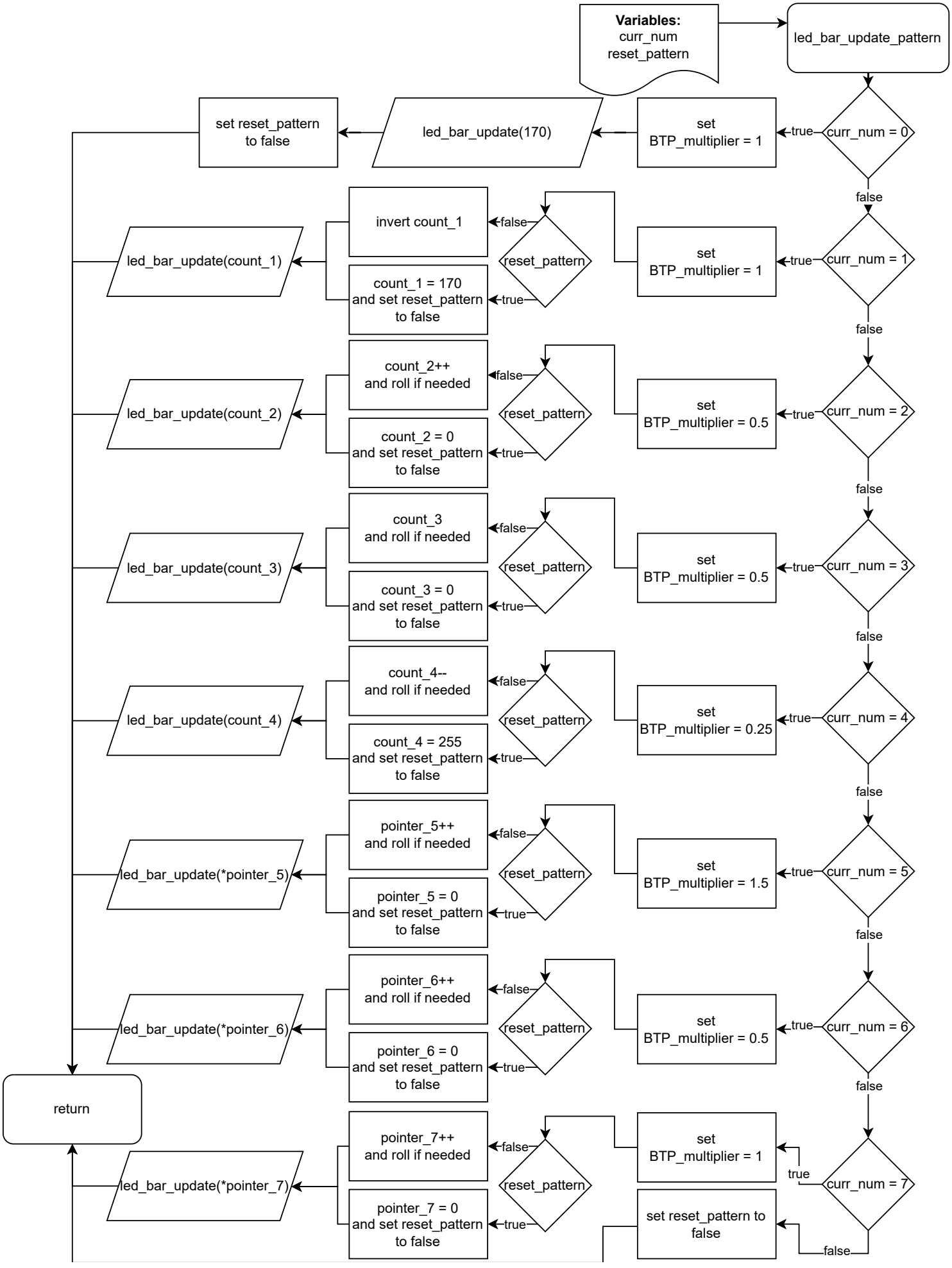
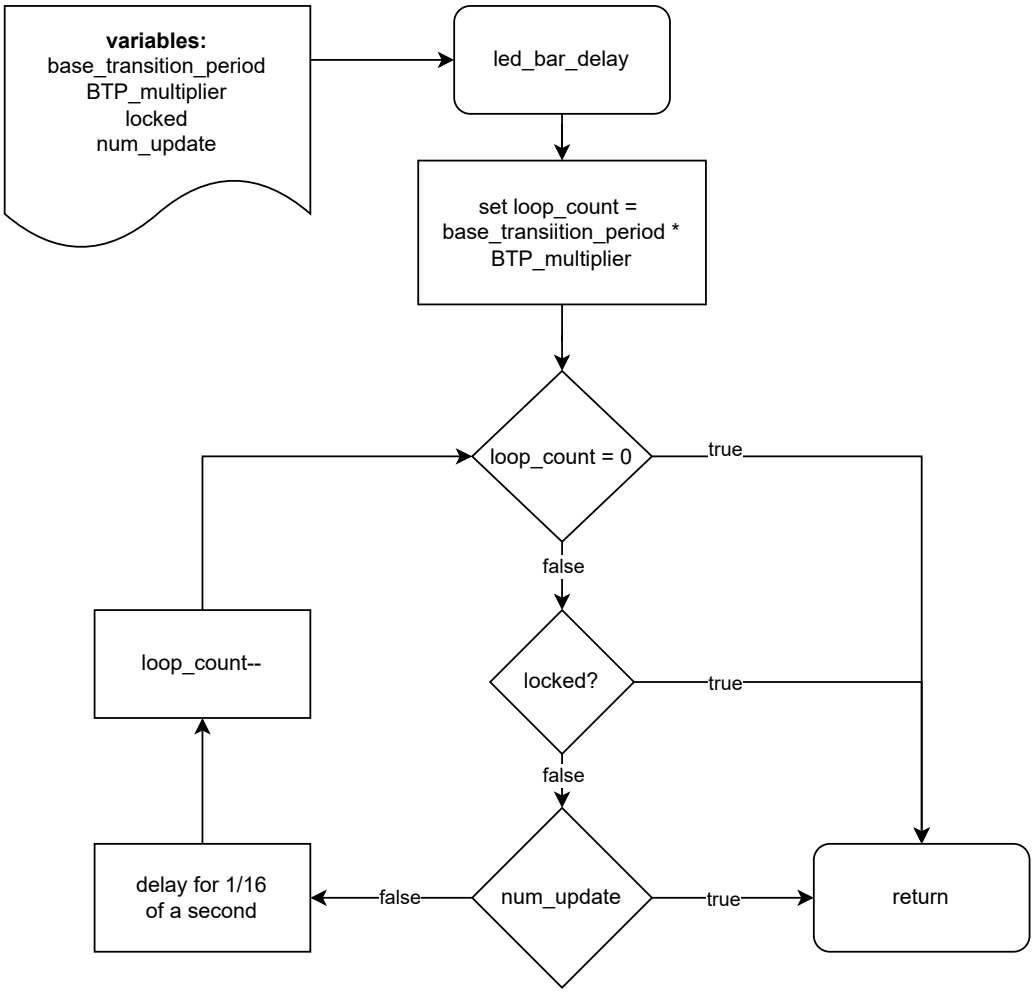
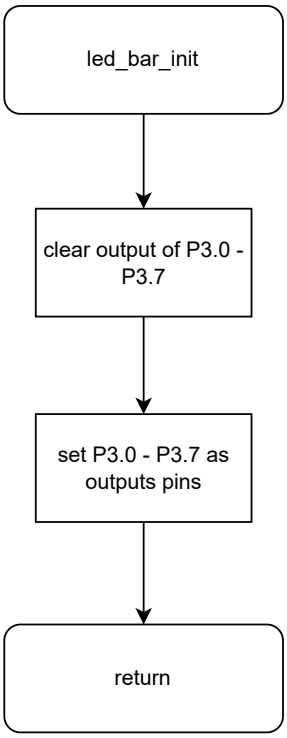
MSP430FR2310IPW16: LED Peripheral

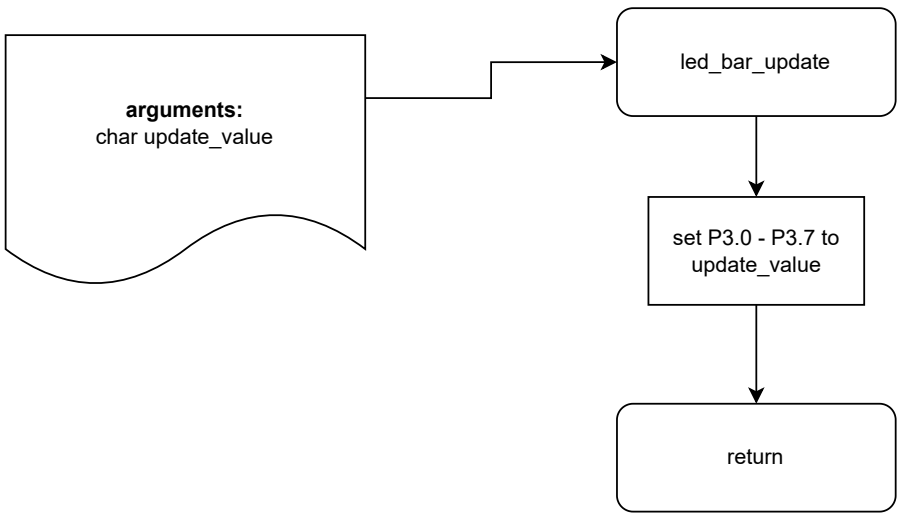



Variables:
curr_num
reset_pattern
led_bar_update_pattern
curr_num = 0
true
false
set
BTP_multiplier = 1
led_bar_update(170)
set reset_pattern
to false
curr_num = 1
set
BTP_multiplier = 1
reset_pattern
invert count_1
count_1 = 170
and set reset_pattern
to false
led_bar_update(count_1)
curr_num = 2
set
BTP_multiplier = 0.5
count_2++
and roll if needed
count_2 = 0
and set reset_pattern
to false
led_bar_update(count_2)
curr_num = 3
set
BTP_multiplier = 0.5
count_3
and roll if needed
count_3 = 0
and set reset_pattern
to false
led_bar_update(count_3)
curr_num = 4
set
BTP_multiplier = 0.25
count_4--
and roll if needed
count_4 = 255
and set reset_pattern
to false
led_bar_update(count_4)
curr_num = 5
set
BTP_multiplier = 1.5
pointer_5++
and roll if needed
pointer_5 = 0
and set reset_pattern
to false
led_bar_update(*pointer_5)
curr_num = 6
set
BTP_multiplier = 0.5
pointer_6++
and roll if needed
pointer_6 = 0
and set reset_pattern
to false
led_bar_update(*pointer_6)
curr_num = 7
set
BTP_multiplier = 1
set reset_pattern to
false
pointer_7++
and roll if needed
pointer_7 = 0
and set reset_pattern
to false
led_bar_update(*pointer_7)
return


variables:
base_transition_period
BTP_multiplier
locked
num_update
led_bar_delay
set loop_count =
base_transiition_period *
BTP_multiplier
loop_count = 0
true
false
loop_count--
locked?
true
false
delay for 1/16
of a second
false
num_update
true
return


led_bar_init
clear output of P3.0 - P3.7
set P3.0 - P3.7 as outputs pins
return

Macro


arguments:
char update_value
led_bar_update
set P3.0 - P3.7 to update_value
return