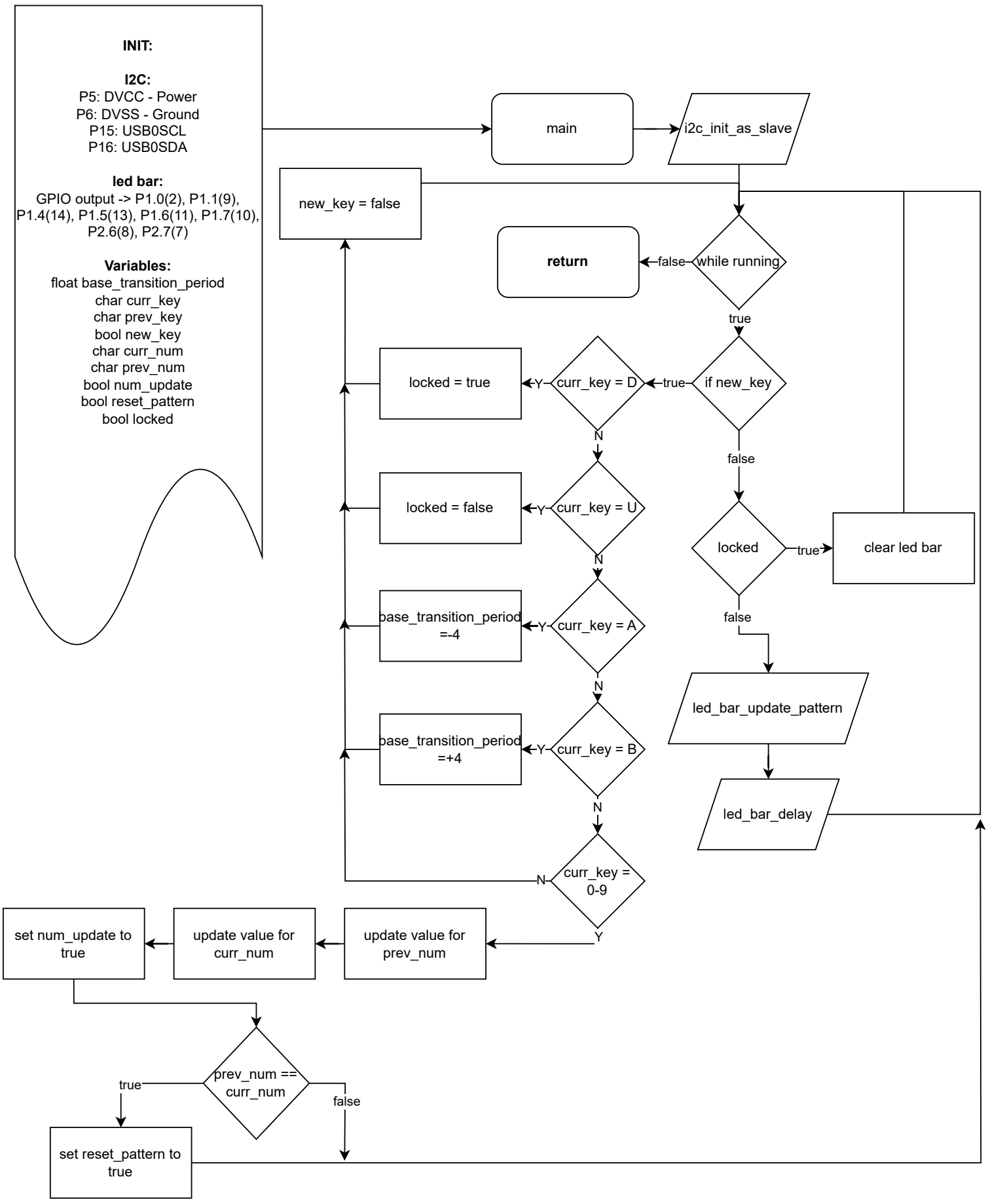
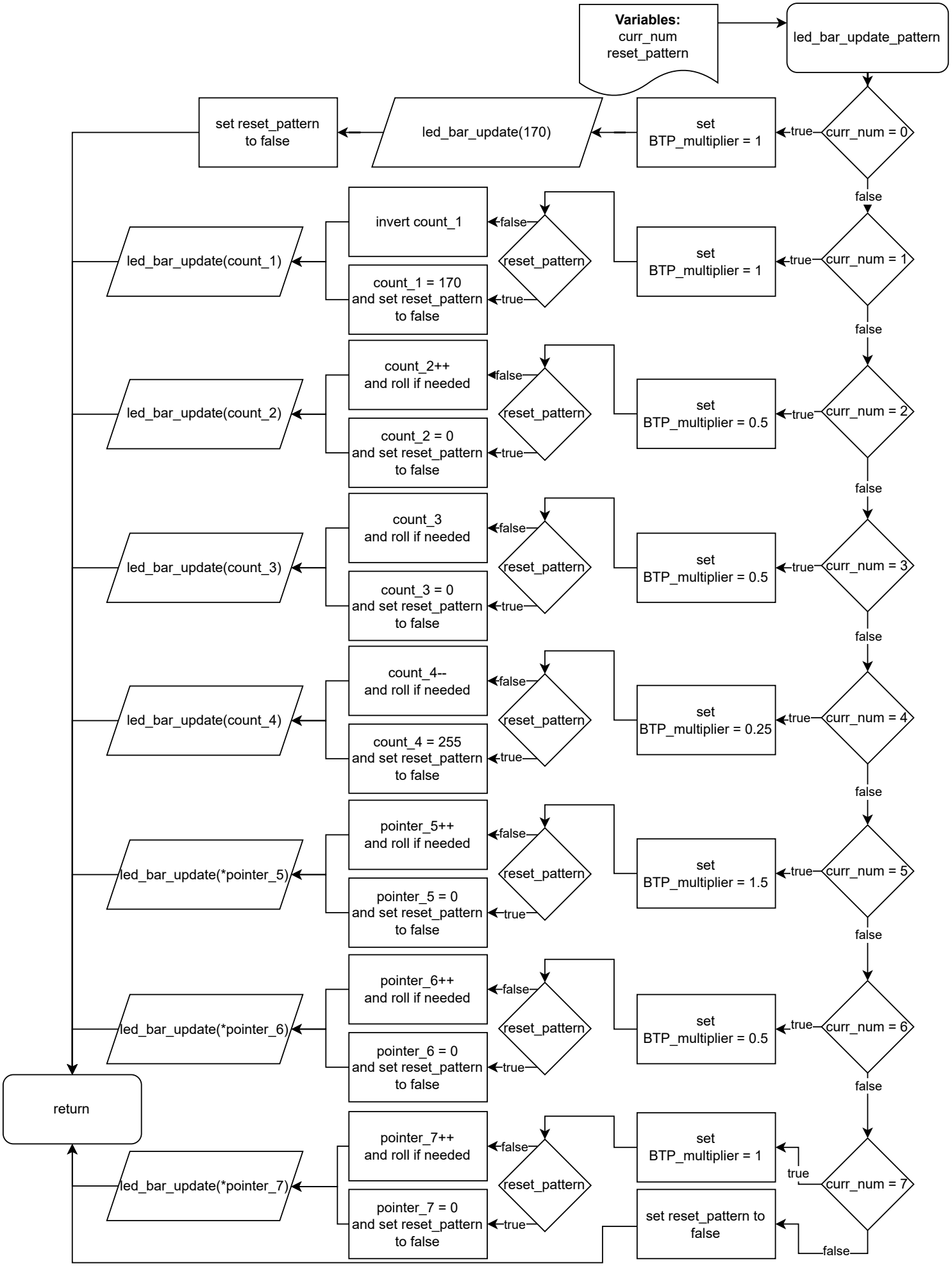
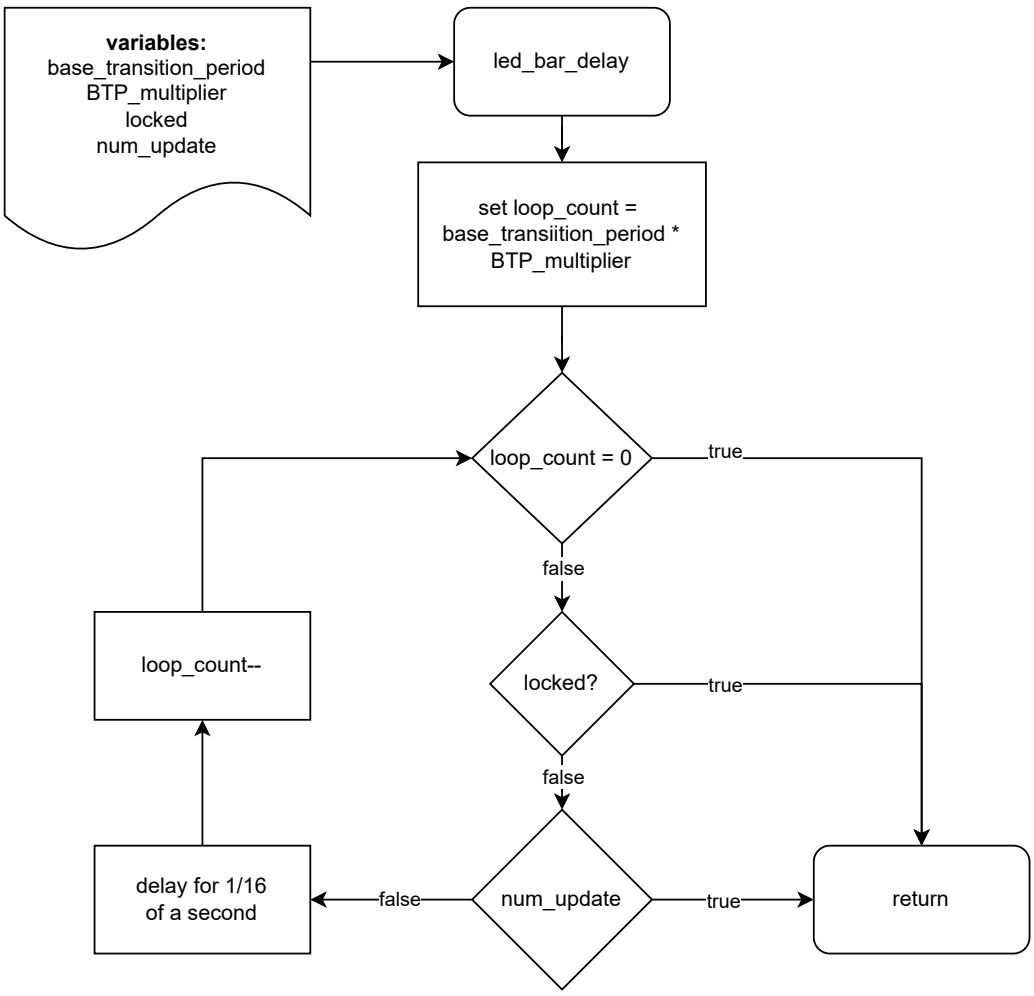
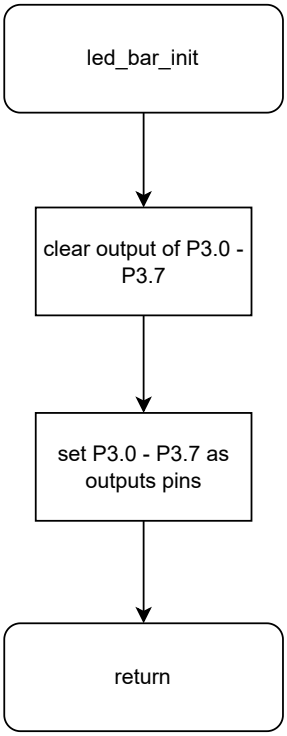
MSP430FR2310IPW16: LED Peripheral

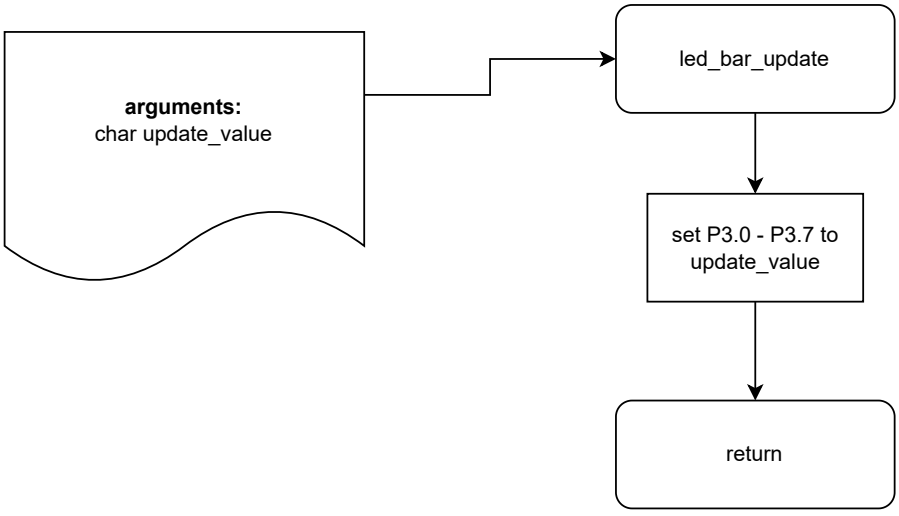



Variables:
curr_num
reset_pattern
led_bar_update_pattern
curr_num = 0
true
set
BTP_multiplier = 1
led_bar_update(170)
set reset_pattern
to false
false
curr_num = 1
true
set
BTP_multiplier = 1
reset_pattern
false
invert count_1
led_bar_update(count_1)
true
count_1 = 170
and set reset_pattern
to false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