

**LEDButton.inc**

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1  ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
2  ;                                                                 ;
3  ;                               LEDButton.inc                      ;
4  ;                               EE110a HW1                        ;
5  ;                               Include File                     ;
6  ;                                                                 ;
7  ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
8
9  ; This file contains the constants for the LED Button program.
10 ;
11 ; References: CC13x2, CC26x2 SimpleLink™ Wireless MCU Technical Reference Manual
12 ;             https://www.ti.com/lit/ug/swcu185g/swcu185g.pdf?ts=1761608306803
13 ;
14 ;             CC26xR launchpad pin mapping and schematic:
15 ;             https://www.ti.com/tool/LAUNCHXL-CC26X2R1#tech-docs
16 ;
17 ; Revision History:
18 ;   10/28/25  Steven Lei          initial revision
19 ;
20
21
22 ; I/O Constants
23
24 RED_LED_IO_BIT      .equ      6           ;red LED on DI06 → bit 6 of GPIO_DOE
25 GREEN_LED_IO_BIT    .equ      7           ;green LED on DI07 → bit 7 of GPIO_DOE
26 LEFT_BTN_IO_BIT     .equ      13          ;left button on DI013 → bit 13 of GPIO_DOE
27 RIGHT_BTN_IO_BIT    .equ      14          ;right button on DI014 → bit 14 of GPIO_DOE
28
29 ; Configuration for a GPIO input that needs a pull up.
30 ; This is used for the push buttons since they are pulled low when pressed,
31 ;   according to schematic.
32 ; see pg 1108
33 IOCFG_DIN_PULL_UP   .equ      0x20004000 ;
34                     ;0----- reserved
35                     ;-0----- no hysteresis
36                     ;--1----- input
37                     ;--00----- no wakeup
38                     ;---000----- normal mode
39                     ;----000----- no edge detect events
40                     ;-----00----- reserved
41                     ;-----0----- no edge detect IRQ
42                     ;-----00----- no edge detection
43                     ;-----0----- reserved
44                     ;-----10----- pull up enabled
45                     ;-----0----- normal slew
46                     ;-----00----- 2mA output
47                     ;-----00----- auto drive strength control
48                     ;-----0----- no edge detect RTC event
49                     ;-----0----- no edge detect wake up event

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50 | ;————000000 general purpose I/O