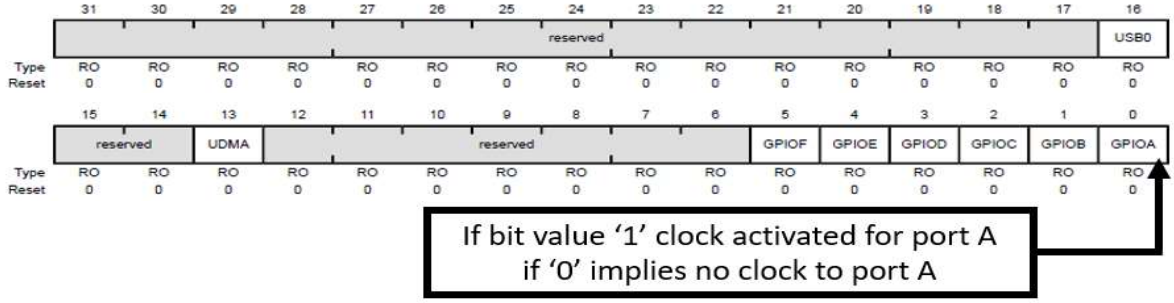
Lab 1: Learning GPIO port interface in TIVA μC

(LED & switch interface with TIVA)

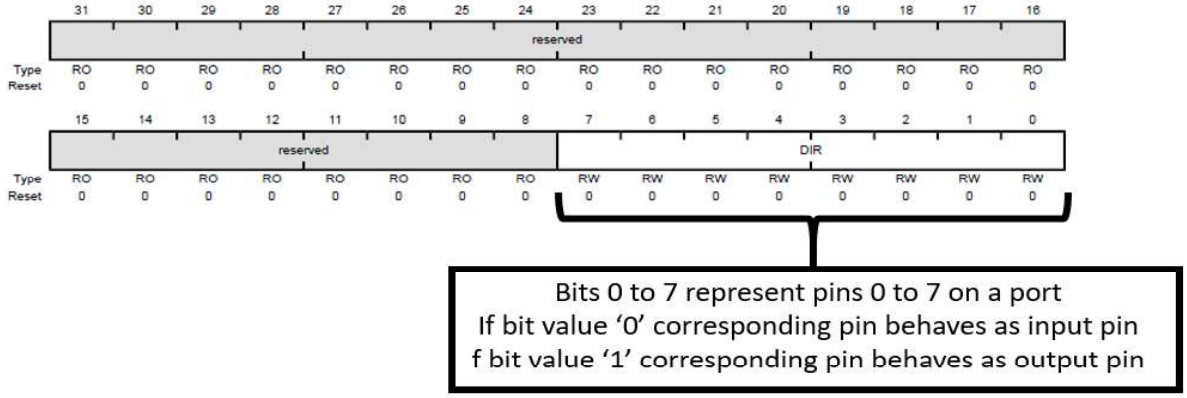
Register Description:

Goto > C > Keil folder > Datasheets > open tm4cgh6pm.pdf (to refer pg)

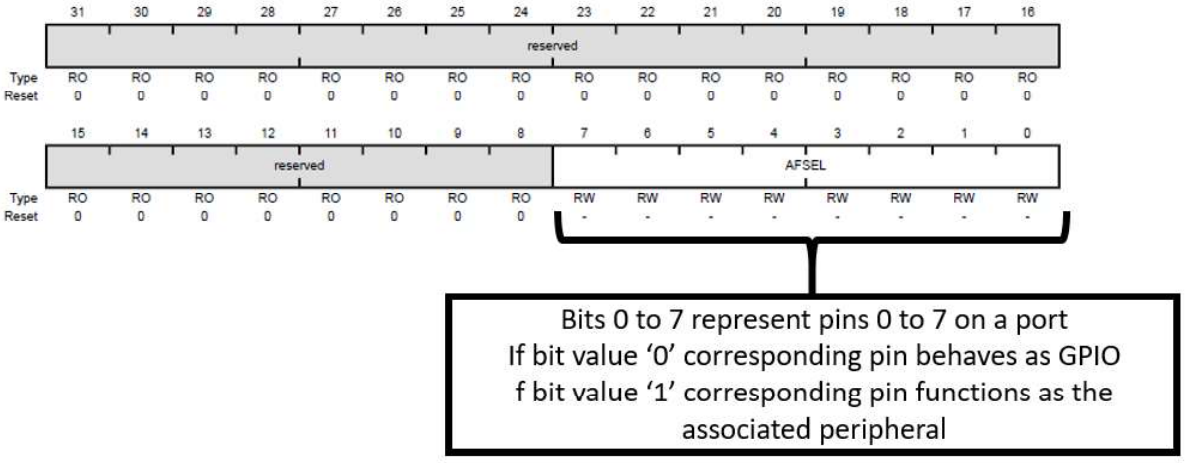
RCGC2: pg-462



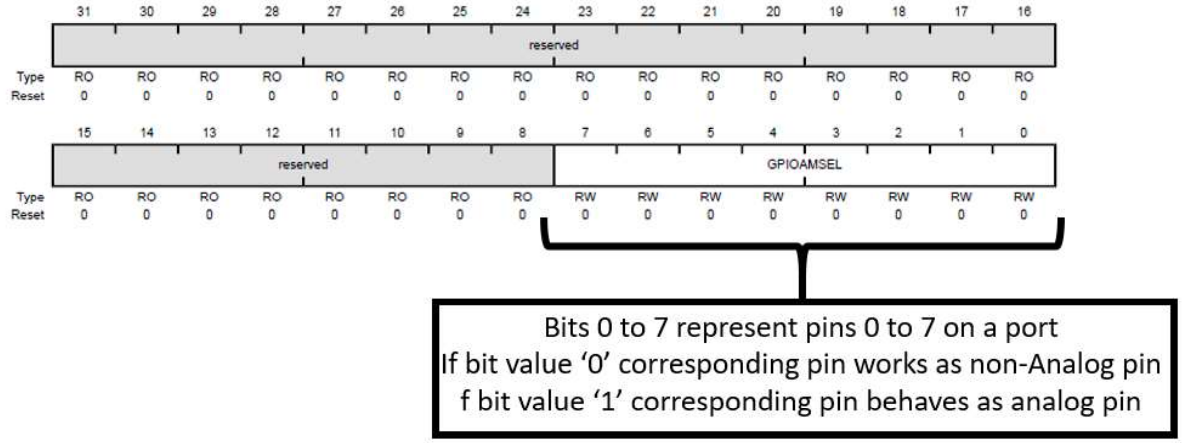
DIR: pg-660



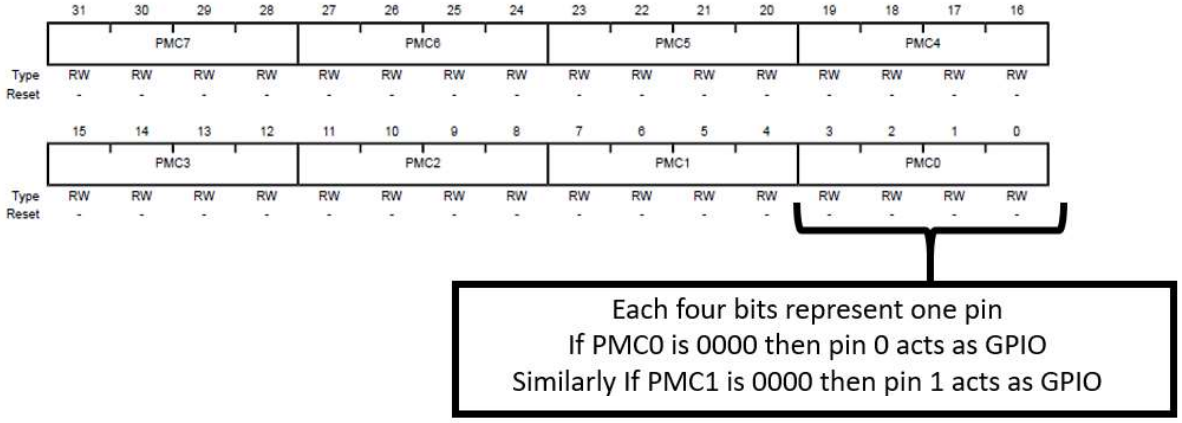
AFSEL: pg-669



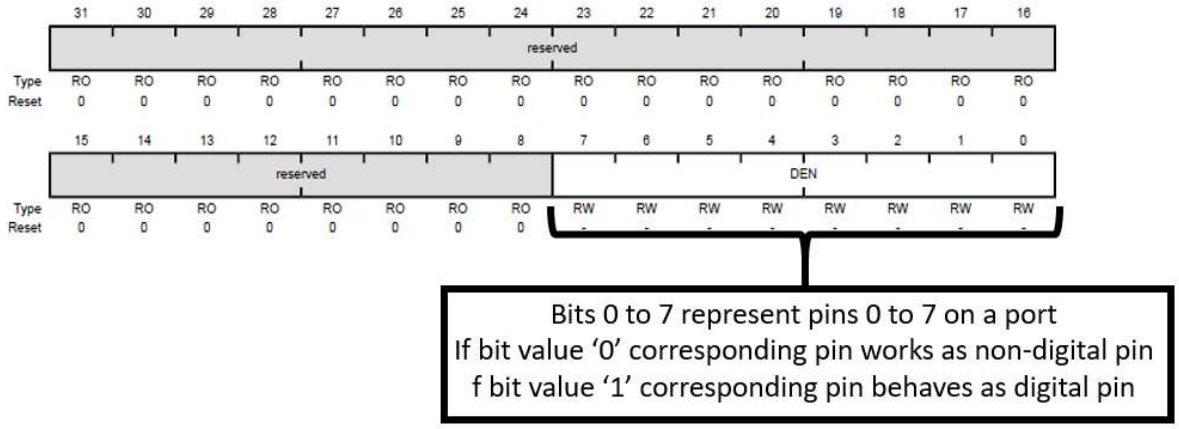
AMSEL: pg-684



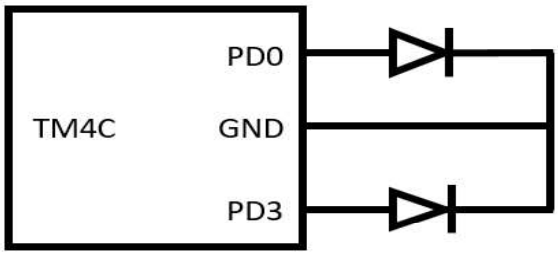
PCTL: pg-686



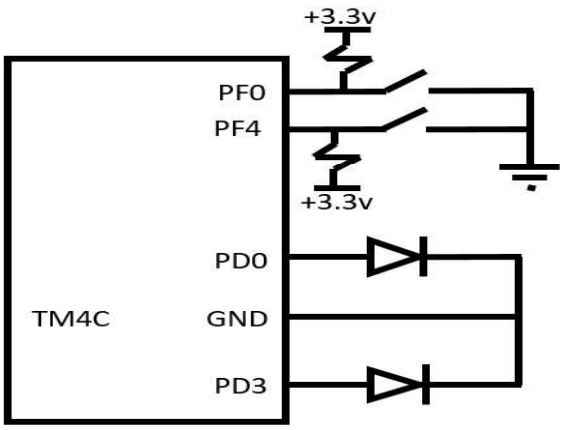
DEN: pg-680



Exercise 1-1: Toggle LED connected to PD3 and PD0. Observe the waveforms in debug mode and calculate on time, off time and frequency.

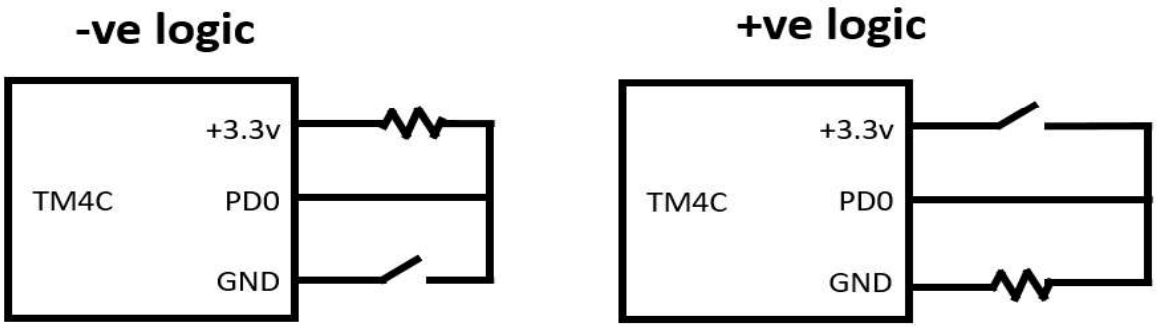


Exercise 1-2: Use on board SW1 and SW2 to control LED on PD3 and PD0. Observe the waveforms in debug mode



Exercise 1-3: Write a program to perform the following operations

SW1=PD0 ;SW2=PD1	**LED1:PD2, LED2: PD3**
SW1 pressed	LED1 blinking
SW2 pressed	LED2 blinking
SW1 and SW2 pressed	LED1 and LED2 blinking
No SW pressed	LED off



Above circuit demonstrates switch interface