

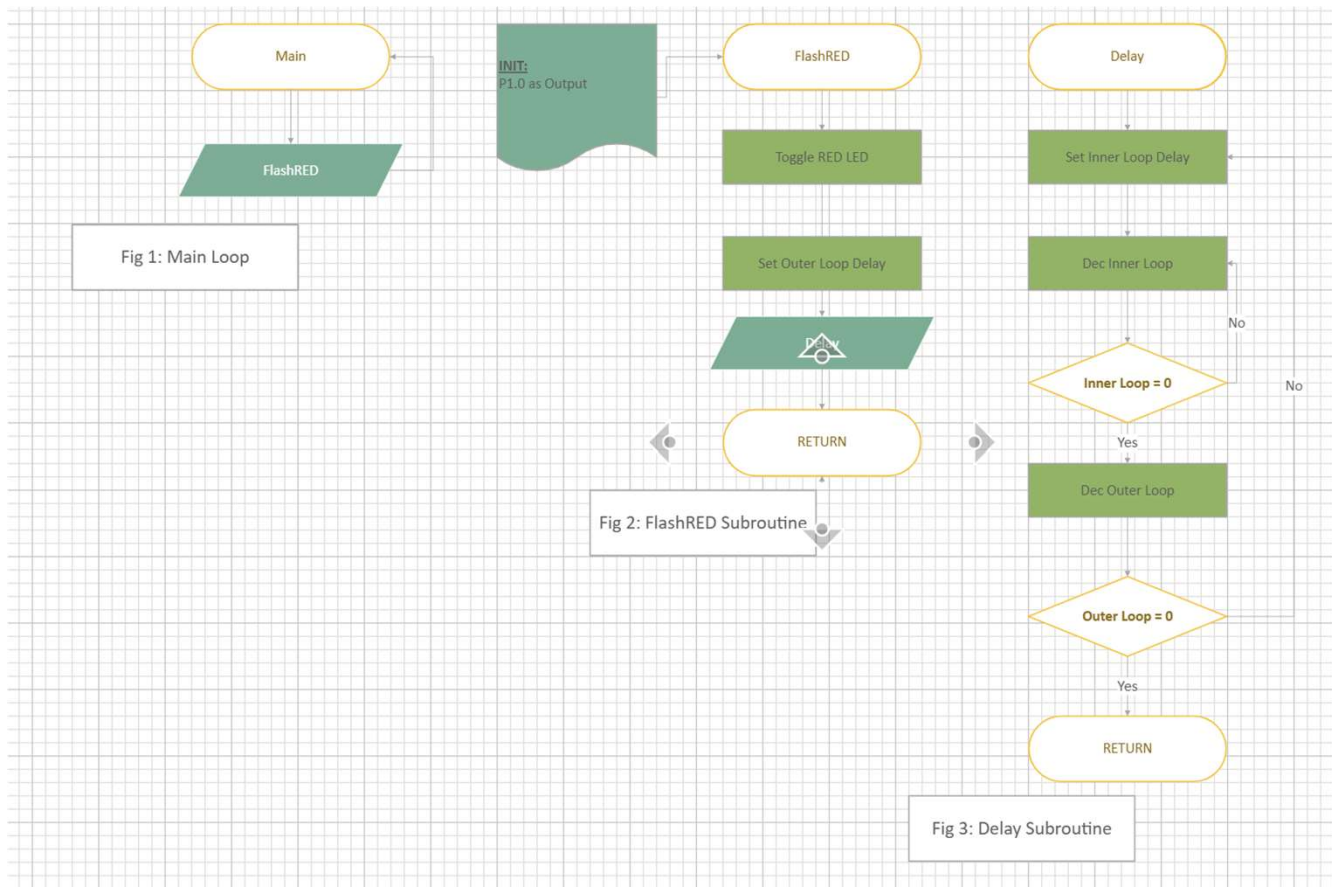
Project 1

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Project Goal

- Blink both the Red LED and green LED on MSP430 at frequency of 0.5Hz
- Red LED was blinked using a subroutine call
- Green LED was blinked using a timer interrupt

Subroutine Call



Started with 50000 for inner loop value in R14
10 for outer loop

Was about 1.4s on, 1.4s off

Eventually reduced to 35000

Timer-Interrupt

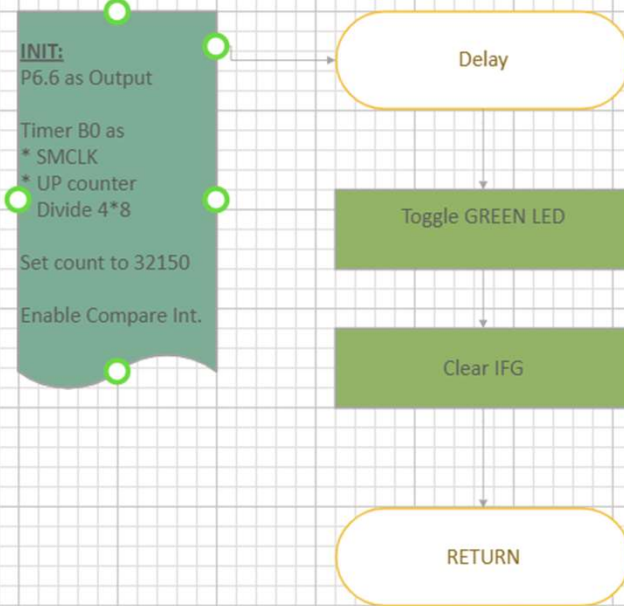


Fig 3: TimerB0 ISR

Started with compare value of 31250:
 $1000000/(4*8) = 31250$

Too fast, eventually changed to 32830

Why one or the other?

- Subroutines are simpler, but must be implemented into main program flow
- Timer interrupts are asynchronous, so can be run next to main program
 - More precise timing