System Block diagram

Blinking LEDs with user input control of periods

start

SysTick start

System initialization

Monitor SysTick Counter value

Set Systick Reload value

start "super loop"

NO

systick Current = zero

monitor input buttons

Yes

NO

Button① Pressed?

Callback function

Yes

Toggle LED

Count how many times did Button② is Pressed

NO

Button① Released?

Yes

Reload systick value