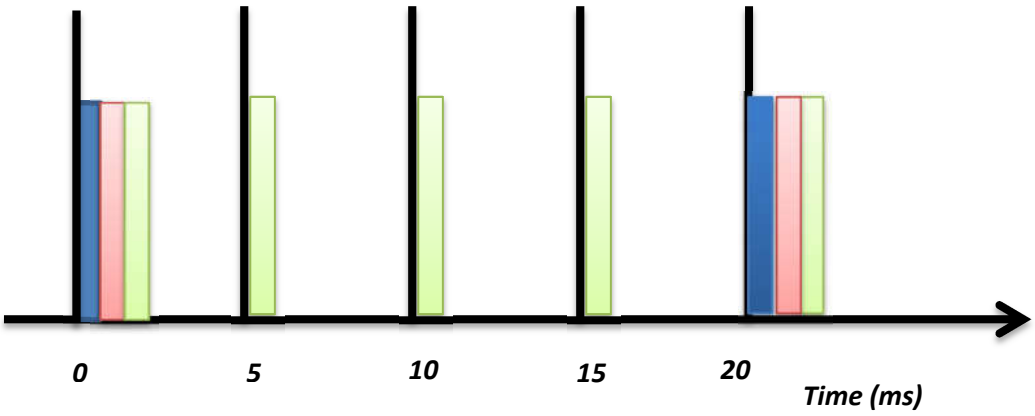
Timing Analysis

Task	Action	BCET (ms)	WCET (ms)	Periode Of Action (ms)	Periode Of Task (ms)
SW_Update	SW_UP_Update SW_DOWN_Update SW_SETTING_Update	0.014	0.428	20	20
TIME_Update	Automatic_Time_Update Manual_Time_Update	0.013	0.126	1000 20	20
SSD_Update	SSD_Update_Mode SSD_Update_Blinking SSD_Refresh	1.08	1.23	5	5
TICK(ms)					5
Major Cycle(ms)					20

Minor Cycle = GCD(P1, P2, P3) = GCD(20, 20, 5) = 5 ms
Major Cycle = LCM(P1, P2, P3) = LCM(20, 20, 5) = 20 ms
Major Cycle = 4 Minor Cycle



*CPU Load = (WCET(P1 + P2 + P3) / Major Cycle) * 100*
*CPU Load = ((0.428 + 0.126 + 1.23)/20)*100 = 8.92 %*

Modules Diagram

SW
+SW_Period_Is_Ended : Bool_t -SW_State[SW_MAX_NUMBER] : SW_State_t
+SW_Init(void) : void +SW_Update(void) : void +SW_UP_Get_State(void) : SW_State_t +SW_DOWN_Get_State(void) : SW_State_t +SW_SEETING_Get_State(void) : SW_State_t -SW_Get_State(SW_ID : const SW_t) : SW_State_t -SW_Update_State(SW_ID : const SW_t) : void

TIME
-Hours : u8_t -Minutes : u8_t -Seconds : u8_t
+TIME_Init(void) : void +TIME_Update(void) : void -Auto_Time_Update(void) : void -Manul_Time_Update(void) : void

SSD
+SSD_Mode : SSD_Mode_t -Hours : u8_t -Minutes : u8_t -Seconds : u8_t -SSD_O _Period : u8_t -SSD_On_Period : u8_t -SSD_Id : SSD_t
+SSD_Init(void) : void +SSD_Update(void) : void +SSD_Set_Hours(HOURS : const u8_t) : void +SSD_Set_Minutes(MINUTES: const u8_t) : void +SSD_Set_Seconds(SECONDS: const u8_t) : void -SSD_On(SSD_ID : SSD_t) : void -SSD_Off(SSD_ID : SSD_t) : void -SSD_Time(TIME : const u8_t) : void -SSD_Update_Mode(void) : void -SSD_Update_Blinking(void) : void -SSD_Refresh(void) : void

Block Diagram