2018.05.09.

노트북:	SW		
만든 날짜:	2018-05-09 오전 11:16	**수정한 날짜:**	2018-05-10 오전 7:16
작성자:	정상요		

2018. 4. 13 금 – 37회차

과정 : TI, DSP, Xilinx Znq FPGA, MCU 기반의 프로그래밍 전문가 과정

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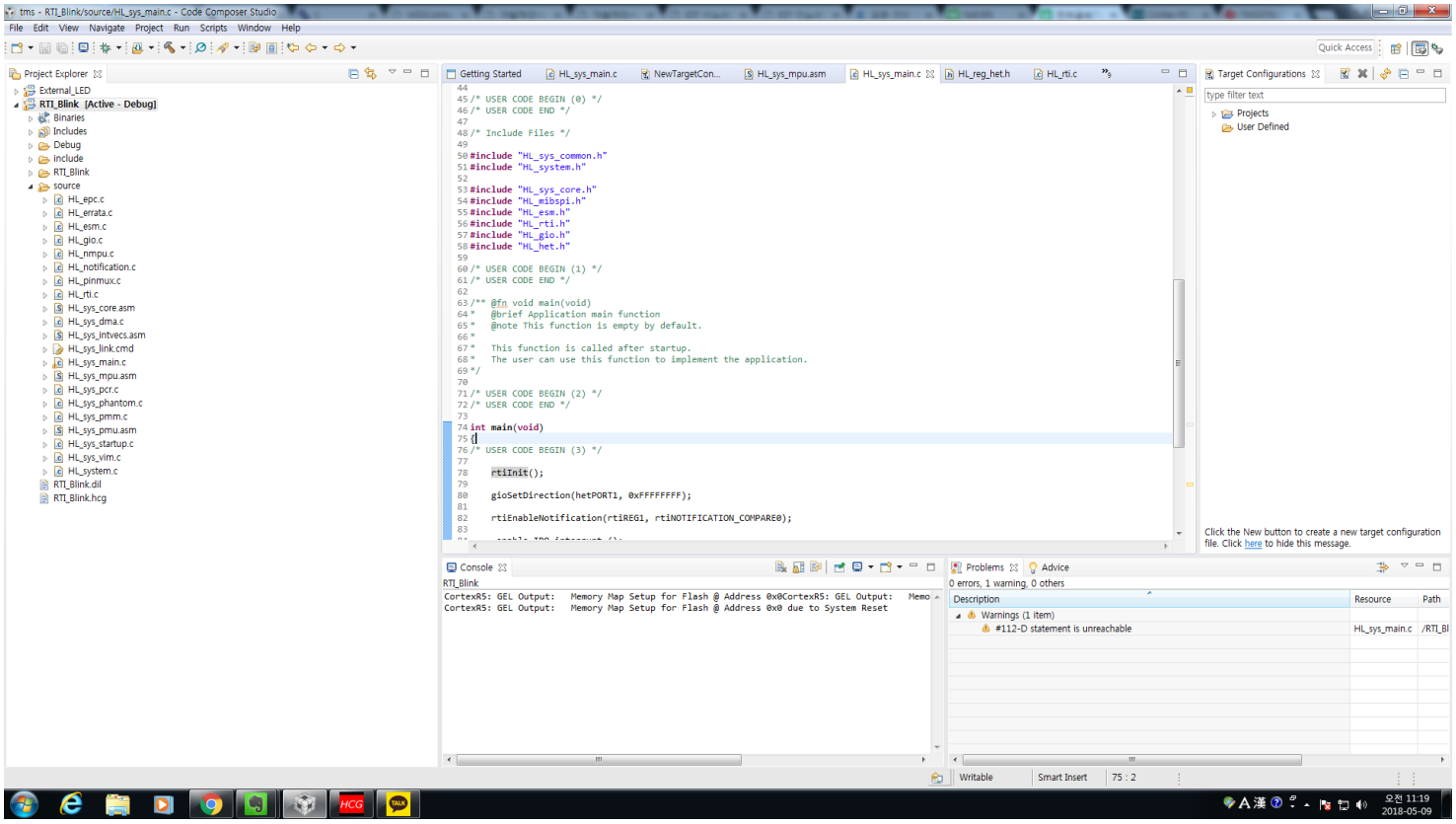
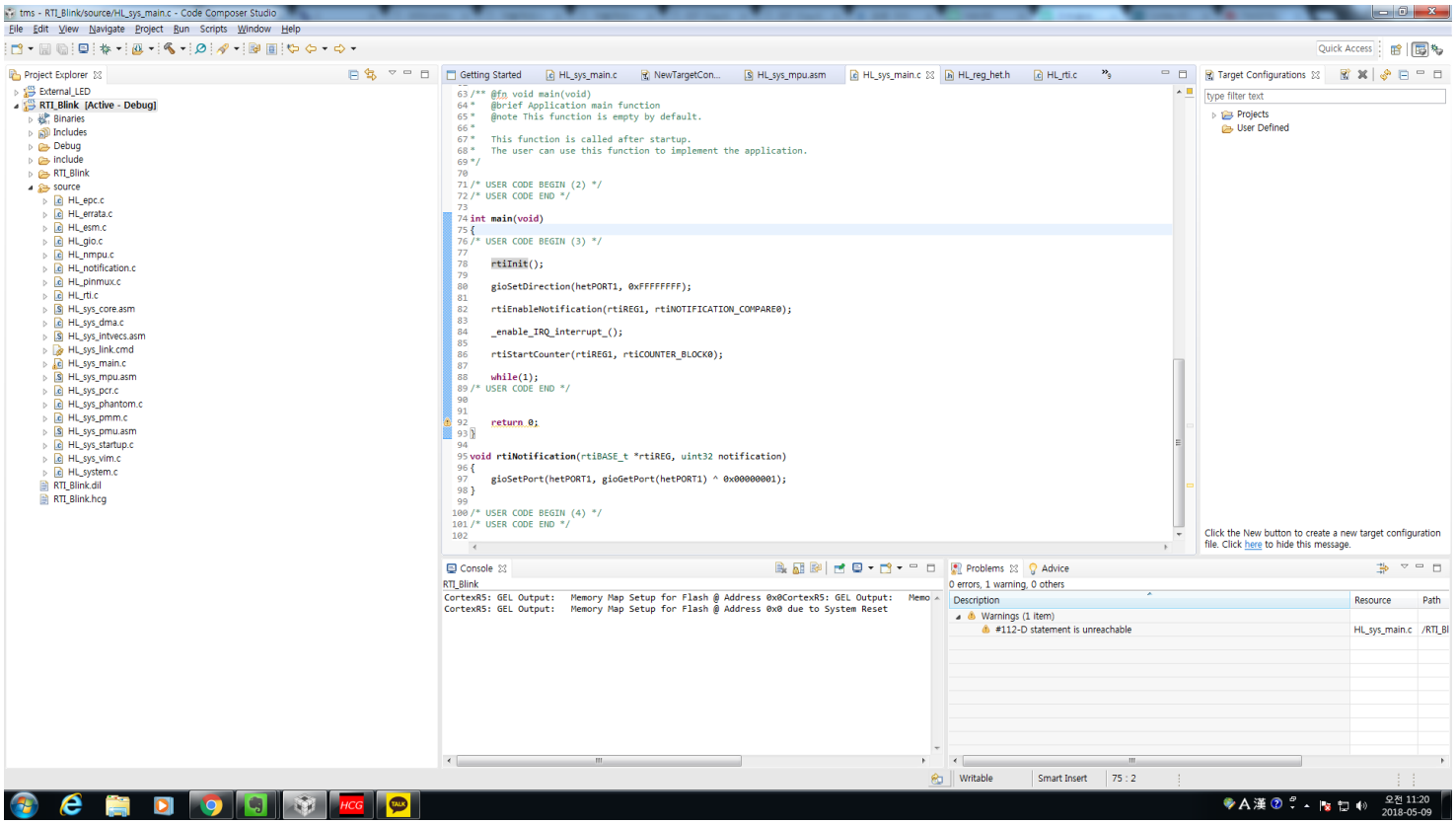
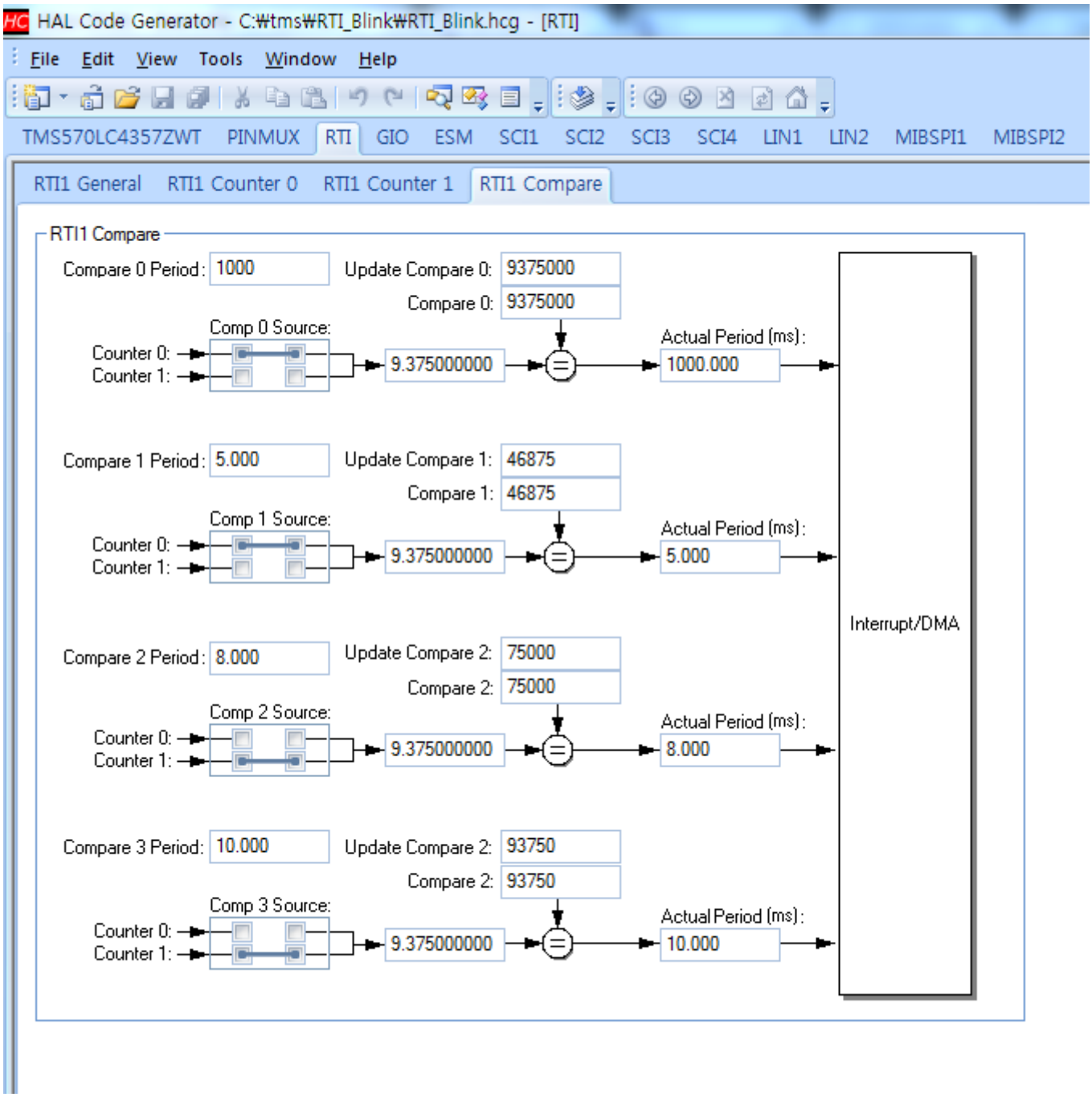
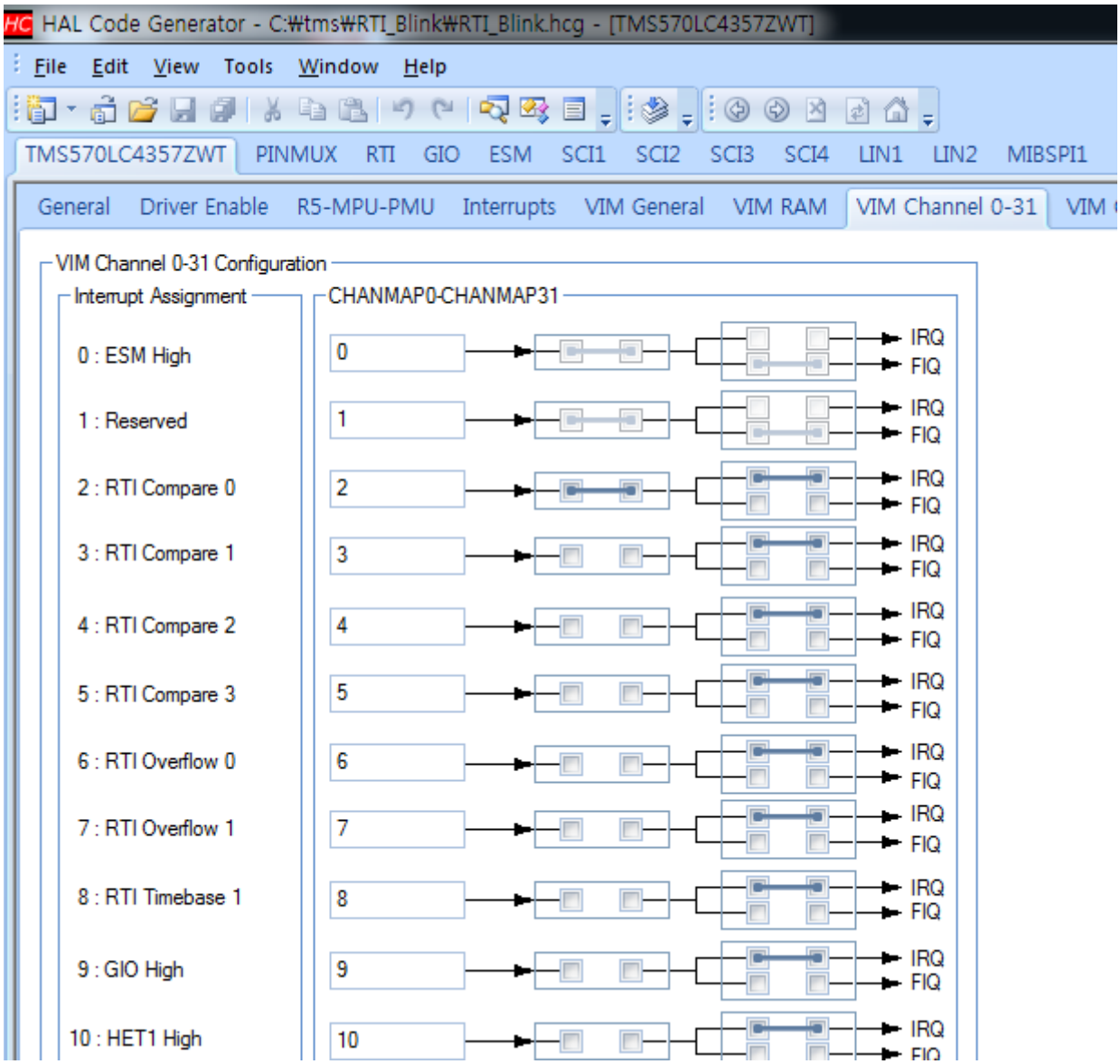
RTI - Interrupt & Interrupt handler
물리




tms - RTI_Blink/source/HL_sys_main.c - Code Composer Studio
File Edit View Navigate Project Run Scripts Window Help
Project Explorer
External_LED
RTI_Blink [Active - Debug]
Binaries
Includes
Debug
Include
RTI_Blink
source
HL_epc.c
HL_errata.c
HL_esm.c
HL_gio.c
HL_nmpu.c
HL_notification.c
HL_pinmux.c
HL_rti.c
HL_sys_core.asm
HL_sys_dma.c
HL_sys_intvecs.asm
HL_sys_link.cmd
HL_sys_main.c
HL_sys_mpu.asm
HL_sys_pcr.c
HL_sys_phantom.c
HL_sys_pmm.c
HL_sys_pmu.asm
HL_sys_startup.c
HL_sys_vim.c
HL_system.c
RTI_Blink.dil
RTI_Blink.hcg
Getting Started
HL_sys_main.c
NewTargetCon...
HL_sys_mpu.asm
HL_sys_main.c
HL_reg_het.h
HL_rti.c
/** @fn void main(void)
* @brief Application main function
* @note This function is empty by default.
*
* This function is called after startup.
* The user can use this function to implement the application.
*/
/* USER CODE BEGIN (2) */
/* USER CODE END */
int main(void)
{
/* USER CODE BEGIN (3) */
rtiInit();
gioSetDirection(hetPORT1, 0xFFFFFFFF);
rtiEnableNotification(rtiREG1, rtiNOTIFICATION_COMPARE0);
_enable_IRQ_interrupt_();
rtiStartCounter(rtiREG1, rtiCOUNTER_BLOCK0);
while(1);
/* USER CODE END */
return 0;
}
void rtiNotification(rtiBASE_t *rtiREG, uint32 notification)
{
gioSetPort(hetPORT1, gioGetPort(hetPORT1) ^ 0x00000001);
}
/* USER CODE BEGIN (4) */
/* USER CODE END */
Target Configurations
type filter text
Projects
User Defined
Click the New button to create a new target configuration file. Click here to hide this message.
Console
RTI_Blink
CortexR5: GEL Output: Memory Map Setup for Flash @ Address 0x0CortexR5: GEL Output: Memo
CortexR5: GEL Output: Memory Map Setup for Flash @ Address 0x0 due to System Reset
Problems
Advice
0 errors, 1 warning, 0 others
Description
Resource
Path
Warnings (1 item)
#112-D statement is unreachable
HL_sys_main.c
/RTI_Bl
Writable
Smart Insert
75 : 2
오전 11:20
2018-05-09

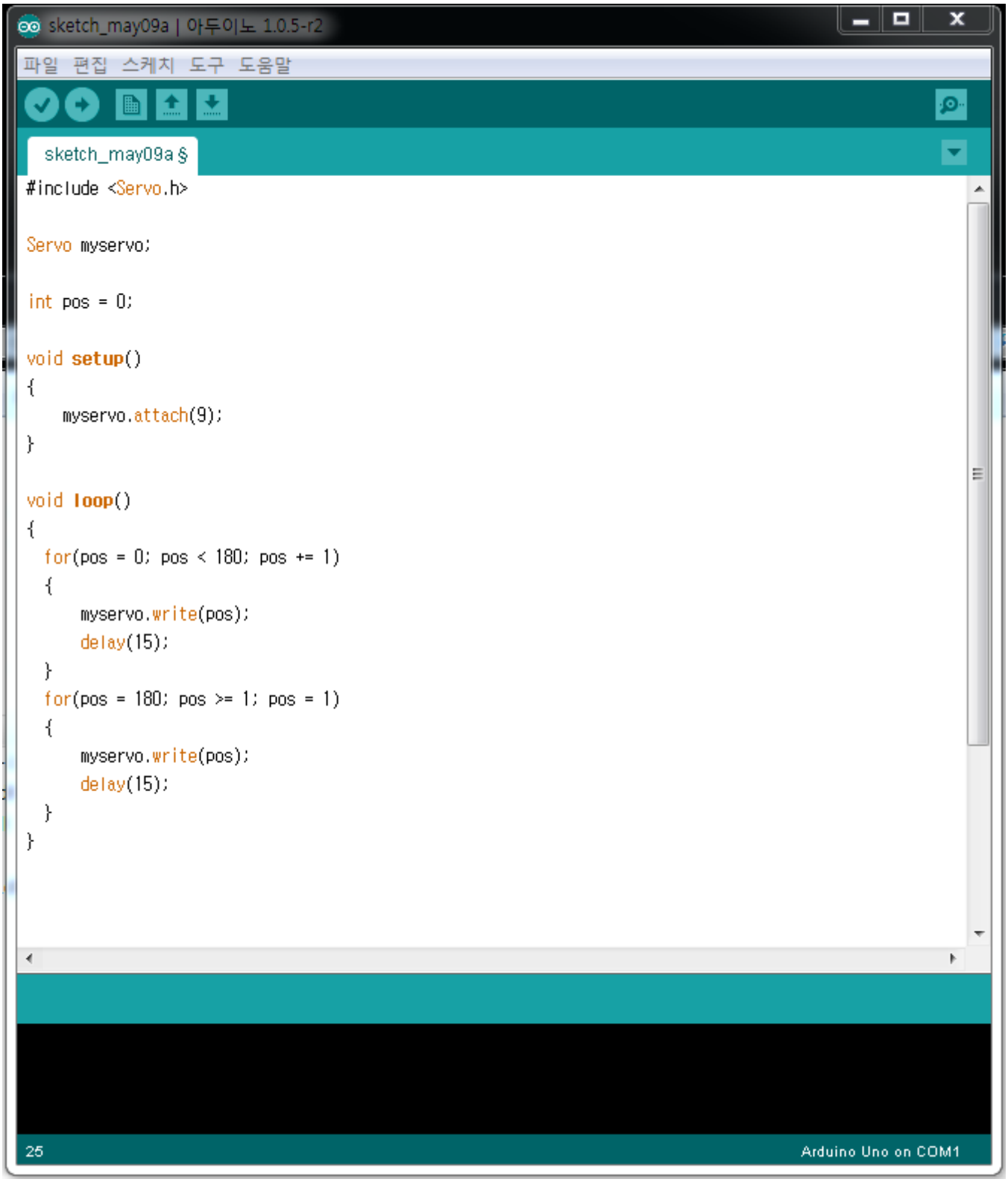

HAL Code Generator - C:¥tms¥RTI_Blink¥RTI_Blink.hcg - [RTI]
File Edit View Tools Window Help
TMS570LC4357ZWT PINMUX RTI GIO ESM SCI1 SCI2 SCI3 SCI4 LIN1 LIN2 MIBSPI1 MIBSPI2
RTI1 General RTI1 Counter 0 RTI1 Counter 1 RTI1 Compare
RTI1 Compare
Compare 0 Period: 1000
Update Compare 0: 9375000
Compare 0: 9375000
Comp 0 Source:
Counter 0:
Counter 1:
9.375000000
Actual Period (ms): 1000.000
Compare 1 Period: 5.000
Update Compare 1: 46875
Compare 1: 46875
Comp 1 Source:
Counter 0:
Counter 1:
9.375000000
Actual Period (ms): 5.000
Compare 2 Period: 8.000
Update Compare 2: 75000
Compare 2: 75000
Comp 2 Source:
Counter 0:
Counter 1:
9.375000000
Actual Period (ms): 8.000
Compare 3 Period: 10.000
Update Compare 2: 93750
Compare 2: 93750
Comp 3 Source:
Counter 0:
Counter 1:
9.375000000
Actual Period (ms): 10.000
Interrupt/DMA



compare : 기존에 비교할 값
update : 비교하고 그 다음에 비교할 값

Real time interrupt를 사용하기 위하여 기본 세팅
hetport1번을 활성화 시킴
인터럽트 활성화시킴
실제 CPU가 동작모드 IRQ를 쓸수있도록 세팅
RTI를 쓸수있도록 최종세팅

rtiNotification : 인터럽트 발생 1sec 후 동작
    gioGetPort :


sketch_may09a | 아두이노 1.0.5-r2
파일 편집 스케치 도구 도움말
sketch_may09a §
#include <Servo.h>
Servo myservo;
int pos = 0;
void setup()
{
myservo.attach(9);
}
void loop()
{
for(pos = 0; pos < 180; pos += 1)
{
myservo.write(pos);
delay(15);
}
for(pos = 180; pos >= 1; pos = 1)
{
myservo.write(pos);
delay(15);
}
}
25
Arduino Uno on COM1