CPE301 – SPRING 2019

Design Assignment 2A TASK2

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Primary Github address: https://github.com/yeeun219/submission\_da.git

Directory: cpe301\DesignAssignments\DA2A\T1. cpe301\DesignAssignments\DA2A\T2

1. **COMPONENTS LIST AND CONNECTION BLOCK DIAGRAM w/ PINS**

while (1) //Repeat continuously,blinking LED

*\_delay\_ms*(435);//Create a Delay of 60%DC

*\_delay\_ms*(290);//Create a Delay of 40%DC

*\_delay\_ms*(1250);: //Create a Delay of 1.25s

1. **DEVELOPED CODE OF TASK 2**

; /\*

\* GccApplication1.c

\*

\* Created: 2019-03-04 오후 5:28:14

\* Author : llje2

\*/

#define *F\_CPU* 16000000UL

#include <avr/io.h>

#include <util/delay.h>

int main(void)

{

//turn led off

DDRB |=(1<<5);

PORTB |=(1<<5);

DDRB |=(1<<2);

PORTB |=(1<<2); //TURN LED OFF

//SET PORTC.2 FOR INPUT

DDRC &=(0<<2);

PORTC |= (1<<2);

while (1) //Repeat continuously

{

PORTB &= ~(1<<2); //turn on

*\_delay\_ms*(435); //0.435SEC DELAY (60%DC)

PORTB |=(1<<2); //TURN LED OFF

*\_delay\_ms*(290); //0.29SEC DELAY (40%DC)

if(!(PINC & (1<<PINC2))) //IF BUTTON IS PRESSED, INTERRUPT HAPPENS

{

PORTB &= ~(1<<2);

*\_delay\_ms*(1250); // 1.25sec

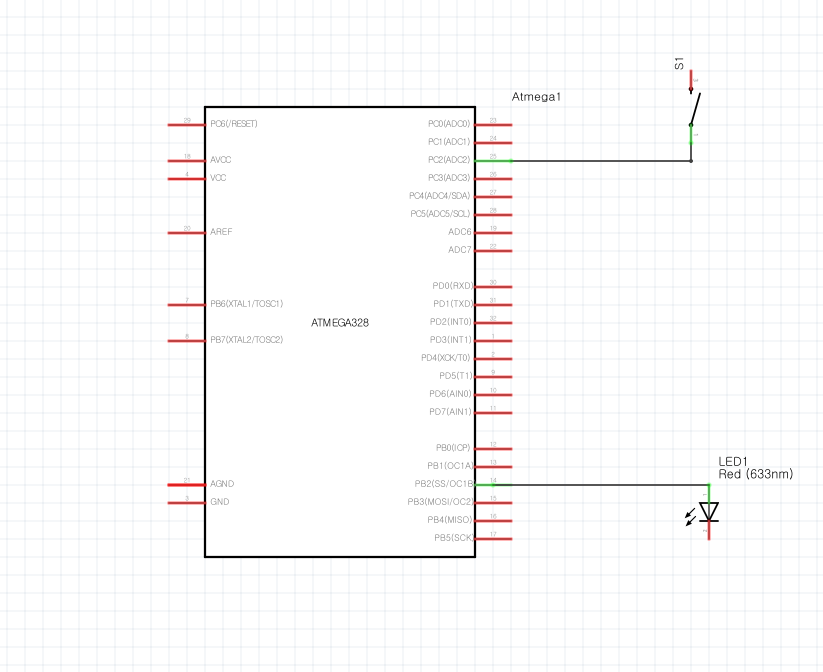
}

}

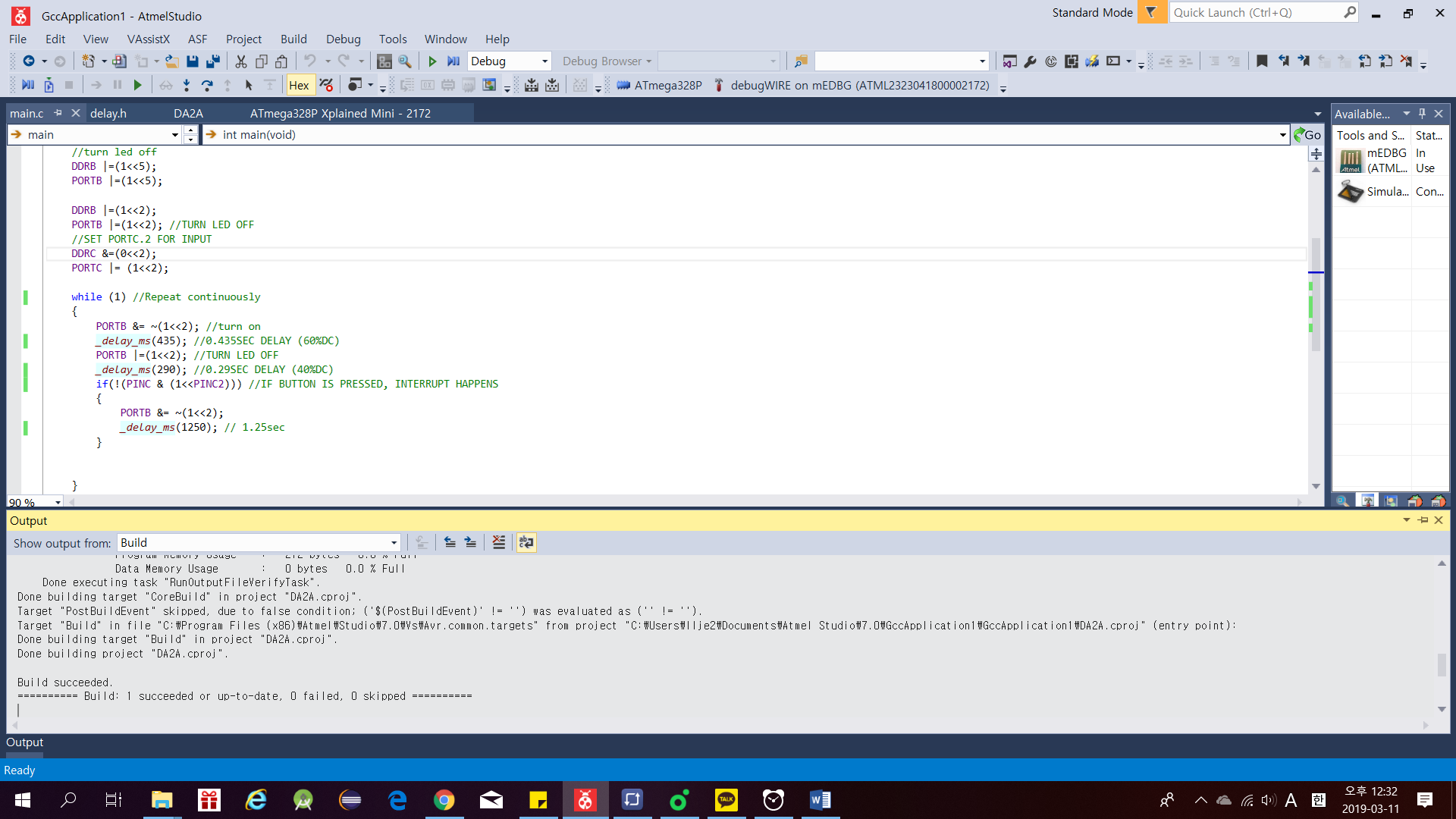
return 0;

}

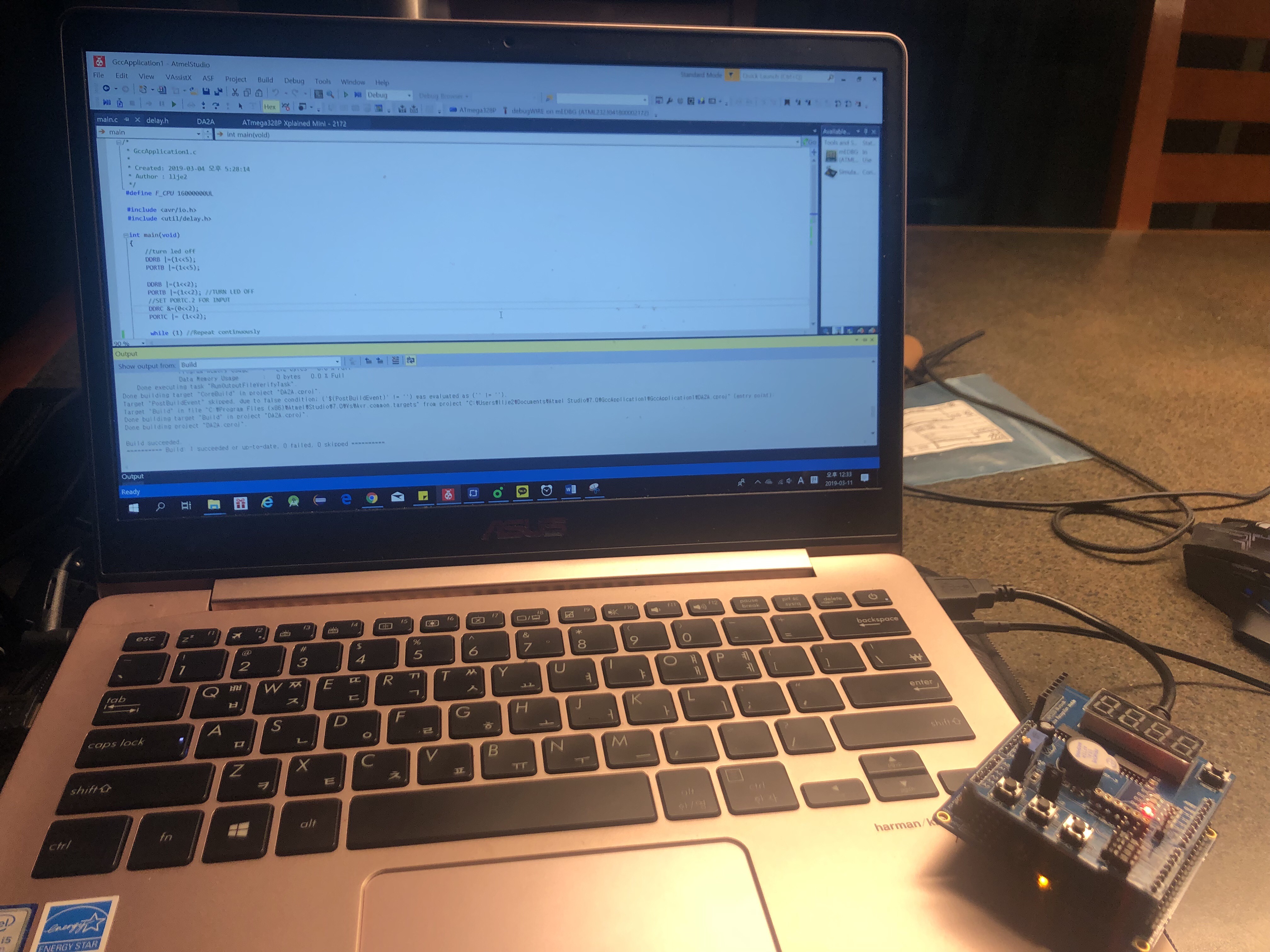
1. **SCHEMATICS**



1. **SCREENSHOTS OF EACH TASK OUTPUT (ATMEL STUDIO OUTPUT)**



1. **SCREENSHOT OF EACH DEMO (BOARD SETUP)**



1. **VIDEO LINKS OF EACH DEMO**

https://youtu.be/9fU7dnyga2M

1. **GITHUB LINK OF THIS DA**

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“This assignment submission is my own, original work”.

YEEUNLEE