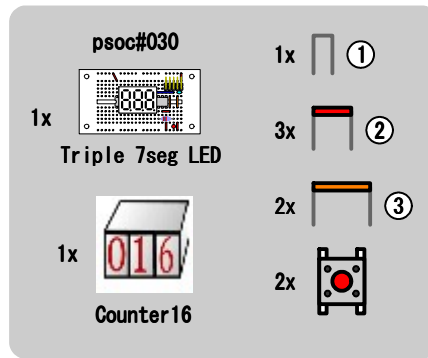




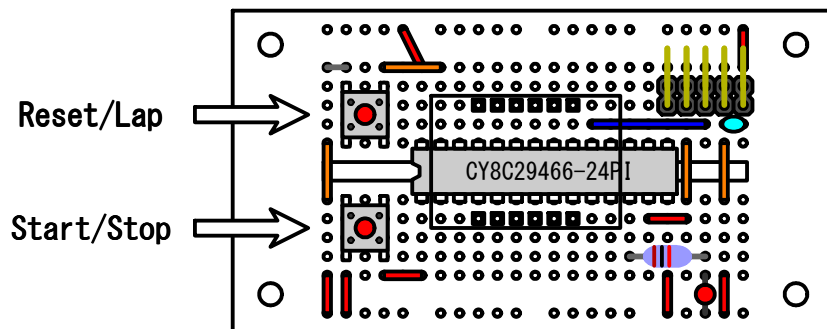
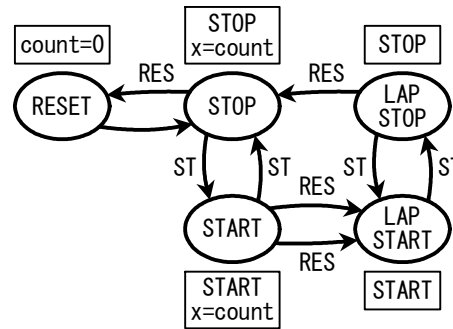
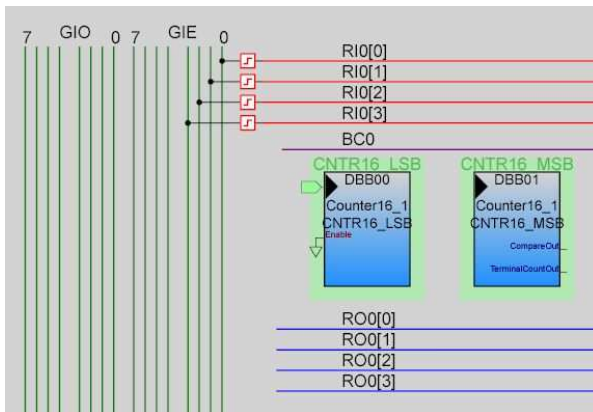
15+

032

Stop Watch



Properties - Counter16_1	
Name	Counter16_1
User Module	Counter16
Version	2.5
Clock	CPU_32_KHz
Enable	Low
CompareOut	None
TerminalCountOut	None
Period	3276
CompareValue	0
CompareType	Less Than
InterruptType	Terminal Count
ClockSync	Sync to SysOlk
InvertEnable	Normal



## Counter16\_1INT.asm

```
_Counter16_1_ISR:  
    ljmp _counter16_1_int_func  
    reti
```

## main.c

```
#define ST 0x80  
#define RES 0x40  
enum eSTATE{RESET,STOP,START,LAPSTART,LAPSTOP};  
  
BYTE sw,keyin,stat=RESET;  
WORD x,count=0;  
#pragma interrupt_handler counter16_1_int_func  
void counter16_1_int_func(void) { count++; }  
  
void main() {  
    PRT2DM2=0x00; PRT2DM1=0xEB; PRT2DM0=0xFF;  
    PRT0DM2=0x38; PRT0DM1=0xFB; PRT0DM0=0xC7;  
    Counter16_1_Start();  
    Counter16_1_EnableInt();  
    M8C_EnableGInt;  
    SegA[0]=SegA[2]=0xC000;  
    SegA[1]=0xC020;  
    for (;;) {  
        sw = ~PRT0DR;  
        switch(stat) {  
            case RESET: DBB00IN=0x07; count=0;  
                stat=STOP; break;  
            case STOP: DBB00IN=0x07; x=count;  
                if (!keyin&&sw&ST) stat=START;  
                if (!keyin&&sw&RES) stat=RESET;  
                break;  
            case START: DBB00IN=0x17; x=count;  
                if (!keyin&&sw&ST) stat=STOP;  
                if (!keyin&&sw&RES) stat=LAPSTART;  
                break;  
            case LAPSTART: DBB00IN=0x17;  
                if (!keyin&&sw&ST) stat=LAPSTOP;  
                if (!keyin&&sw&RES) stat=START;  
                break;  
            case LAPSTOP: DBB00IN=0x07;  
                if (!keyin&&sw&ST) stat=LAPSTART;  
                if (!keyin&&sw&RES) stat=STOP;  
                break;  
        }  
        Disp7seg((x%1000/100<<8)+(x%100/10<<4)+(x%10));  
        keyin = (keyin<<1)+sw&(ST|RES);  
    }  
}
```