

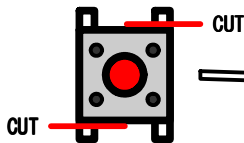
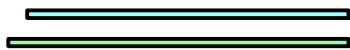
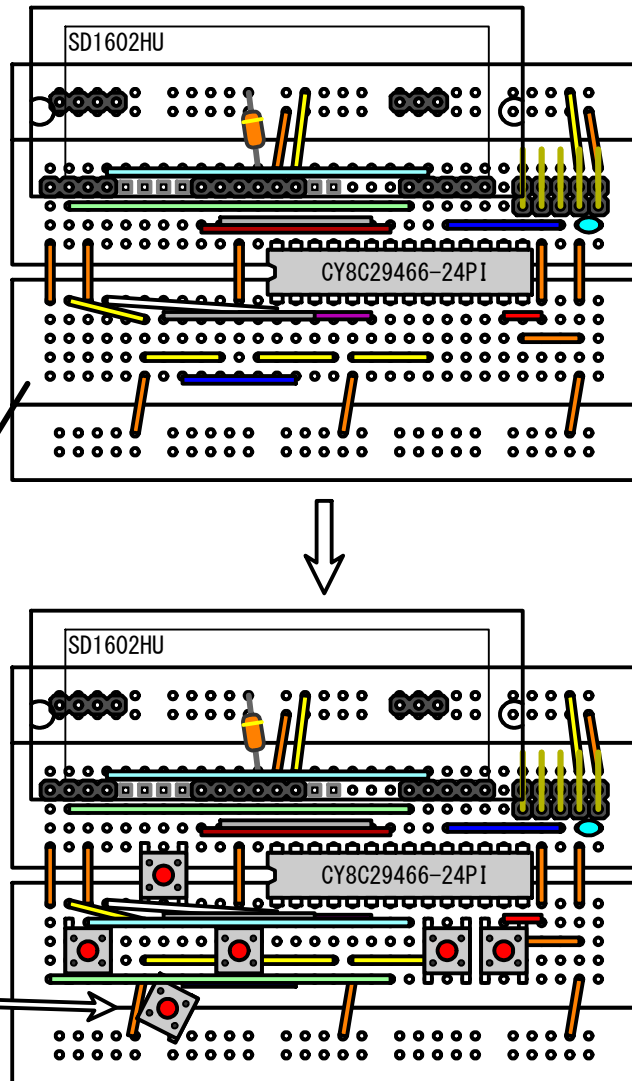
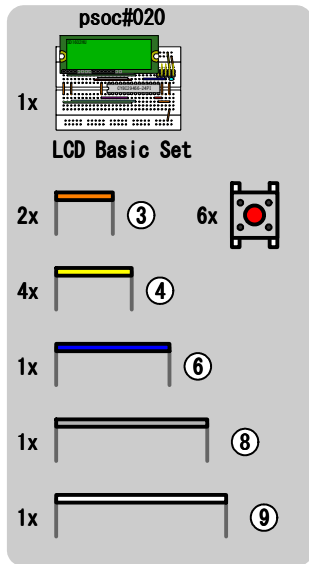


15+

027

Tact Switch Test

Pinout - psoc027	
P0[0]	Port_0_0, StdCPU, High Z Analog, DisableInt
P0[1]	Port_0_1, StdCPU, Pull Up, DisableInt
P0[2]	Port_0_2, StdCPU, High Z Analog, DisableInt
P0[3]	Port_0_3, StdCPU, Pull Up, DisableInt
P0[4]	Port_0_4, StdCPU, High Z Analog, DisableInt
P0[5]	Port_0_5, StdCPU, Pull Up, DisableInt
P0[6]	Port_0_6, StdCPU, High Z Analog, DisableInt
P0[7]	Port_0_7, StdCPU, Pull Up, DisableInt
P1[0]	Port_1_0, StdCPU, High Z Analog, DisableInt
P1[1]	Port_1_1, StdCPU, High Z Analog, DisableInt
P1[2]	Port_1_2, StdCPU, High Z Analog, DisableInt
P1[3]	Port_1_3, StdCPU, Pull Up, DisableInt
P1[4]	Port_1_4, StdCPU, High Z Analog, DisableInt
P1[5]	Port_1_5, StdCPU, Pull Up, DisableInt
P1[6]	Port_1_6, StdCPU, High Z Analog, DisableInt



## main.c

```
enum eMode{DATAIN,TIMER};
#define KEY_LEFT 0x80
#define KEY_UP 0x20
#define KEY_DOWN 0x08
#define KEY_RIGHT 0x02
#define KEY_STOP 0x20
#define KEY_START 0x08
void wait_ms(WORD ms) { for(;ms;ms--) LCD_1_Delay50uTimes(20); }

void main()
{
    WORD data=0, mask=0x000F, datax=0x0001, cursor=3;
    BYTE lastkey=0xff, mode = DATAIN;
    LCD_1_Start();
    LCD_1_PrCString("Tact Switch Test");
    LCD_1_Control(0x0E); //Show cursor
    PRT0DR = KEY_LEFT|KEY_RIGHT|KEY_UP|KEY_DOWN;
    PRT1DR = KEY_START|KEY_STOP;
    for (;;) {
        if (mode==DATAIN) {
            switch(~PRT0DR&(KEY_LEFT|KEY_RIGHT|KEY_UP|KEY_DOWN)) {
                case KEY_LEFT:
                    mask = (mask<<4) + (mask>>12);
                    datax = (datax<<4) + (datax>>12);
                    cursor = (cursor+3)%4; break;
                case KEY_RIGHT:
                    mask = (mask>>4) + (mask<<12);
                    datax = (datax>>4) + (datax<<12);
                    cursor = (cursor+1)%4; break;
                case KEY_DOWN:
                    data = ((data-datax)&mask) + (data&~mask); break;
                case KEY_UP:
                    data = ((data+datax)&mask) + (data&~mask); break;
            }
            LCD_1_Position(1,cursor+6);wait_ms(200);
        }
        else if (mode==TIMER) {
            wait_ms(1000);
            if (!--data) {
                LCD_1_Position(1,0);
                LCD_1_PrCString("**** TimeUp ****");
                wait_ms(5000);
                mode = DATAIN;
            }
        }
        switch(~PRT1DR&(KEY_START|KEY_STOP)) {
            case KEY_STOP: mode = DATAIN; break;
            case KEY_START: mode = TIMER; break;
        }
        LCD_1_Position(1,0);
        LCD_1_PrCString("****          ****");
        LCD_1_Position(1,6);
        LCD_1_PrHexInt(data);
    }
}
```