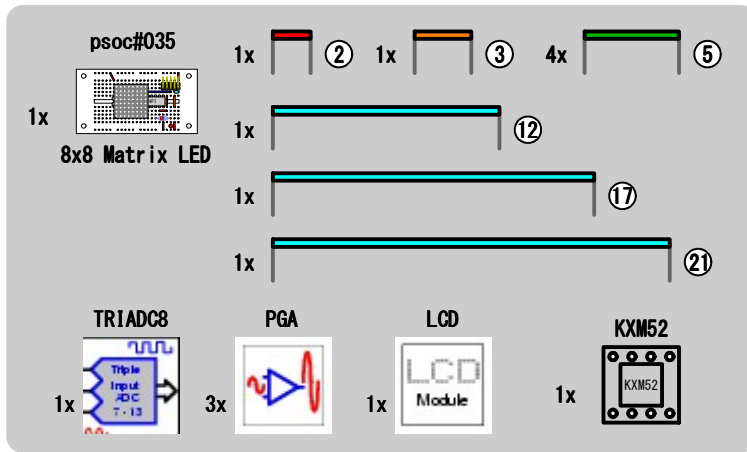




15+

036

G sensor & 8x8 Matrix LED



Properties - LCD_1

Name	LCD_1
User Module	LCD
Version	1.5
LCDPort	None
BarGraph	Enable

Properties - PGA_1

Name	PGA_1
User Module	PGA
Version	3.2
Gain	1.000
Input	AnalogColumn_InputMUX_0
Reference	AGND
AnalogBus	Disable

Properties - PGA_2

Name	PGA_2
User Module	PGA
Version	3.2
Gain	1.000
Input	AnalogColumn_InputSelect_1
Reference	AGND
AnalogBus	Disable

Properties - PGA_3

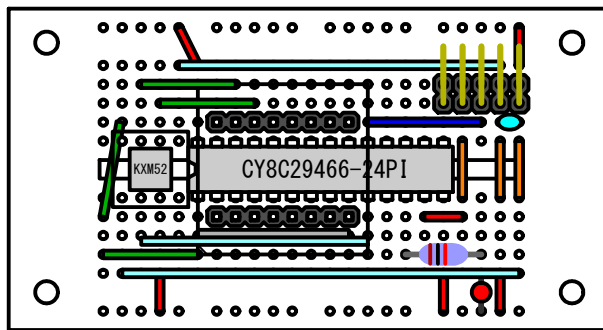
Name	PGA_3
User Module	PGA
Version	3.2
Gain	1.000
Input	AnalogColumn_InputSelect_2
Reference	AGND
AnalogBus	Disable

Global Resources - psoc036

Power Setting [Vcc	5.0V / 24MHz
CPU_Clock	SysClk/8
32K_Select	Internal
PLL_Mode	Disable
Sleep_Timer	512_Hz
VC1= SysClk/N	16
VC2= VC1/N	16
VC3 Source	SysClk/1
VC3 Divider	1
SysClk Source	Internal
SysClk*2 Disable	No
Analog Power	SC On/Ref Low
Ref Mux	(Vdd/2)+/-BandGap
AGndBypass	Disable
Op-Amp Bias	Low
A_Buff_Power	Low
SwitchModePump	OFF
Trip Voltage [LVD (4.81V (5.00V)
LVDThrottleBack	Disable
Watchdog Enable	Disable

Properties - TRIADC8_1

Name	TRIADC8_1
User Module	TRIADC8
Version	1.0
ADC Input1	ACB00
ADC Input2	ACB01
ADC Input3	ACB02
ClockPhase1	Norm
ClockPhase2	Norm
ClockPhase3	Norm
Clock	VC2
DataFormat	Unsigned



main.c

```
typedef union {WORD w; BYTE x[2];} uniword;
const WORD Col[8] =
    {0x0002,0x0080,0x0200,0x0800,0x0004,0x0010,0x0040,0x1000};
const WORD Row[8] =
    {0xA529,0xC529,0xE129,0xE429,0xE509,0xE521,0xE528,0x6529};
WORD LCount=0;
uniword Light;
BYTE row,count;

void MatrixLED(BYTE x, BYTE y) {
    PRT0DR = Light.x[0]; PRT2DR = Light.x[1];
    Light.w=Col[y]|Row[x];
}

void main() {
    BYTE gx,gy,gz;
    M8C_EnableGInt ;
    TRIADC8_1_Start(TRIADC8_1_HIGHPOWER);
    PGA_1_Start(PGA_1_HIGHPOWER);
    PGA_2_Start(PGA_2_HIGHPOWER);
    PGA_3_Start(PGA_3_HIGHPOWER);
    PRT1DM2=0x7F; PRT1DM1=0x7F; PRT1DM0=0x80; //P1_7 Strong
    for (;;) {
        PRT2DM2=0x00; PRT2DM1=0xFF; PRT2DM0=0xFF; //Pull-Up
        PRT0DM2=0x00; PRT0DM1=0xFF; PRT0DM0=0xFF; //Pull-Up
        MatrixLED(8-gx/30,8-gy/30);
        LCD_1_Delay50uTimes(200);
        PRT2DM2=0xFF; PRT2DM1=0xFF; PRT2DM0=0x00; //Hi-Z
        PRT0DM2=0xFF; PRT0DM1=0xFF; PRT0DM0=0x00; //Hi-Z
        PRT1DR = 0x80; TRIADC8_1_GetSamples(); //AD Start
        while(!TRIADC8_1_fIsDataAvailable());
        gz = (gz+TRIADC8_1_cGetData1())/2;
        gx = (gx+TRIADC8_1_cGetData2())/2;
        gy = (gy+TRIADC8_1_cGetData3ClearFlag())/2;
        PRT1DR = 0x00; TRIADC8_1_StopAD(); //AD Stop
    }
}
```

