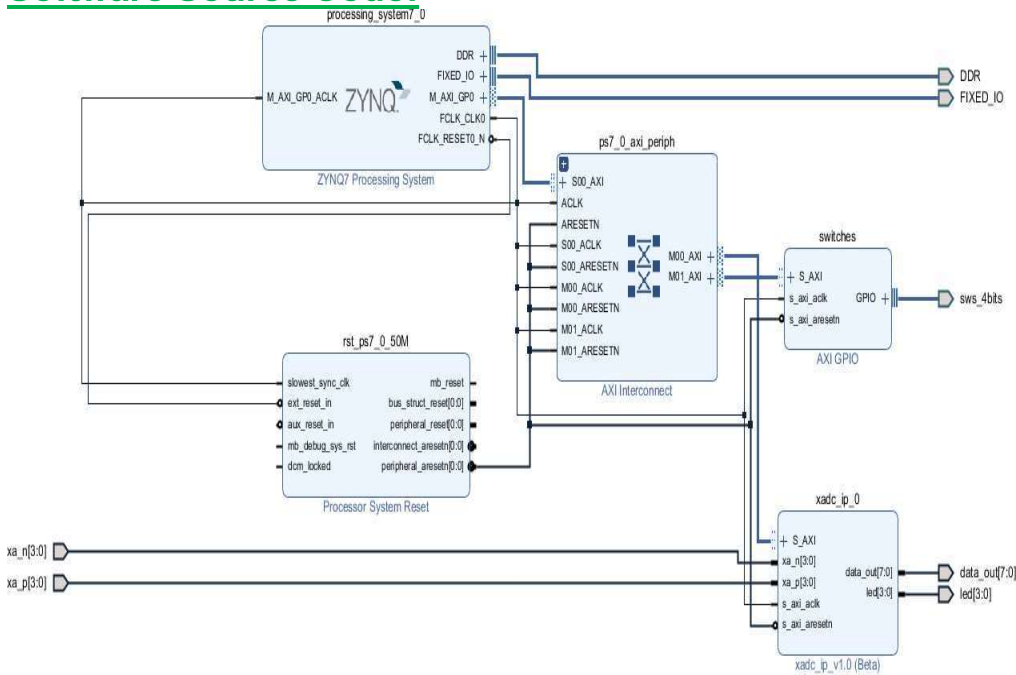## Software Source Code:

In SDK development environment, initialize the AXI GPIO dipswitches, use the dip switches value to write to the slave register of the xadc_custom_ip. The program loops through by keep reading the switch value to turn on or off the leds.

```c
#include "xparameters.h"
#include "xgpio.h"
#include "xadc_ip.h"

//==================================================

int main (void)
{

    XGpio dip_sw;
    int i, dip_sw_check;

    xil_printf("-- Start of the Program --\r\n");

    XGpio_Initialize(&dip_sw, XPAR_SWITCHES_DEVICE_ID); // Modify this
    XGpio_SetDataDirection(&dip_sw, 1, 0xffffffff);

while (1)
    {
        dip_sw_check = XGpio_DiscreteRead(&dip_sw, 1);
        xil_printf("DIP Switch Status %x\r\n", dip_sw_check);

        // output dip switches value on LED_ip device
        XADC_IP_mWriteReg(XPAR_XADC_IP_0_S_AXI_BASEADDR, 12, dip_sw_check);

        for (i=0; i<9999999; i++);
    }
}
```