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Forum: [8-bit PIC](#)

Topic: [PIC18F4520 ADC問題](#)

Subject: [Re: PIC18F4520 ADC問題](#)

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引用:

ssnow1314 寫道:

你好, 各位大大, 小弟目前使用PIC18F4520, 最近在研究ADC轉換, 想將input的電壓顯示在LCD上, 輸入腳位為RA0, 解析度算出 $5/1023=0.00488$, 在input為5V時應顯示D=1023, 但顯示出的數值卻是64, 想請問一下各位大大, 這是為什麼, 及如何解決這問題, 謝謝。

以下是我的程式:

```
#include "p18f4520.h"
#include "delays.h"
#include "evm_lcd.h"
#include "adc.h"
#include <stdlib.h>
#include <stdio.h>
#pragma config OSC=HS,BOREN=OFF,BORV=2,PWRT=ON,WDT=OFF,LVP=OFF
#define OSC_CLOCK 10

void main()
{
    char LCD_name[] = "Chicken Test 123";
    float adc0_volt;
    int adc0_dec;
    int adc0_volt1;
    int adc0_volt2;
    char Buf[16];

    TRISA = 0b00000001;           // Setup RA0=Input RA1=Output

    //    Initialise LCD
    OpenLCD();
    WriteCmdLCD(0*01);
    LCD_Set_Cursor(0,0);
    putsLCD(LCD_name);
    Delay10KTCYx(21);

    OpenADC(
```

```

        ADC_FOSC_16 &           // A/D clock source set to 32Tosc
        ADC_LEFT_JUST &        // ADRESH:ADRESL from roght
        ADC_20_TAD,           // A/D Acquisition time: 20TAD
        ADC_CH0 &             // Analog Channel0 AN0
        ADC_INT_OFF &         // ADC Interrupt off
        ADC_VREFPLUS_VDD &     // Vref+ = VDD
        ADC_VREFMINUS_VSS,    // Vref- = VSS
        0b1110                 //ADCON1 AN0=Analog
    );

while(1)
{
    ConvertADC();              // Start an A/D Conversion
    while(BusyADC());          // Wait for Conversion Finished
    adc0_dec=ReadADC();        // Read A/D Result

    // Convert Floating Point to Decimal
    adc0_volt=0.0048875855327468*adc0_dec;
    adc0_volt1=(unsigned int)adc0_volt;
    adc0_volt2=(unsigned int)((adc0_volt-adc0_volt1)*10);

    sprintf(Buf, "D=%4u V=%u.%uV", adc0_dec, adc0_volt1, adc0_volt2);
    WriteCmdLCD(0*01);
    LCD_Set_Cursor(1,0);
    putsLCD(Buf);

    Delay10KTCYx(125);

} // End While
}

```

請問你adc0_dec=ReadADC(); adc0_dec的值是多少?
 拿電表量量AN0腳位的電是多少V?