

Max's Application Note #2

Test AD Input



****You can watch AD.MPG for live action!**

Hi! My name is Max! If you have any questions about this application,

Please e-mail max@comfile.co.kr.

Today, we will use the CUBLOC Study Board to receive AD (Analog-to-Digital) input and display it on to the GHLCD.

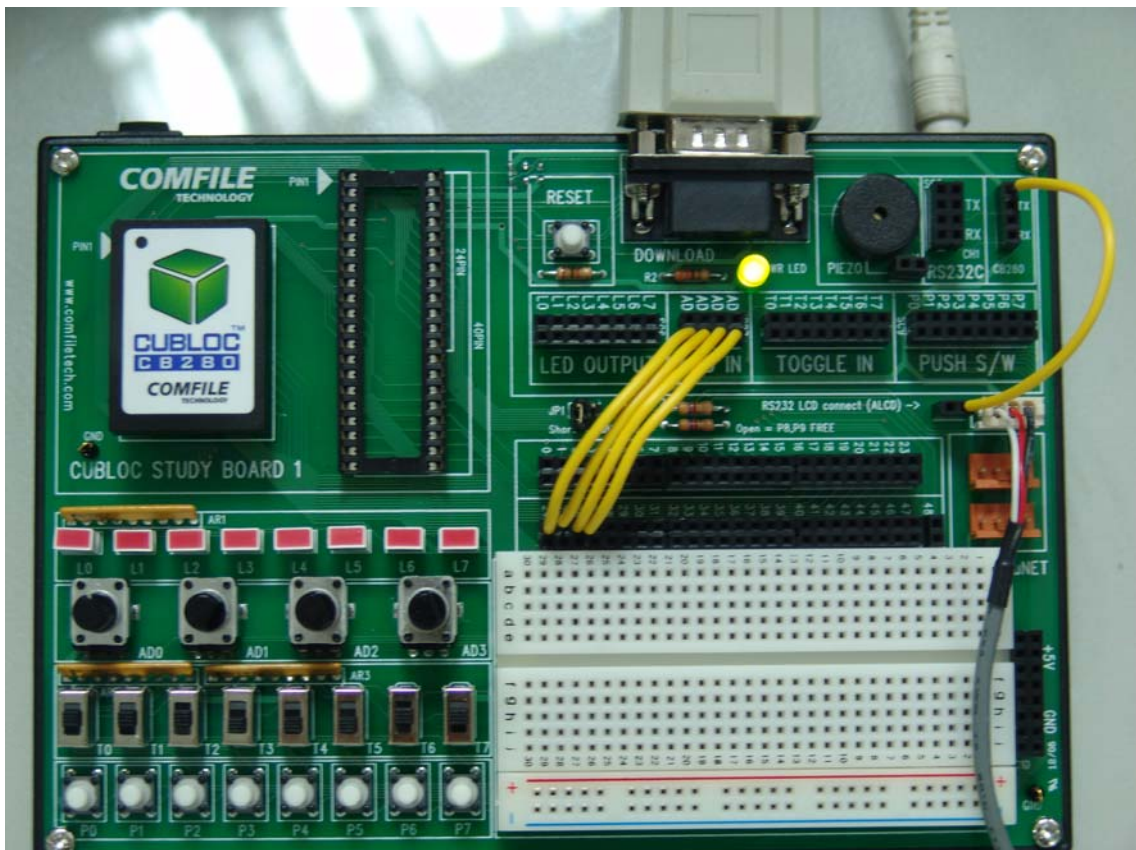
Part Required:

CUBLOC and Study Board 1 each
Wires Couple

Connecting Directions:

Please connect as shown below.

- Pin 24 ↔ ADC0
- Pin 25 ↔ ADC1
- Pin 26 ↔ ADC2
- Pin 27 ↔ ADC3



```

Const Device=cb280
Set Display 1,1,115200,128

Cls

CuADInit

On timer(20) Gosub GOPLAY

'Infinite Loop
Do
Loop

GOPLAY:
CuAD
Return

End

```

Use the **Const Device** command to set the CUBLOC/CuTOUCH you are using. Then use **Set Display** to set the Baud rate of the GHLCD.

Use **Cls** command to initialize the LCD and call the function **CuADInit** (Code 2.2).

On timer(20) will jump to label GOPLAY every 20 milli-seconds.

At label, **GOPLAY:**, **CuAD** will be executed.

In **CuAD**(Code 2.3), we will check the AD input values and display the results to the LCD.

Code 2.2

```

' _____Draw circle outlines.
Sub CuADInit()
  Locate 13,9
  Print "AD0   AD1   AD2   AD3"
  Circle 110,200,10
  Circle 130,200,10
  Circle 150,200,10
  Circle 170,200,10
  Circle 190,200,10
  Circle 210,200,10
  Circle 230,200,10
  Circle 250,200,10
End Sub

```

Here, we use Locate to locate the position to display text, then we draw circles to outline the circles. (Did I make sense here?)

Code 2.3

```
Sub CuAD()  
' Declare as Integer since 0 thru 1023 can be used.  
  
    Dim ainput As Integer  
    Dim ainput2 As Integer  
    Dim ainput3 As Integer  
    Dim ainput4 As Integer  
  
' _____Read AD input values.  
    ainput=Adin(0)  
    ainput2=Adin(1)  
    ainput3=Adin(2)  
    ainput4=Adin(3)  
  
' Display the current AD input values.  
    Locate 13,10  
    Print "  
    Locate 13,10  
    Print Dec ainput  
    Locate 20,10  
    Print Dec ainput2  
    Locate 27,10  
    Print Dec ainput3  
    Locate 34,10  
    Print Dec ainput4
```

Here, `ainput`, `ainput2`, `ainput3`, `ainput4` are declared and results of AD inputs are stored in these variables.

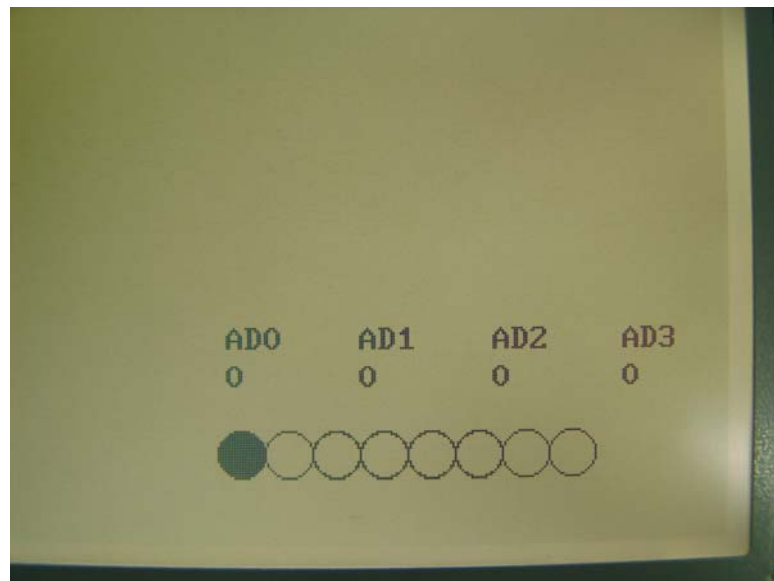
Code 2.4

```
If ainput<128 Then  
    Circlefill 110,200,10  
Else  
    Color 0  
    Circlefill 110,200,9  
    Color 1  
End If
```

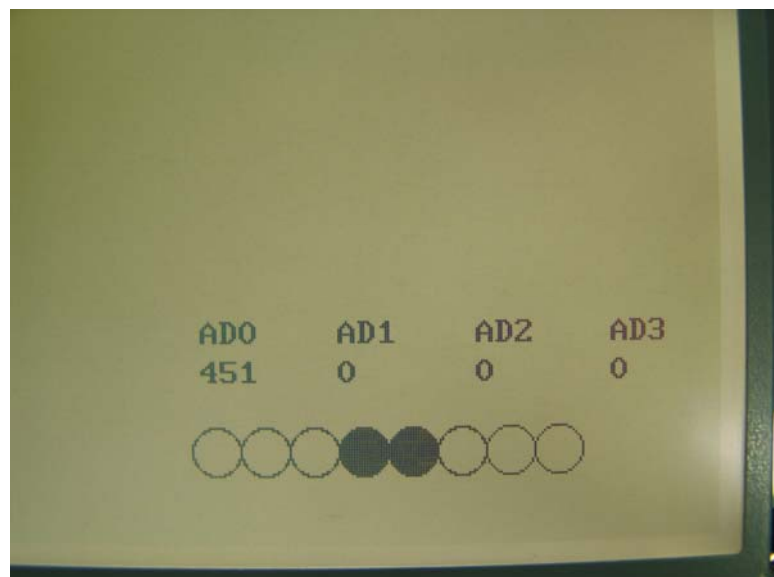
In the next section of the code, we will check the current value of AD0 (`ainput`) and based on that value, we will fill circles or not fill them. Since there are 8 circles, we have to take care of all of them.

In real life:

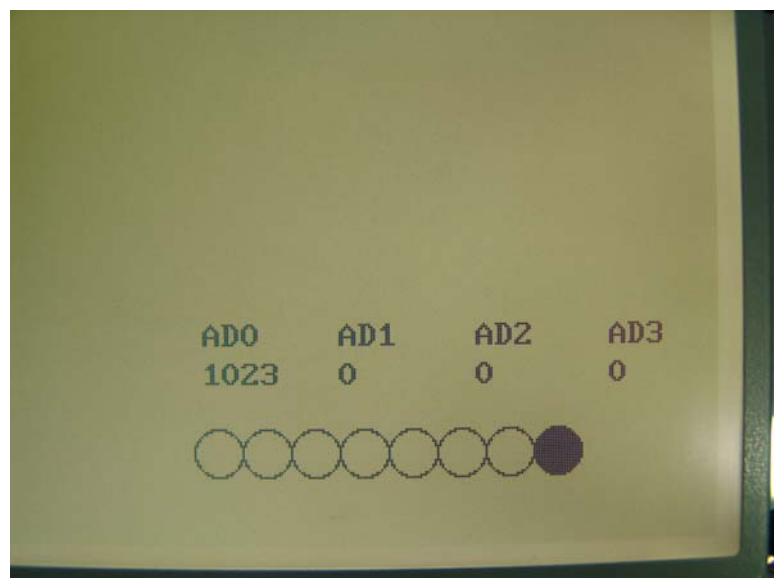
AD0=0:



AD0=451:



AD0=1023:



That's all folks! I hope this has been helpful. I will make some more cool stuff next time. My hands are tired, I need to get some hand massage somewhere...hm..... 😊