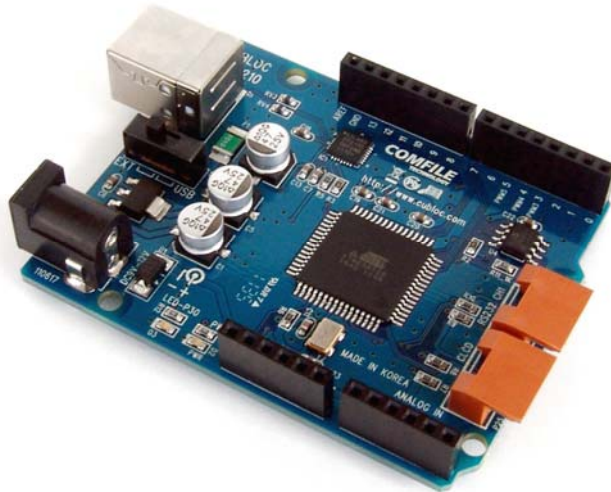
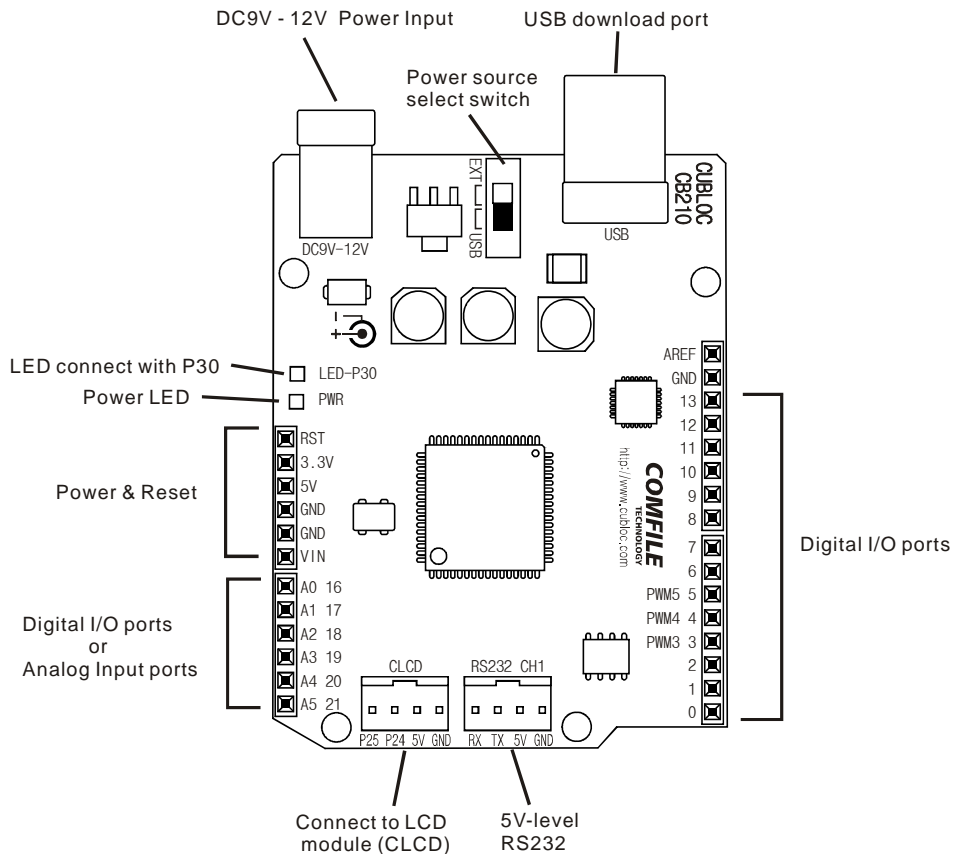


CB210



Introduction

- The CUBLOC CB210 has 20 digital I/O ports, and 6 of them can be used as A/D input.
- It can be connected to PC via USB for downloading and debugging.
- There are two power supply options: External 9V power supply, and 5V USB power. A switch is provided to select the power source.

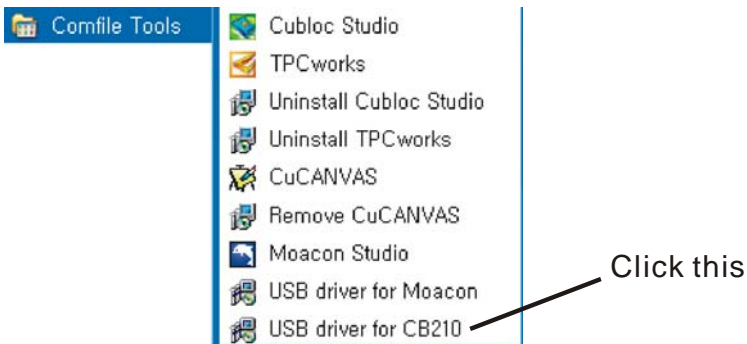


Please be aware of the following when using the CB210.

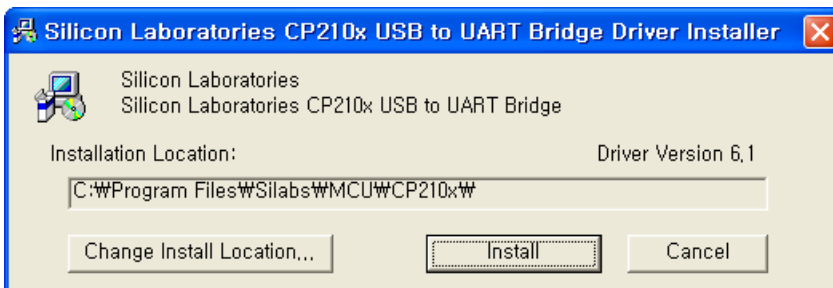
- Use CUBLOC Studio V3.3.0 and above. CUBLOC Studio can be downloaded from Comfile Technology's website at <http://www.ComfileTech.com/>. A USB Driver is included in the download. You must install the USB Driver to use the CB210.
- Only PWMs 3,4,and 5 are available. You cannot use PWM 0,1, and 2.
- You can use ports 0 to 21 for digital I/O.
- You can use ports 16 to 21 for A/D input, but you must first configure the ports as input ports. For A/D input, you should supply 3.3V-5V power to AVREF port.
- The CB210 cannot handle currents over 300mA.
- An LED is connected to port 30.

Installing the USB Driver

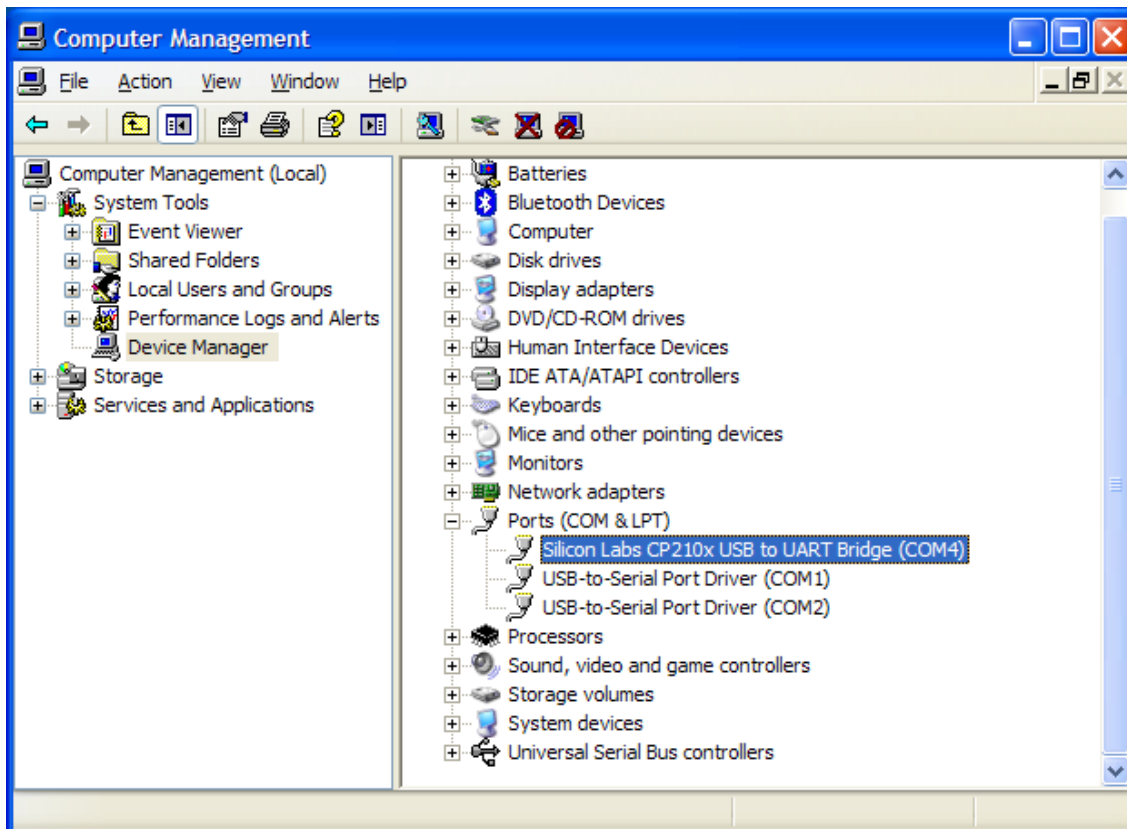
Install CUBLOC Studio V3.3.0 and run "USB driver for CB210" from the start menu.



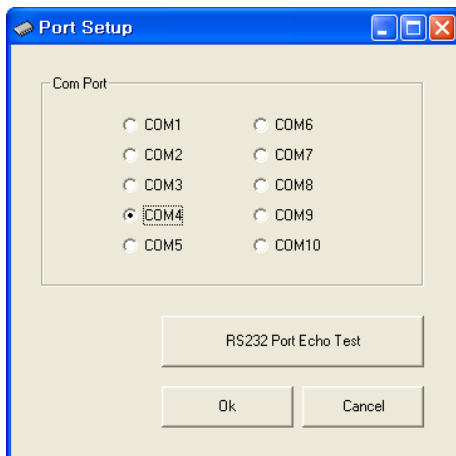
At the following pop up screen, click the 'Install'.



If the installation is successful, you will see the message "Installation completed successfully".



Using Windows Device Manager, you can see if the driver is installed and the port number allocated to it. Port numbers will vary on different PCs.

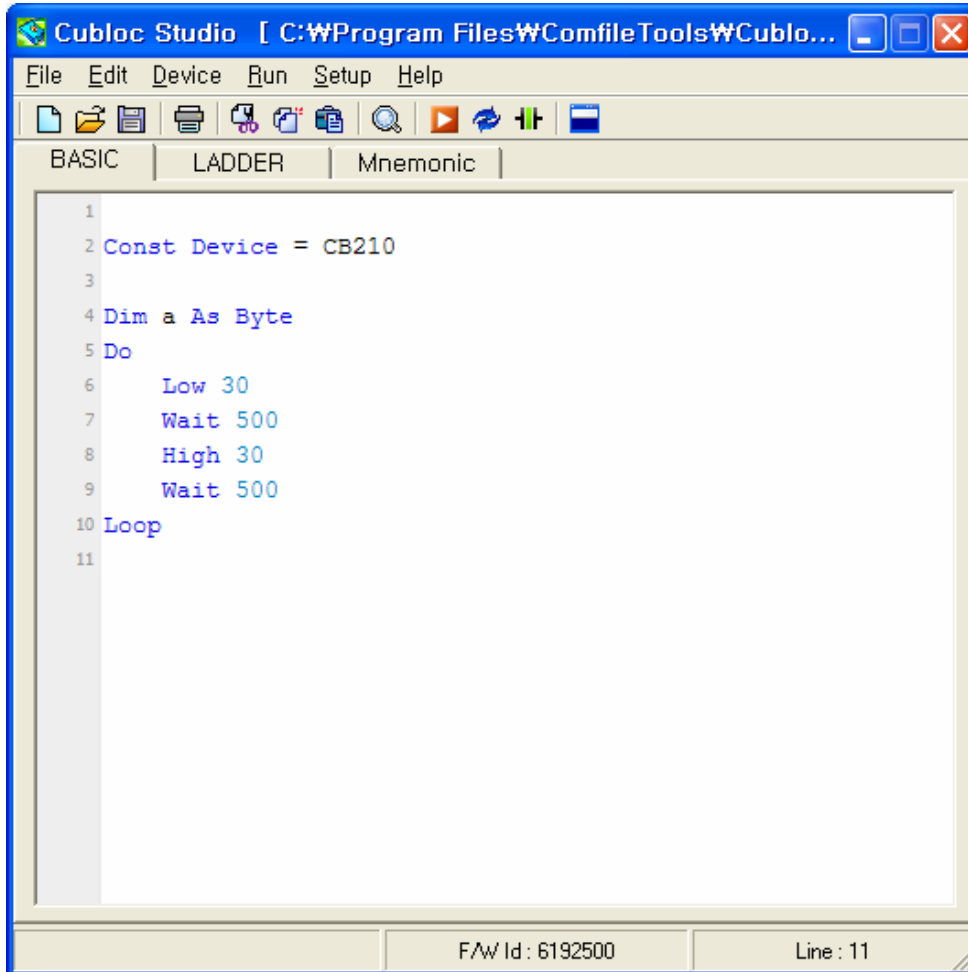


From CUBLOC Studio's menu choose "Setup" > "PC interface setup" and select the port allocated to the CB210 in Windows Device Manager.

Programming the CB210

At the beginning of your program, declare the device using the statement `Set Const Device = CB210`. Write the rest of your program and download it to the CB210.

The following is a sample program that blinks the onboard LED every 500 ms.



The screenshot shows the Cubloc Studio application window. The title bar reads "Cubloc Studio [C:\Program Files\ComfileTools\Cublo...". The menu bar includes "File", "Edit", "Device", "Run", "Setup", and "Help". The toolbar contains icons for file operations and execution. The main window has three tabs: "BASIC", "LADDER", and "Mnemonic", with "BASIC" selected. The code editor displays the following BASIC program:

```
1
2 Const Device = CB210
3
4 Dim a As Byte
5 Do
6     Low 30
7     Wait 500
8     High 30
9     Wait 500
10 Loop
11
```

The status bar at the bottom shows "F/W Id: 6192500" and "Line : 11".

For detailed information on programming the CB210, please see the CUBLOC manual.