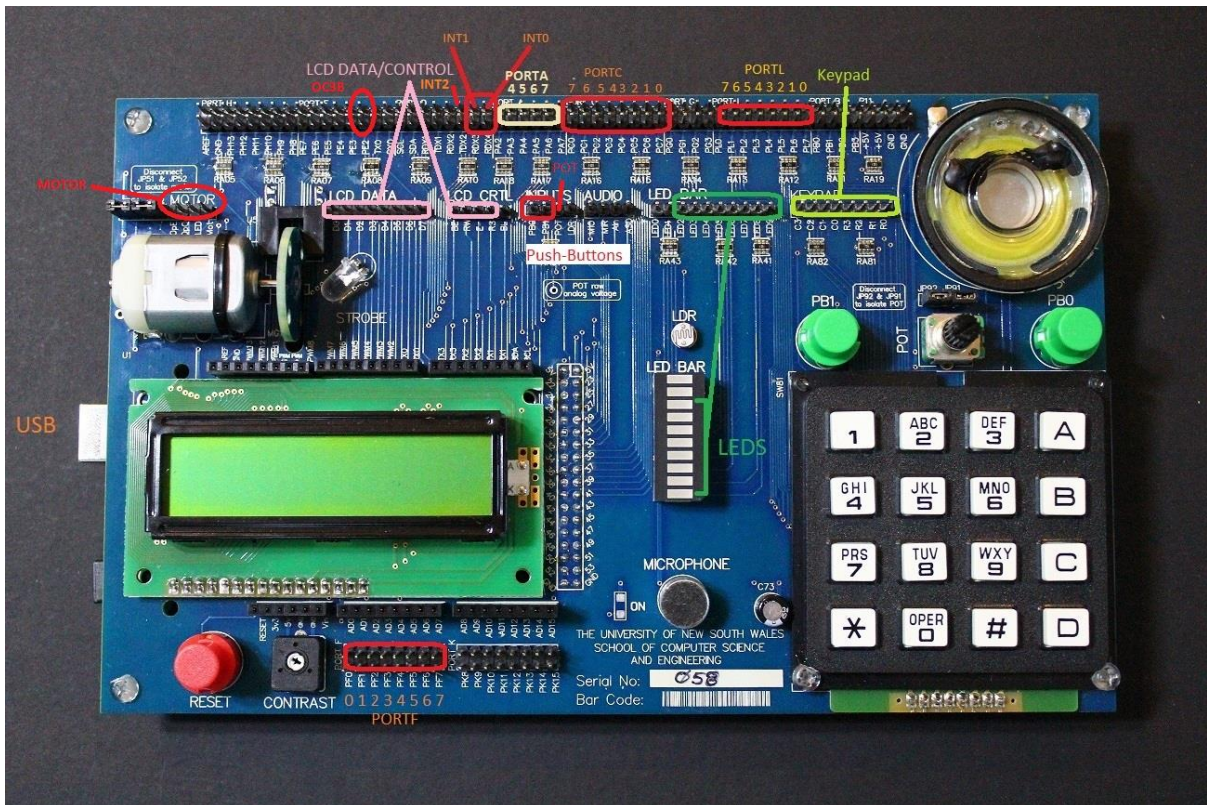# Board Introduction

Connecting to the Computer

To connect the board to your computer, use the USB Type-B port on the Arduino (left). A green light should be visible on the Arduino board. When using the lab computers, use the provided USB cable instead of pulling your own one into the computer. Only one USB port on the lab machines has the driver installed, the others will not work.

Wiring

Use the provided cables to make connections from Port C to the LEDs. To connect correctly, none of the wires need to cross over.

Find COM port number

To work out which COM port the Arduino is connected to, open system properties by clicking the start button, right-clicking 'My Computer' then clicking properties. In the 'Hardware' tab, click 'Device Manager'. You may get a warning about administrator privileges that you can ignore. Scroll down to 'Ports (COM & LPT)'. There should be one item called 'Arduino Mega 2560 (<portname>)'.

Programming

Download the file 'programmer.zip' from the 'AVR resources' page on the course website. Extract the files and open the folder.

Run the batch file 'console.bat' to open up a command prompt. To load the test program, run use the download command:

```
download <comport> test.hex
```

<comport> is the name of the port you found earlier. Eg COM3 or COM16

If the download is successful and the LEDs are connected correctly, the LEDs should start flashing one by one.

To download a different hex file, replace 'test.hex' with the path to the other file.