

## LCD Shield Buttons

The LCD keypad shield we use in the lab is made by DF Robot. It looks like there are two versions of this board (v1.0 and v1.1). As the boards are not marked with version number, there is a high chance that both versions of these boards may be present in the lab. The assignment assumed it is v1.0 board. So please use the following table and test your code in case of any problems. The limits are decimal values and corresponding hex values are provided here. Thanks.

```
if (adc_key_in > 1000) return btnNONE;  (1000 = 0x3E8)
```

### **// For V1.1 use this threshold**

```
if (adc_key_in < 50)    return btnRIGHT;  (50 = 0x032)
if (adc_key_in < 250)   return btnUP;     (250 = 0x0FA)
if (adc_key_in < 450)   return btnDOWN;   (450 = 0x1C2)
if (adc_key_in < 650)   return btnLEFT;   (650 = 0x28A)
if (adc_key_in < 850)   return btnSELECT; (850 = 0x352)
```

### **// For V1.0 use the one below:**

```
if (adc_key_in < 50)    return btnRIGHT;  (50 = 0x032)
if (adc_key_in < 195)   return btnUP;     (195 = 0x0C3)
if (adc_key_in < 380)   return btnDOWN;   (380 = 0x17C)
if (adc_key_in < 555)   return btnLEFT;   (555 = 0x22B)
if (adc_key_in < 790)   return btnSELECT; (790 = 0x316)
```