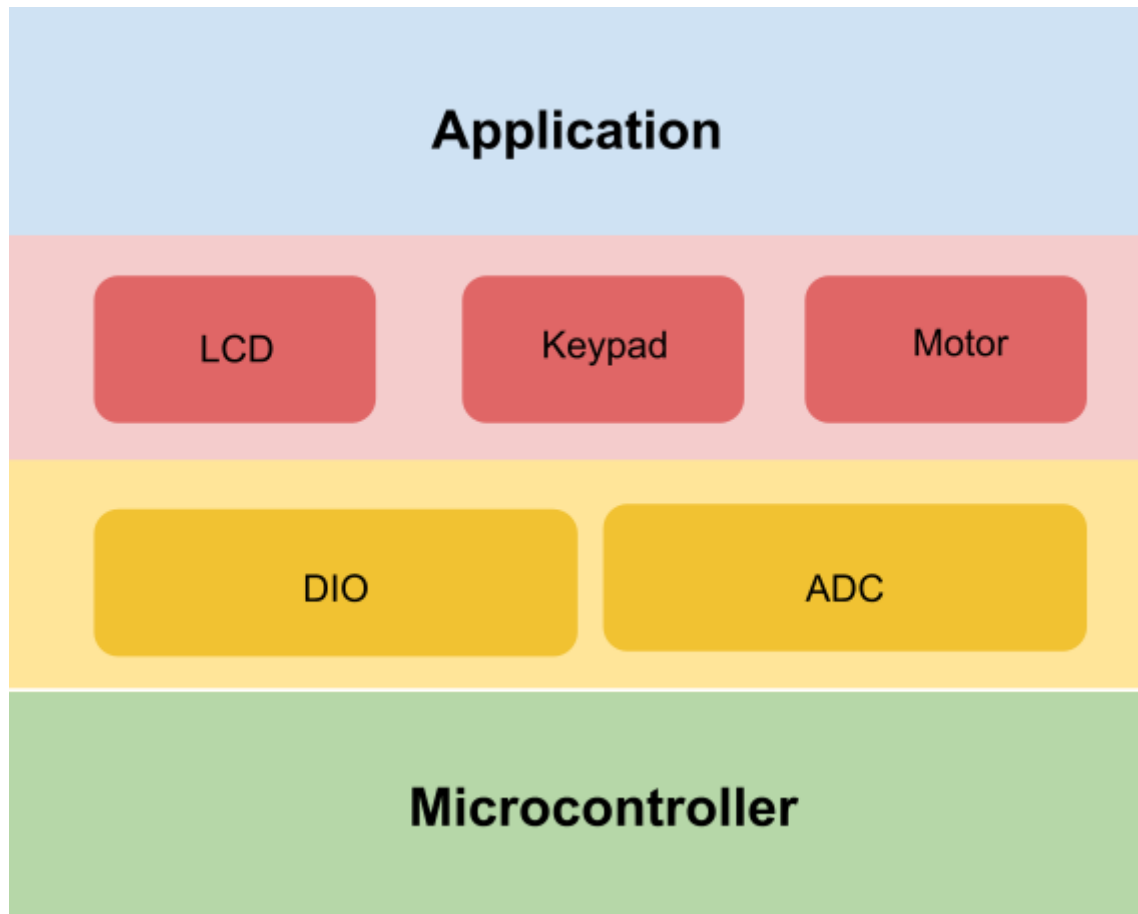


Air conditioner static design



Code sekeleton

main.c

```
void main(void)
{
    APP_init();
    while(1)
    {
        APP_update();
    }
}
```

Application

```
void APP_init(void);
void APP_update(void);
```

ADC driver

```
void ADC_init(void);
uint16 ADC_readChannel(uint8 channel_num);
```

LCD driver

```
/* LCD HW Pins */
```

```
/* LCD Commands */
```

```
/******
```

```
 *                Functions Prototypes                *
```

```
*****/
```

```
void LCD_sendCommand(uint8 command);
void LCD_displayCharacter(uint8 data);
void LCD_displayString(const char *Str);
void LCD_init(void);
void LCD_clearScreen(void);
void LCD_displayStringRowColumn(uint8 row,uint8 col,const char *Str);
void LCD_goToRowColumn(uint8 row,uint8 col);
void LCD_intgerToString(int data);
```

Keypad driver

```
/* Keypad configurations for number of rows and columns */
```

```
#define N_col 4
```

```
#define N_row 4
```

```
/* Keypad Port Configurations */
```

```
#define KEYPAD_PORT_OUT PORTB
```

```
#define KEYPAD_PORT_IN  PINB
```

```
#define KEYPAD_PORT_DIR DDRB
```

```
/******  
*                Functions Prototypes                *  
*****/  
/*  
* Function responsible for getting the pressed keypad key  
*/  
uint8 KeyPad_getPressedKey(void);
```

Motor driver

```
void motor_init();  
void motor_CW();  
void motor_ACW();  
void motor_stop();
```