Library functions

1. IO read and write

```
// read the data from the base
IORD_ALTERA_AVALON_PIO_DATA(BASE);
// write the data to the base
IOWR_ALTERA_AVALON_PIO_DATA(BASE, DATA);

// Bases
// SWITCH0_BASE
// SWITCH1_BASE
// KEY0_BASE
// KEY1_BASE
// LEFTREADY_BASE
// RIGHTREADY_BASE
// LED_BASE
```

2. AIC23 setting (aic23.c)

```
// Initializes AIC to default
void AIC23_init()

// reset AIC23
void AIC23_reset()

// Update the AIC23 setting
void AIC23_config(int address, int setting)

/*AIC configuration function: Update all control registers*/
void AIC23_demo()

// Set the AIC23 sampling frequency
void AIC_setFreq(int sampleRate)
```

3. UART communication (uart.c)

```
/*Send char value through UART */
void uart_sendByte(char data)

/*Send integer value through UART */
void uart_sendInt16(alt_16 data)

/*Send float value through UART */
void uart_sendFloat(float data)

/*Receive the data from UART */
void uart_byteRecv(void)
```