

LCD Module

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LCD Module APIs

LCD Initialization

```
/**
 * @brief Initializes the pins connected to the LCD display, clears the
 * display,
 * and sets the cursor to the home position.
 */
void LCD_init(void);
```

LCD Send Command

```
/**
 * @brief Sends a command to the LCD display.
 * @param[in] lcd_command The specified command to be sent to the LCD.
 */
void LCD_sendCommand(uint8 lcd_command);
```

LCD Display Character

```
/**
 * @brief Displays the specified character on the LCD display.
 * @param[in] character The specified character to be displayed.
 */
void LCD_displayCharacter(uint8 character);
```

LCD Display String

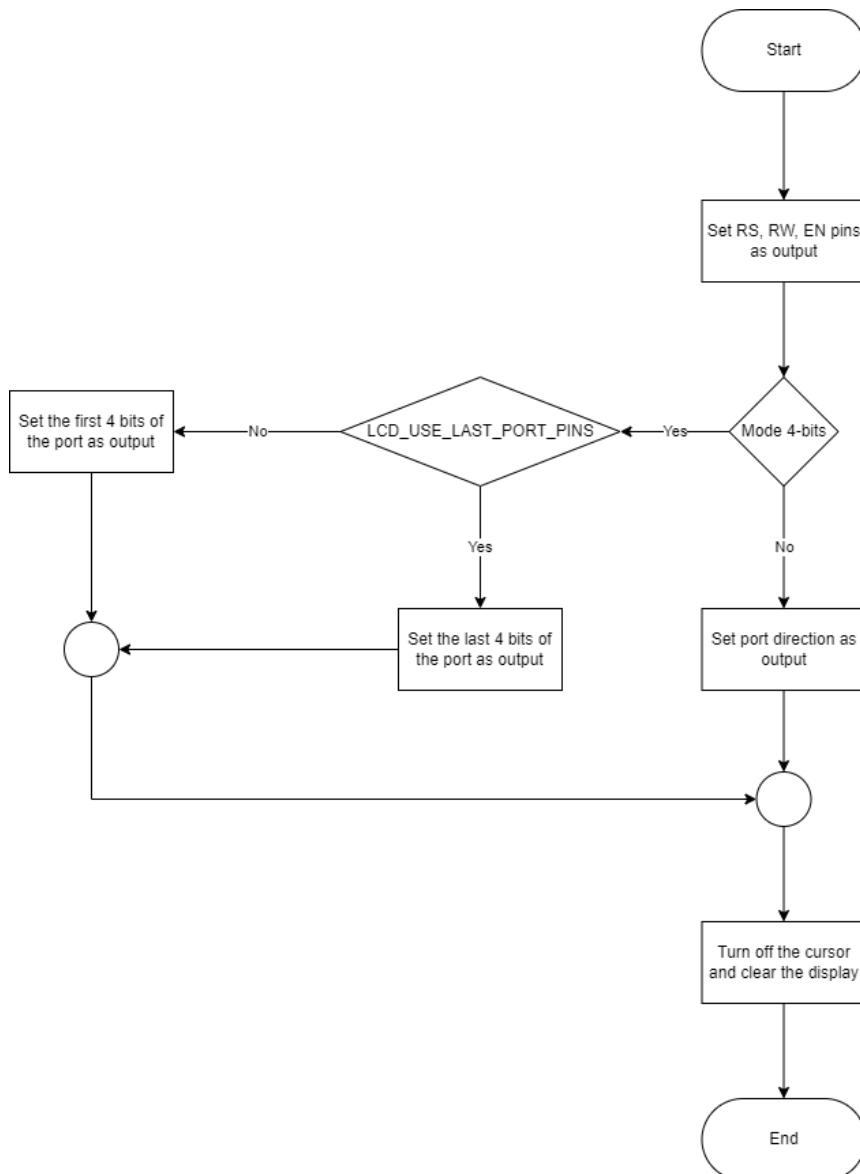
```
/**
 * @brief Displays a whole string on the LCD.
 * @param[in] p_string Address of the string to be displayed on the LCD.
 */
void LCD_displayString(uint8 *p_string);
```

LCD Move Cursor

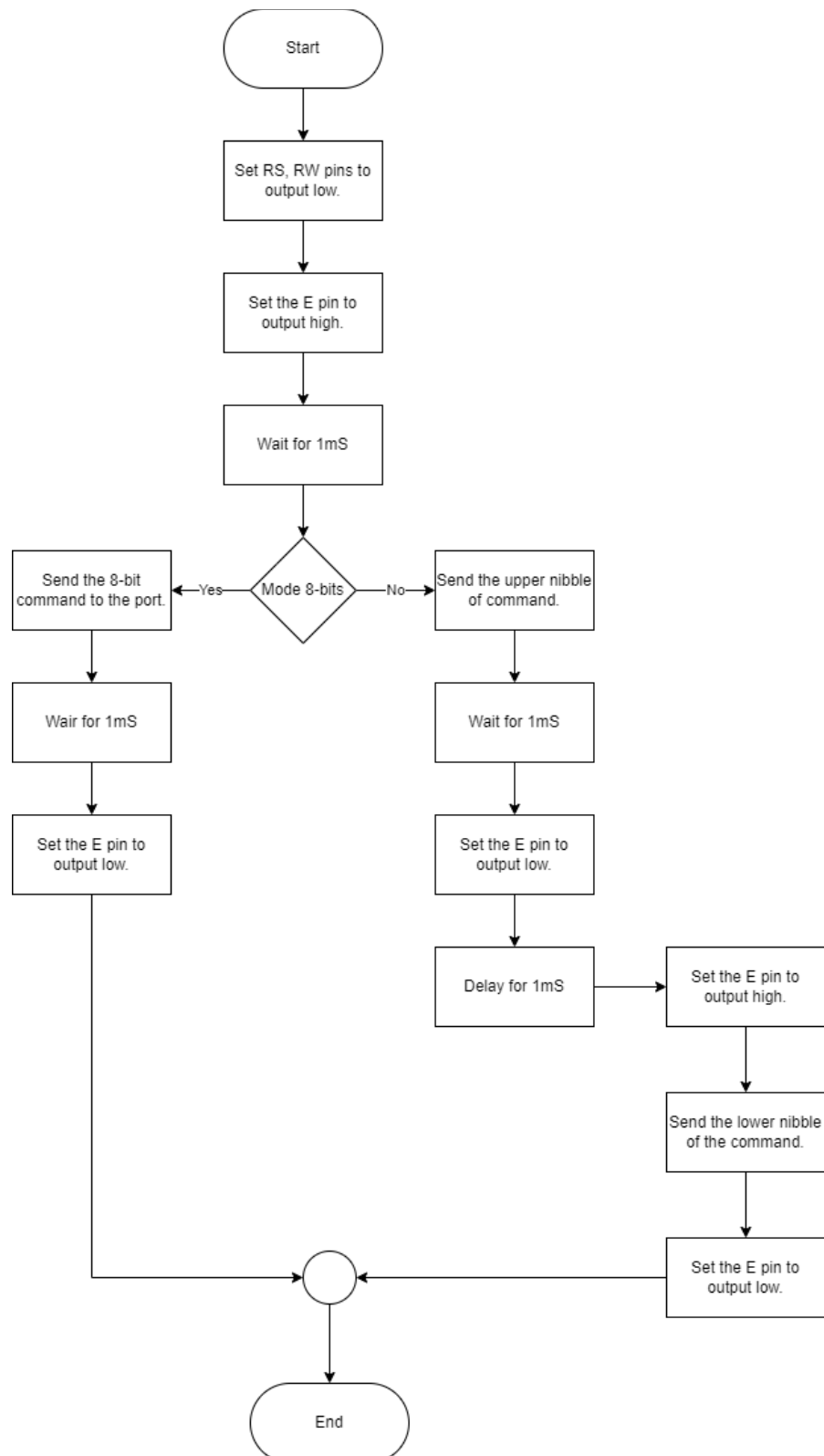
```
/**  
 * @brief Moves the cursor to a specific row and column on the LCD display.  
 * @param row The specified row, either row 0 or row 1.  
 * @param col The specified column from 0 to 15.  
 */  
void LCD_moveCursor(uint8 row, uint8 col);
```

LCD Module Low Level Design Flowcharts

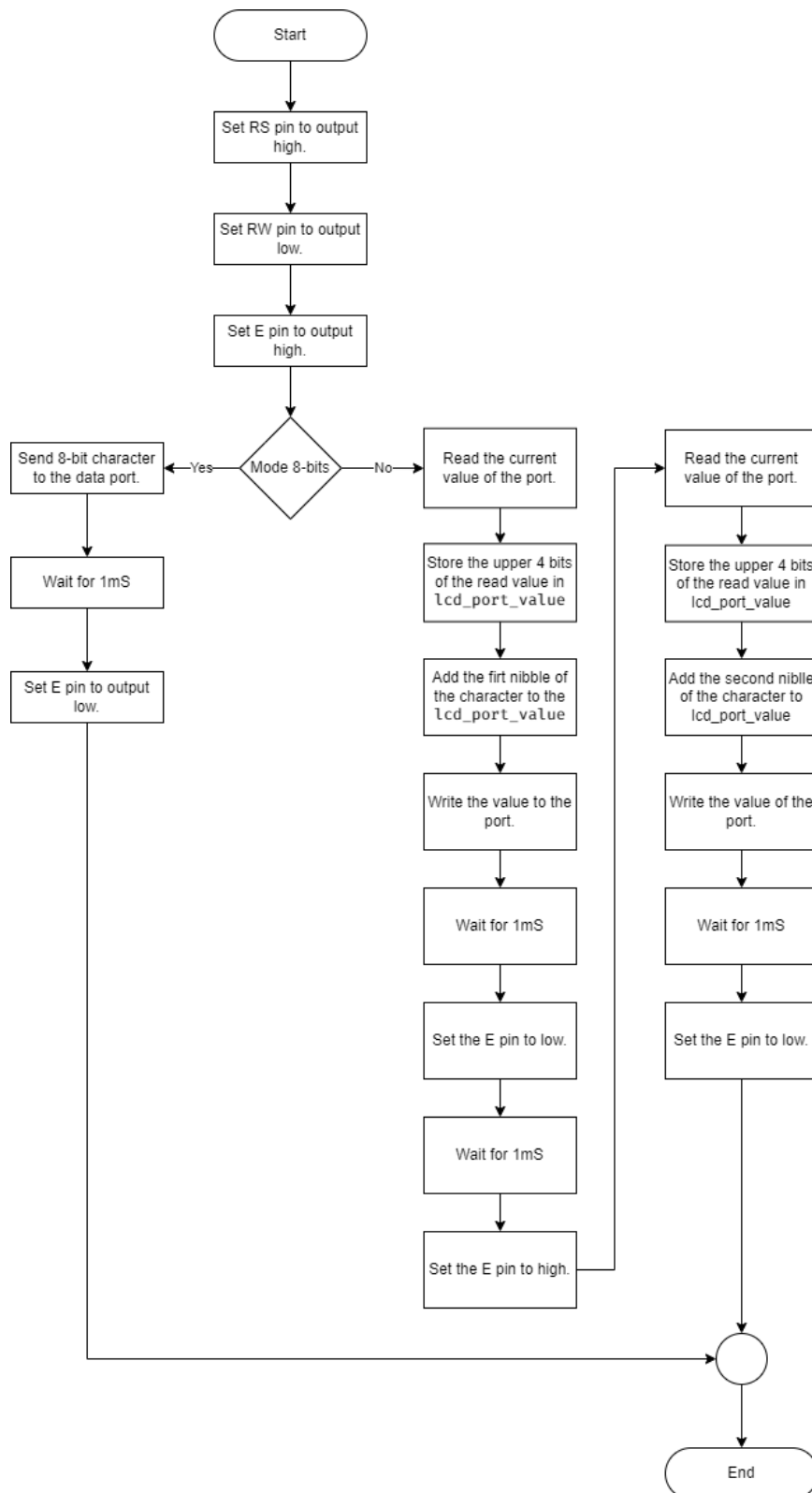
LCD Initialization Flowcharts



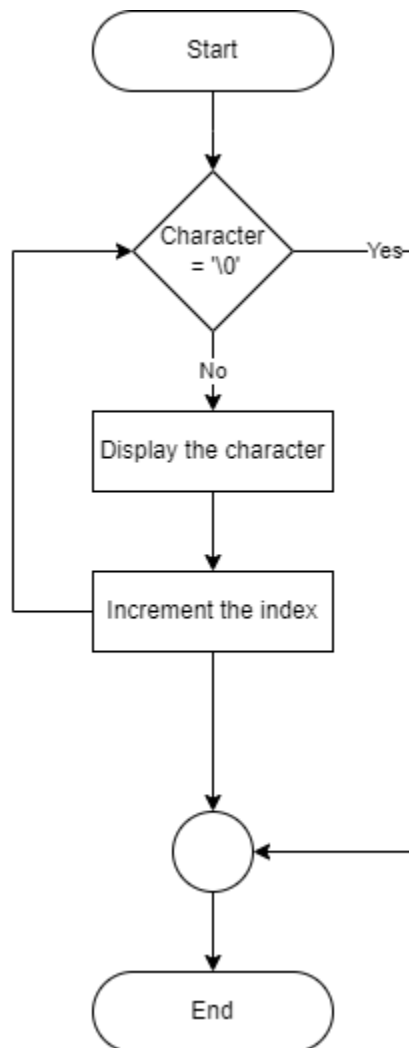
LCD Send Command Flowchart



LCD Display Character



LCD Display String



LCD Move Cursor

