<LCD>

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| **Document Name** | <LCD module> |
| **Version** | 1 |
| **Author** | <Yasmin > |
| **Status** | Proposed |
| **Date** | 4/1/2016 |

# Introduction

**This module enables user to configure the LCD 16\*2 and to write a string on it**

## Document Scope

LCD description for further use.

## Goals and Objectives

This module helps user to display the room temperature when it rises

## Context Diagram

*Add the* System *context* diagram *of the system here*

Figure 1 : System *context* diagram *of <DIO>*

|  |  |
| --- | --- |
| **Interface** | **Description** |
| *Temperature sensor* | *Whenever the sensor senses any change in the room temperature the LCD will display this change* |

Table 1: Interfaces description

*Add the Control Flow Diagram of the system here*

Figure 2 : Control Flowdiagram

|  |  |  |  |
| --- | --- | --- | --- |
| ***API*** | ***Description*** | ***Inputs*** | ***Return Value*** |
| **void** **CLC\_voidInit**(**void**); | Initializing LCD so the user can sending it commands | N/A | N/A |
| **extern** u8 **CLCD\_u8WriteComand**(u8 Copy\_u8command) ; | Enabling the commands mode for LCD configuration | The command to maintain a certain feature in the LCD | N/A |
| **extern** u8 **CLCD\_u8WriteDataStr**(u8 \*Copy\_u8Data) ; | Writing a string on the LCD | Pointer to the string array | zero |

Table 2: API description

# Design Constraints

## Constraints on Initialization

Works on LCD 16\*2 only

## Constraints on Inputs

Only English strings

## Constraints on Outputs

N/A

## Communication/Network Constraints

N/A

## Diagnostic Constraints

N/A