Component Design Document

For

<Button >

**<Air Conditioner >**

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**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
| Hager mohamed | 15th April 2018 | Create the file | 1.0 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# *1. Introduction*

## Objective

Knowing which button has been pressed to make the suitable action.

Getting the button status pressed or released.

## Context Diagram

Get\_ButtonStatus ()

|

|  |  |
| --- | --- |
| **Init ()** | **Button H** |

|

DIO\_ReadPin ()

# *External Interface*

## DIO\_cfg.h

### Types

|  |  |
| --- | --- |
| Data Type | Description |
| U8 | unsigned char |
| U16 | unsigned short int |
| U32 | unsigned long int |

### Interface

|  |  |
| --- | --- |
| Function | Description |
| DIO\_ReadPin(); | Reading the pin value to know which button has been pressed |
| Get\_ButtonStatus (); | Getting the button status pressed or released. |

### Const

### Symbol <#defines>

# *Static Design*

## Files

### Used Files

|  |  |
| --- | --- |
| FILE NAME | Description |
| Stdtypes. h | Includes the standard types |
| Button\_H.c | Includes the function implementation |
| Button\_H.h | Includes the function prototype |
| Button\_cfg.h | Include the configuration symbol |
| Button\_cfg.c | Include the configuration symbol |

### Files Inclusion

## Types

## Symbol define

## Const

## Interface (Services)

Know the status of the choice button using Get\_ButtonStatus function .

# *Dynamic Design*

## Mode Management

## Sequence Diagram

# *Shared Resources*

## Analysis

## Protection

# *Configuration Parameters*

## Pre-compile time

## Link time

## Post-build

# *Configuration Constrains*

Depend on pin number you can include this number of buttons.

# *Integration Constrains*

call Init () and make required configuration

# *History*

**Appendix A: Glossary**