GPIO CDD

for

LCD\_LED\_UART

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**Mar 27, 2020**

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# **Global Variables**

**static GPIO\_x volatile \* const GPIO\_PORT[3] = PORTS\_ARRAY;**

**contains all available ports.**

# **Configurations**

**N/A**

1. **GPIO APIs**

|  |  |  |  |
| --- | --- | --- | --- |
| **Component Name** | GPIO | | |
| **API Name** | STD\_ERROR GPIO\_Config(GPIO\_t\* p) | | |
| **Return type** | It’s u8 Error\_Status, it returns OK or NOT\_OK   |  |  | | --- | --- | | OK | 0 | | NOT\_OK | 1 | | | |
| **Input signal** | p:   * Type: pointer GPIO\_t * Description: struct containing Pins, port,mode,speed | Output signal | N/A |
| **Description** | The functionality of this API is to configure multiple pins on the same port to have the same configuration . | | |
| **Type (Public/Private)** | Public | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Component Name** | GPIO | | |
| **API Name** | STD\_ERROR GPIO\_GetPinValue(u16 Pin, u8 Port, u8\* Value) | | |
| **Return type** | It’s u8 Error\_Status, it returns OK or NOT\_OK   |  |  | | --- | --- | | OK | 0 | | NOT\_OK | 1 | | | |
| **Input signal** | Pin:   * Type: u16 * Description: desired pin to get its value   Port:   * Type: u8 * Description: Pins’ port   Value:   * Type: u8\* * Description: Value of pin | Output signal | Value:  pin value |
| **Description** | Get value of a pin | | |
| **Type (Public/Private)** | Public | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Component Name** | GPIO | | |
| **API Name** | STD\_ERROR GPIO\_SetPinValue(u16 Pin, u8 Port, u8 Value) | | |
| **Return type** | It’s u8 Error\_Status, it returns OK or NOT\_OK   |  |  | | --- | --- | | OK | 0 | | NOT\_OK | 1 | | | |
| **Input signal** | Pin:   * Type: u16 * Description: desired pins to set or clear their values   Port:   * Type: u8 * Description: Pins’ port   Value:   * Type: u8 * Description: Value of pins | Output signal | N/A |
| **Description** | Set or clear multiple pins on the same port | | |
| **Type (Public/Private)** | Public | | |