**CDD**

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| |  |  | | --- | --- | | Version: | V0.0 | | Updated by: | Ahmed Tarek | | History: | 2/3/2019 | |
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| |  |  | | --- | --- | | Version: | V0.1 | | Updated by: | Nada | | History: | 2/3/2019 | |
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| |  |  | | --- | --- | | Version: | V0.2 | | Updated by: | Bassem | | History: | 2/3/2019 | |
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| |  |  | | --- | --- | | Version: | V0.3 | | Updated by: | Mina | | History: | 2/3/2019 | |

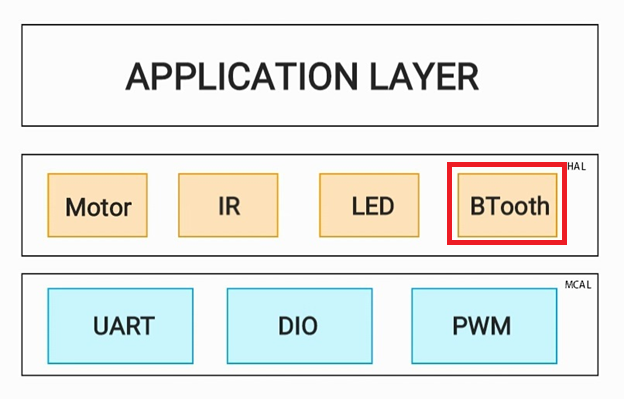
**Description:**

This file contains all the information concerning the **Component Design Document for Bluetooth Component**

needed to specify the **Bluetooth** APIs and design in the MCAL Layer used in this project.

We also can find the coverage range of each API along with the GDD document.

**Component Layer:**



**APIs Used:**

**Covers API\_CDD\_BT\_1**

**==> Initialize blueteooth ( Covers API\_GDD\_BT\_1 )**

Description: Initialize Bluetooth to send and receive data serially

Inputs : void

Outputs: Error state

u8 **BLUETOOTH\_Init**(void);

Return status

Check Error

No Error

Error

U8 BLUETOOTH\_u8Init(void)

U8 DIO\_u8UART\_Init(Boadrate)

**API\_CDD\_BT\_2**

**==> Bluetooth Send (Covers API\_GDD\_BT\_2)**

Description: Bluetooth sends data serially through UART communication

Inputs : character to be send

Outputs: Error state

u8 **BLUETOOTH\_u8Send**(void);

Return status

Check Error

No Error

Error

U8 BLUETOOTH\_u8Send(u8 u8\_copy\_char)

U8 DIO\_u8UART\_Send(u8\_copy\_char)

**API\_CDD\_BT\_3**

**==> Bluetooth Receive (Covers API\_GDD\_BT\_3)**

Description: receiving data serially through UART communication via Bluetooth

Inputs: character to be send

Outputs: Data received

u8 **BLUETOOTH\_u8Send**(void);

Return received data

Check Error

No Error

Error

U8 BLUETOOTH\_u8receive(void)

U8 DIO\_u8UART\_receive(void)

UML Diagram:

