# REPORT ON REMOTE KEY CONTROL

### **Description:**

- A] Bicom Systems is the only Unified Communications provider with all of the pieces to start and grow a telephony company.
- B] Established in 2003 with the first ever open-standards, turnkey telephony platform, Bicom Systems synergizes telephony, mobility, security, and billing on rock-solid stability to support partners around the world to grow their businesses.
- C] Seven highly-featured products integrate seamlessly to boost sales, growth, and profit, topped off with gloom, a desktop and mobile Unified Communications app that enhances and simplifies business communications.
- D] A BiCom system is the extension of the unidirectional RKE to bidirectional RKE system.
- E] This system can check the window status, Alarm status, Battery info, Door status.
- F] The status of all the above system can be verified through the led's.

#### Abstract:

- 1] keyless entry system allows you to lock or unlock your automobile without need to use your mechanical key.
- 2] To function the automotive body, the key fob does not need to be presented. For the sensors to pick up the signal, it can only be within range.
- 3] This system is implemented through LEDs in our project.

## Requirements:

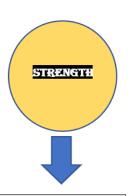
## High level requirements

ID	Description
HLR01	Display the status of window
HLR02	DISPLAY alarm status
HLR03	DISPLAY car battery info
HLR04	Display the status of door

## Low level requirements:

ID	Description				
LLR1	switch on -All led on at the same time				
LLR2	switch press two times- All led off at the same time				
LLR3	switch press three times- All led on in clockwise manner				
LLR4	switch press four times- All led on in anti-clockwise manner				

#### **SWOT ANALYSIS:**



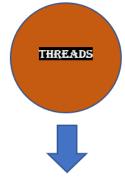
- We can use with less power
- Not connected to the internet



- We can only lock and unlock the system within the required range
- complex Systems



- Advancement in Technology
- Low cost and economical



- Component's damage
- Power failure can't have charge backup until resolved

#### 4W's & 1H

#### Who

• People having automobile and need to secure it

#### What

• Bi com system - Allows the people to lock and unlock the car

#### When

• Whenever we need to lock and unlock the system

#### Where

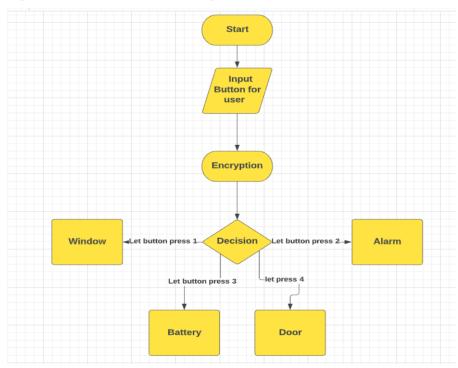
• Can be used anywhere at short distance

#### How

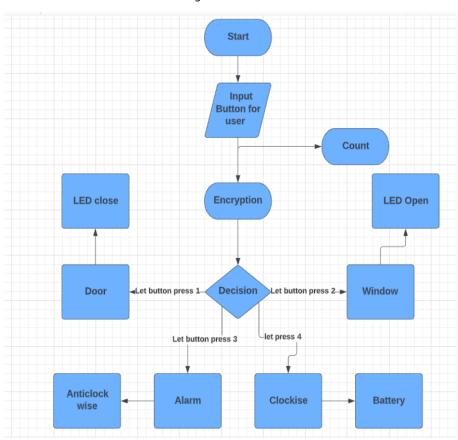
• Press on the blue switch and using LED'S ON and OFF as per the requirements.

## **Architecture:**

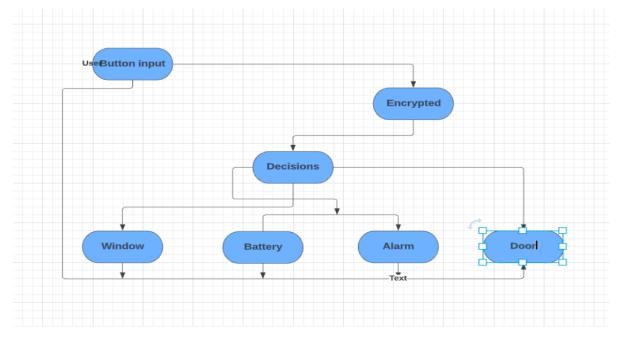
High Level Flow chart Behavioural Diagram



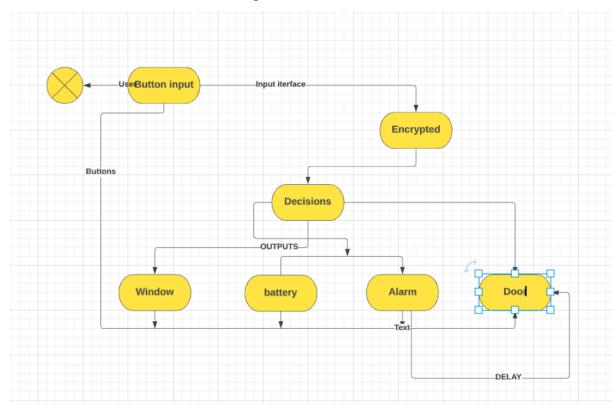
#### Low Level Flow chart Behavioural Diagram



High Level UML Use Case Structural Diagram



#### Low Level UML Use Case Structural Diagram



### • Test Plan and Output

### • High level test plan

Test ID	Description	Exp I/P	Exp O/P	Actual Output	Type Of Test
H_01	Display the status of window	None	Successful Integration	Successful Integration	Requirement based
H_02	DISPLAY alarm status	None	Successful Integration	Successful Integration	Requirement based
H_03	Display car battery info	None	Partially Integrated	Partially Integrated	Requirement based
H_04	Display the status of door	None	Partially Integrated	Partially Integrated	Requirement based

### • Low level test plan

Test ID	Description	Exp I/P	Exp O/P	Actual Output	Type Of Test
L_01	Display the status of window	USER button press once	ALL 4 LED TURNS ON	ALL 4 LED TURNS ON	Requirement based
L_02	DISPLAY alarm status	USER BUTTON PRESS TWICE	ALL 4 LED TURNS ON	ALL 4 LED TURNS ON	Requirement based
L_03	Display car battery info	USER BUTTON PRESS THREE TIMES	LED Turns on Clockwise	-	Requirement based
L_04	Display the status of door	USER BUTTON PRESS FOUR TIMES	LED Turns on anti-Clockwise	-	Requirement based

# Results:

• To display window status



• To display alarm status



