

Project: Battleship

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Introduction

The following report is based on the design of Battleship game with STM32F103RB Nucleo-64 controller. The design was carried in Keli uVision in C++ format. This design involves hardcode locations of the ships that can be accessed via peripherals. This is a complete working example of Battleship Game.

Battleship game came into existence around the time of World-War 1. The earlier known versions of the game were based on the paper and pencil that was played by military as a strategy game. The game was derived from L'Attaque which was a French game back in the day.

Equipment:

Name	Quantity
STM32F103RB	1
LEDs	8
270-ohm resistor	8
10-K ohm resistor	5
4-way button	1
DIP Switch	1
Wires	-

Procedure:

- 1) Connect all 270-ohm resistor to the LEDs and ground them. Anode side of the LED will connect to the resistor and cathode side of LED will connect to the ground.
- 2) Connect 10-k-ohm resistor to the dip switch and other side of the dip switch to the ground.
- 3) Connect 1 10-k resistor to the button diagonally the other side to the ground. Connect the other side of the resistor to the positive rail of the board. The PC10 will connect to the other side of the button.
- 4) Connect PC0, PC1, PC2, PC3 from the Nucleo to the switch respectively.
- 5) Connect 3.3 V from the Nucleo to the power railing of the bread board.
- 6) Connect PC11, PC12, PD2, PA10, PA0, PA1, PA4, PB0 to the led respectively.

Now you will have the required circuit to the run the game. Please follow readme.txt file to learn how to play the game.