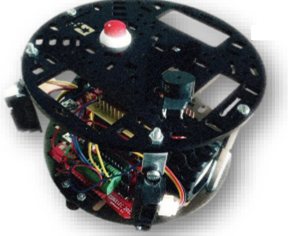
SAMBOT – Unit Tests

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Introduction

SAMBOT is a tiny robot that is controlled by UART. It is composed of a master and a slave card. The first one controls the wheels depending of the information it receives from the second, which manages the sensors.

This document lists the different unit tests.

Every Unit Test is composed of:

-One unique ID following this pattern: SAMUT\_XXX (Three digits).

-A function name to know what is being tested.

-A text explaining what the test is about.

SAMUT\_001

Function name: Detect\_Hole

Text: When there is no hole the function shall return 0. When there is, it shall return 1.

SAMUT\_002

Function name: Detect\_Obstacle

Text: The function shall return a range included in [0;20] cm if there is an obstacle. If not, the function returns 30.

SAMUT\_003

Function name: Turn\_Servo

Text: This function shall return the angle of the servomotor. When active the servomotor shall turn.

SAMUT\_004

Function name: SB\_Forward

Text: When active, the wheels shall turn to move the robot forward.

SAMUT\_005

Function name: SB\_Stop

Text: When triggered, the wheels shall stop.

SAMUT\_006

Function name: Turn\_Robot

Text: When active they shall turn on right is 1 is entered, on left if 2 is entered. If something else is in parameter, the function shall do nothing.

SAMUT\_007

Function name: Emergency\_Stop

Text: If the button is pressed, the wheels shall stop instantly.

SAMUT\_008

Function name: Bluetooth\_Connect

Text: When the launchpad is started, it sends a message telling the computer that they are connected. It says “MSP430 READY!”