Introduction & Project Objective

In the fields of physical security , access control (AC) is the selective restriction of access to a place or other resource. The act of accessing may mean consuming, entering, or using. Permission to access a resource is called authorization.

Locks and login credentials are two analogous mechanisms of access control.

In Most Code Lock system, You will Find Matrix Keypad. These are not secured, Because the number itself is printed on the Keypad. If someone see, while you are entering the code. He can easily identify.

Let's Design a Smart, Highly encripted Lock.

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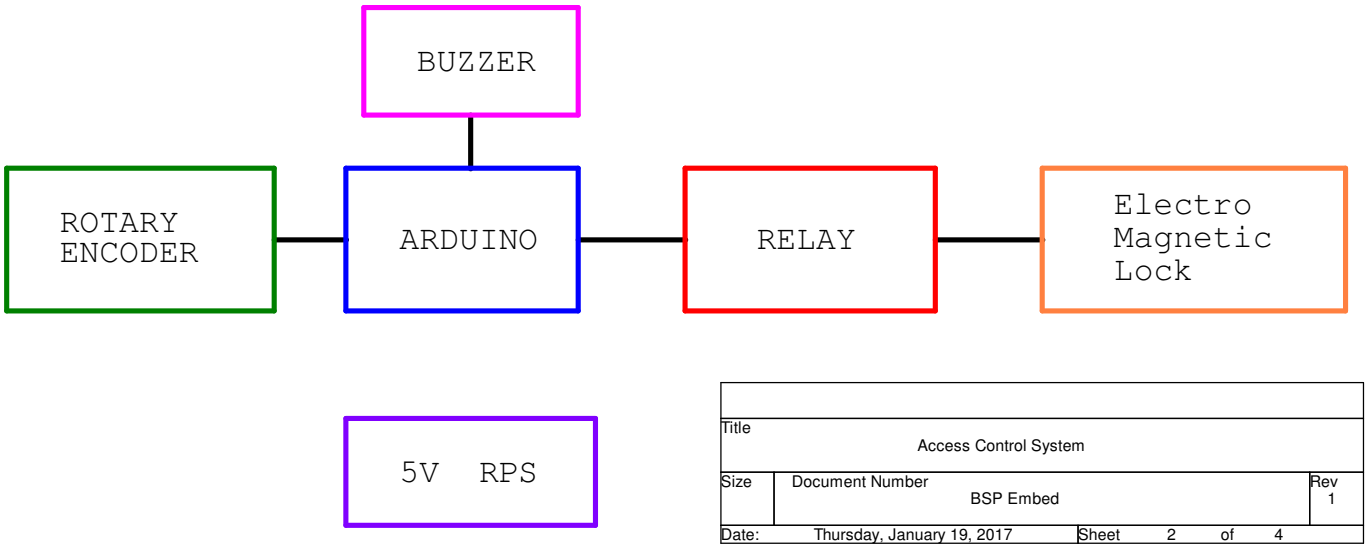
FUNCTIONAL BLOCK DIAGRAM



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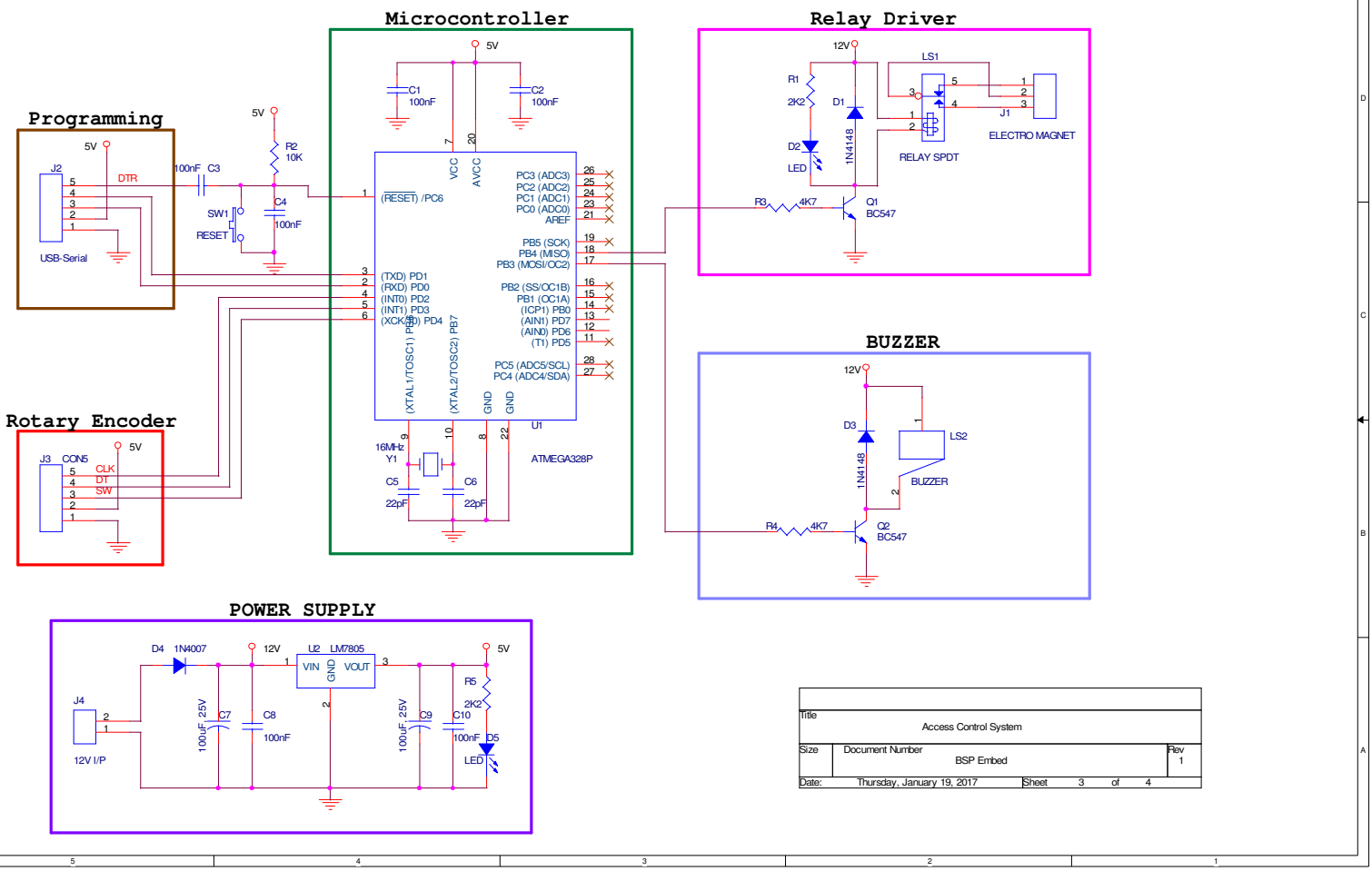

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Initial Setup Procedure

Download the following Libraries from GitHub

https://github.com/brianlow/Rotary

Add all these Libraries to Arduino IDE.

Operating Procedure

Mode1: Access Mode
If you rotate the encoder clockwise, the code will increase. If you rotate it in counterclockwise , the code will decrease. To confirm the code, Press the encoder switch. Repeat the process for 3 more times. If the Password is correct, The relay will activate for 2 Seconds.

Mode 2: Change Password Mode
Press and hold the encoder switch for about 1 seconds. You will hear a beep sounds. Enter the old Password, If it correct, you will hear 2 beep sounds, Then enter the NEW password. The system will store this new password into memory & You will hear 3 beep sounds. Congrats Your Password is change successfully.

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