DOOR LOCK WITH FINGERPRINT AND PASSWORD

Functional requirements:

Number	Descriptions	Notes
1	Shall be able to enter password and scan fingerprint	
2	Shall be able to change password	
3	Shall be able to store maximum 5 different fingerprints	
4	Shall display the password entered by user, format is ****	
5	If password is entererd incorrectly 3 times, shall disable the action, only fingerprint is available	

Non-functional requirements:

Number	Descriptions	Note
1	Buzzer sound pressure at distance of 1 m is 60dB	
2	Shall response to button no longer than 0.01sec	
3	Shall have LCD display, response to button no longer than 0.01sec	
4	Shall operate with battery 9V	
5	Shall operate in humidity levels between 25% to 80% relative humidity	
6	Shall last more than 1 week with battery 9V 300mAh	

7	Size is smaller than 10x7x4 cm	
8	BOM cost (only components) less than 20 USD/device with manufacturing quantity of 1000	

BLOCK DIAGRAM