



Automotive Control System

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Description

This project covers the aspects of the car door opening and closing system, Airconditioning based on temperature sensor reading and security alarm triggered in cases of unauthorized presence inside the car, all using STM32F401TXVE.

Features

- Unlock car doors and open mirrors using fingerprint scanner.



- Unlocking car doors and open mirrors using remote.



- Locking car doors and closing mirrors using touch panel.



- Open and close car trunk using ultrasonic sensor.



- Air-conditioner control using temperature sensor.



- Security alarm using ultrasonic sensor.

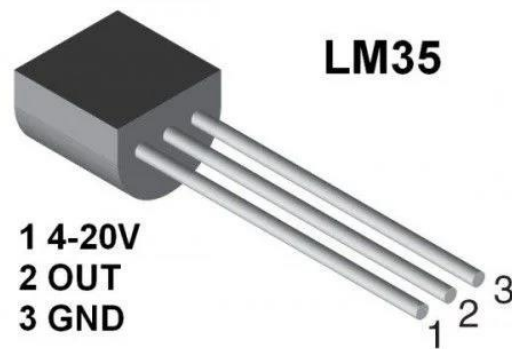


Components

- Microcontroller STM32F401TXVE.



- LM35 temperature sensor.



- Servo motor.



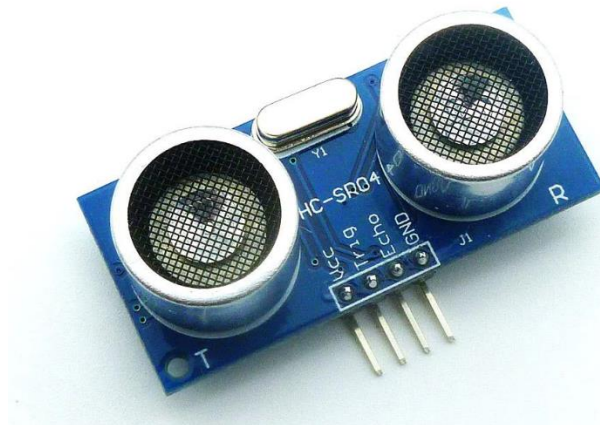
- LEDS & Buzzer.



- TFT.



- Ultrasonic sensor.



- Fingerprint scanner.



- Touch sensor.

