Components

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| Component selection | Description |
| 4 STM32F103C8T6 | 1 Pole is MASTER, other 3 poles are SLAVE  - MASTER: Get data from keypad to select mode (LIGHT\_TRAFFIC\_MODE, HEAVY\_TRAFFIC\_MODE, NIGHT\_MODE, CONTROL\_MODE), and sending to other poles. Getting data from SLAVE to display on LCD.  - SLAVE: 1 Slave working as Matser and the other 2 are opposite |
| 4 RF-NRF24L01 | Wireless SPI comunicaion between traffic light poles, from Master to Slave, to change operation mode and other things |
| 4 Double 7-LEDS Segment  Intergate IC 74HC595 | Counting time for driver |
| 1 LCD TFT ST7735 | Display number of car cross over red light, name of GROUP |
| 4 Move Sensor MH-SR602 | Identify when a car is cross over the street when red light. Furthermore, counting how many car infringe |
| 1 Matrix Keypad 4x4 | Modifing time of traffic light and switching operation mode of the traffic system |
| 4 Module traffic light- 3 colors Led | Display Green, Yellow, Red state |
| 1 Camera OV7670 | Need only 1 for illustrate how system detect colors of violating vehicle (instead of car’ID) |