POWER

J1 BATTERY
1
2
GND
1N4007 D2
+BATT
SW1
PWR

U1 LM1117-3.3
+3.3V
3 VI VO 2
GND 1
C1 10u
C2 10u
GND

U2 L7805
+5V
+BATT
1 IN OUT 3
GND 2
C3 10u
C4 10u
GND

J6
GND
1
2
3
4
Ground

TRAFFIC LIGHTS

J7
1 LED_R_1
2 LED_Y_1
3 LED_G_1
4 GND
Traffic_LEDS-1

J8
1 LED_R_2
2 LED_Y_2
3 LED_G_2
4 GND
Traffic_LEDS-2

J9
1 LED_R_3
2 LED_Y_3
3 LED_G_3
4 GND
Traffic_LEDS-3

J10
1 LED_R_4
2 LED_Y_4
3 LED_G_4
4 GND
Traffic_LEDS-4

RFID READERS CONTROL

+BATT
GND
30 VIN
17 3V3
27 +5V

2 D0/RX   RESET 28
1 D1/TX   RESET 3
cardDetected 5 D2
cardSelect0 6 D3
cardSelect1 7 D4   AREF 18
8 D5
SS1 9 D6   A0 19
SS2 10 D7   A1 20
SS3 11 D8   A2 21
SS4 12 D9   A3 22
RST 13 D10   A4 23
LED 14 D11   A5 24
MOSI 15 D12 A6 25
MISO 16 D13 A7 26
SCK
GND GND
GND 4   29 GND
A1
Arduino_Nano_v3.x

RFID READERS

J2 RFID-RC522_1
SS1
1
SCK 2
MOSI 3
MISO 4
5
GND GND 6
RST 7
+3.3V 3.3V 8

J4 RFID-RC522_3
1
2 SCK
3 MOSI
4 MISO
5
6 GND GND
7 RST
8 3.3V +3.3V
SS3

J3 RFID-RC522_2
SS2
1
SCK 2
MOSI 3
MISO 4
5
GND GND 6
RST 7
+3.3V 3.3V 8

J5 RFID-RC522_4
1
2 SCK
3 MOSI
4 MISO
5
6 GND GND
7 RST
8 3.3V +3.3V
SS4

TRAFFIC CONTROL

MCLR
U3
cardSelect0 2 RA0   RB7 40 LED_R_1 PGD
cardSelect1 3 RA1   RB6 39 LED_Y_1 PGC
4 RA2   RB5 38 LED_G_1
5 RA3   RB4 37 LED_R_2
6 RA4   RB3 36 LED_Y_2
7 RA5   RB2 35 LED_G_2
14 RA6   RB1 34
13 RA7   RB0 33 cardDetected

15 RC0   RD0 19
16 RC1   RD1 20
17 RC2   RD2 21
18 RC3   RD3 22
23 RC4   RD4 27
LED_G_4 24 RC5   RD5 28 LED_G_3
LED_Y_4 25 RC6   RD6 29 LED_Y_3
LED_R_4 26 RC7   RD7 30 LED_R_3
PIC18F45K22

MCLR/Vpp/RE3
RE0 8
RE1 9
RE2 10

32 Vdd
31 Vss
12 Vss
11 Vdd
+5V
C5 0.1u
C6 0.1u
GND
+5V

ICSP

J11 ICSP
1 MCLR
2 +5V
3 GND
4 PGD
5 PGC
6

LED

D1 LED
LED
R1 330
GND