

LED Current Calculation
 Supply Voltage: 12V
 Red LED voltage drop: 2.1V
 Green/Blue LED voltage drop: 3.1V

Current through red LEDs
 $-I = (12V - 2.1V)/510R = 19.41mA$

Current through blue/green LEDs
 $-I = (12V - 3.1V)/430R = 20.70mA$

Total current through Q1:
 $-I = 19.41mA * 32 = 621.12mA$

Total current through Q2/Q3:
 $-I = 20.70mA * 32 = 662.4mA$



