

Erasmus+ Project KA2

“MST + Culture through e-car”

Meeting – Targovishte, Bulgaria
5th – 9th October 2015

Applied Electronics





The purpose of electronics is to create workable devices (appliances)

Electronics is used in cars, too



Control over the car battery



Alarm for ice



Car alarm systems



Alarm for forgotten lights on

And others

Electronic components are used for producing an electronic device



resistors



diodes



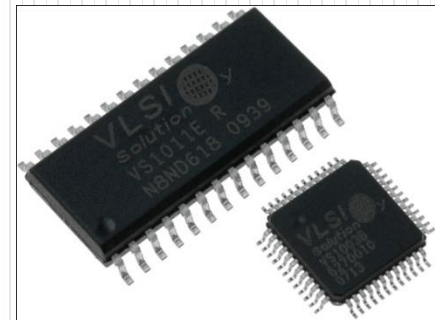
LEDs



capacitors



transistors



ICs

For soldering we use



Soldering iron

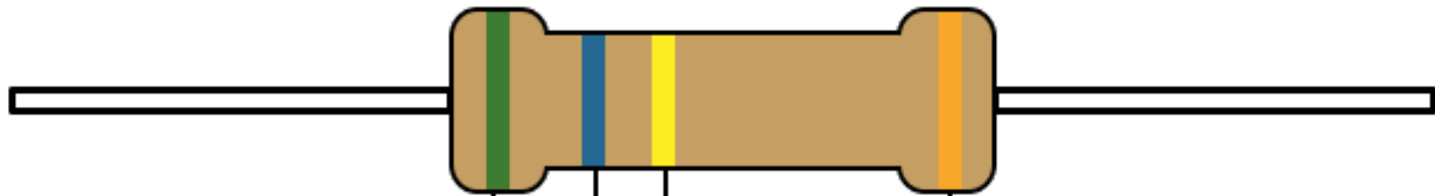


Tin



Solder paste

Reading colour code of resistors



1 line

2 line

3 line

4 line

1st digit of
designation

2nd digit of
designation

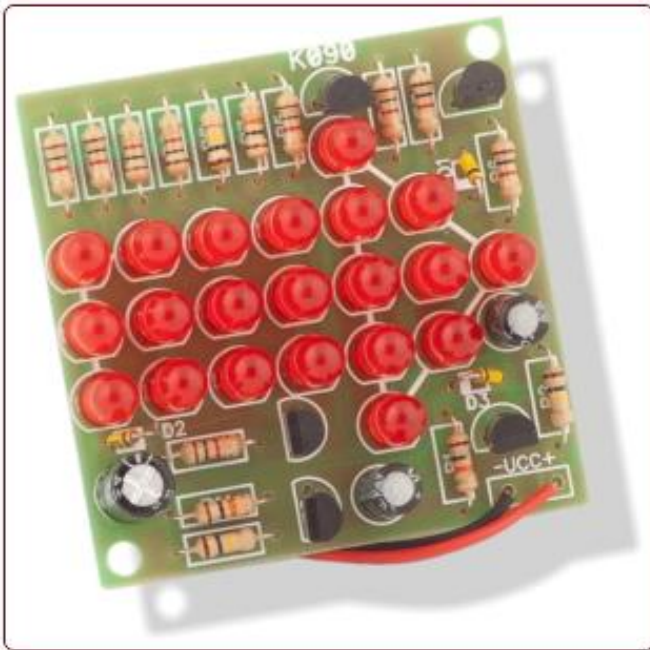
multiplier

deviation

Practical task

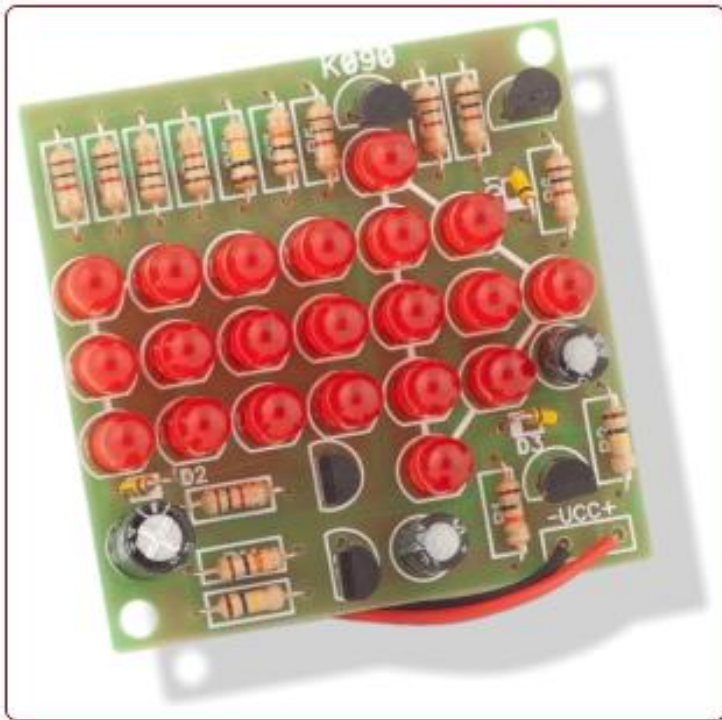
Define the values of the four resistors. Solder them on the PCB.

Making a LED directional pointer



The device can be used to indicate the direction by 21 LEDs located in a form of a pointer. The LEDs are divided into two groups one of which is a rectangle for the tail of the pointer, and the other is a triangle which is the start of the pointer.

Application:



This lighting effect creates a very good visibility of the pointer (to attract the attention) and is an ideal one for indicating the direction.

Sequence in making the electronic device:

- Decipherment of the electronic components, which are necessary for making the device
- Mechanical installation of the electronic components on the PCB
- Electrical installation of the electronic components on the PCB
- Testing the device

Let's get started!

