Dear Participant,

Hope you all are doing well.

I think you all have completed both the tasks and you are just a step behind from completing this internship.

I hope all of you have enjoyed and learned how to design a PCB during this time. I wish after the complection of this internship all of you will practice the things which you have learnt.

The primary objective of **Task 3** is to provide an insight into Board Designing of ATMega Chip and to test your approach.

TASK 3 :

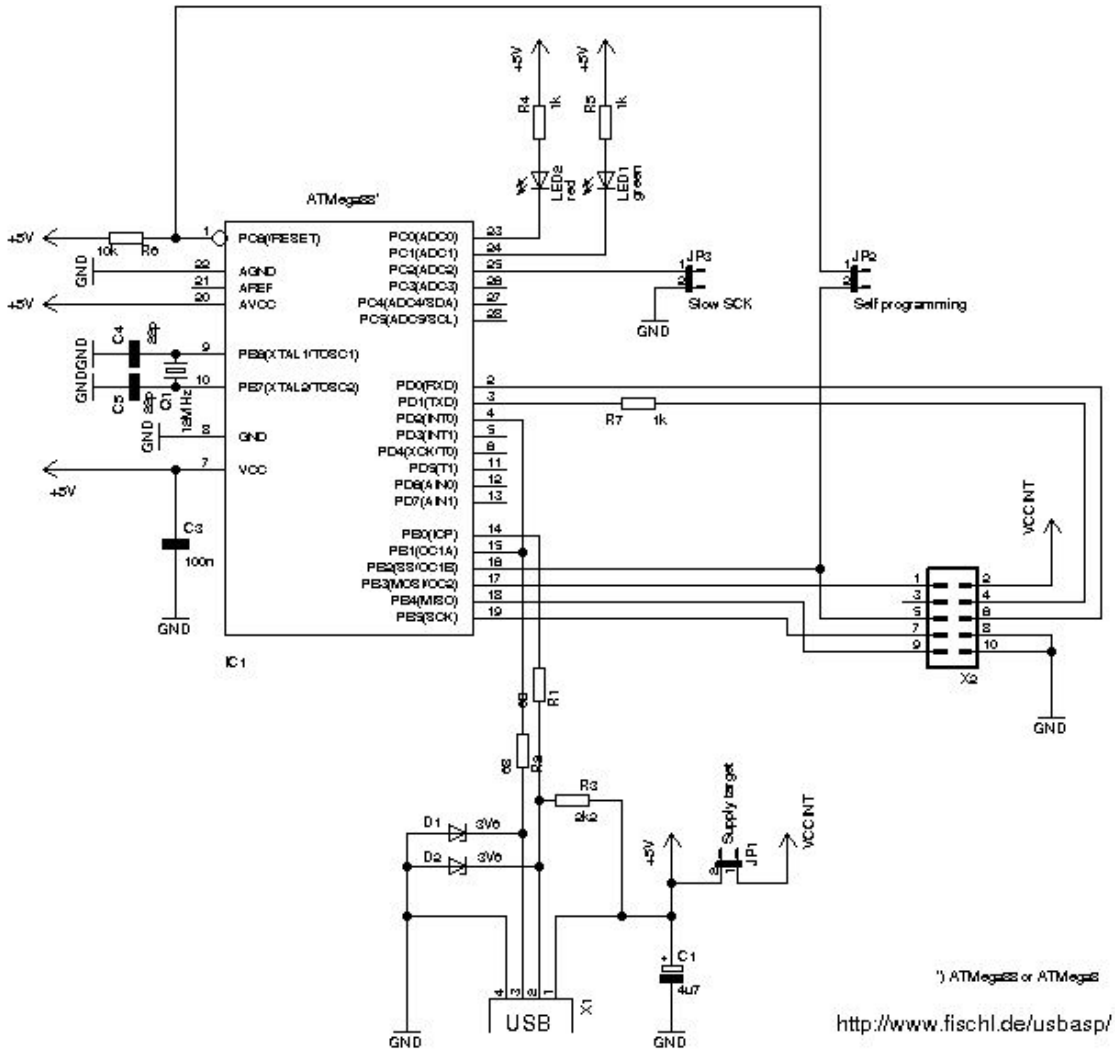
Technology Stack to be used:

-Basic AVR Circuits -EasyEda PCB Design Platform

Problem Statement:

1) Design an USBASP AVR Programmer module.

Reference Circuit Diagram In Next Page



Reference Circuit Diagram

Problem Breakdown:

- The following operations are to be performed to be done **EasyEda**(online simulator or software)
    - Draw the Schematic diagram of given problem referring to the image and your knowledge.

  - Check the circuit and save it and convert it to PCB.
  - Arrange the components in a Rectangular border
  - Now perform the routing operation and save the design
    - Try to use minimum number of layers(not more than 2 layers)
    - You can use any no of Via
    - Try to make using manual routing
    - Must add a copper layer in your board
- Place your name in both schematic as well as in the PCB.

Submission Guidelines :

- Properly check the schematic diagram and PCB.
- Export the EasyEda file of schematic diagram and PCB.
- Take a screenshot of you PCB, Schematic and 3d view.
- Create a folder and add all your files (PCB(.JSON), Schematic(.JSON)& Screenshot(.jpeg or .png)) to that folder, then to your Github Repository, and upload the link to the repository in the SID website.
- Alternatively, you can upload that folder in Google Drive, and upload the public link in the website. (Make sure that viewing right is provided to everyone having the link).

Resources:

- EasyEDA Tutorial (Video)- https://bit.ly/3qaTKr2
- EasyEDA Tutorial (Documentation)- https://bit.ly/3vB438N
- What is USBAsp AVR Programmer(Documentation)- https://bit.ly/3hwPuzt

LAST DATE OF SUBMISSION: 30/07/2021

Warm regards,
SPECTRUM, CET-B