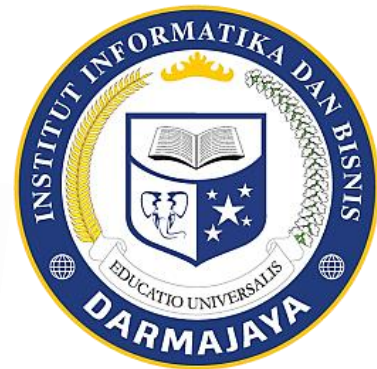


Modul Praktikum

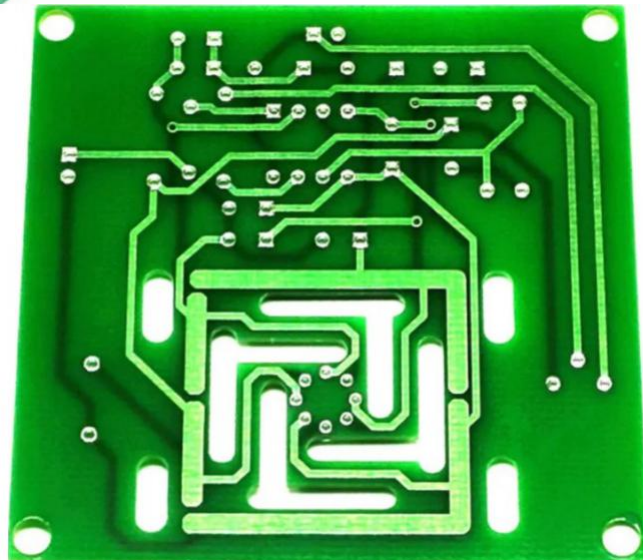
DESAIN DAN SIMULASI RANGKAIAN ELEKTRONIKA

Kode Matakuliah: SKO21425



Penyusun:

Bayu Nugroho. S.Kom., M.Eng



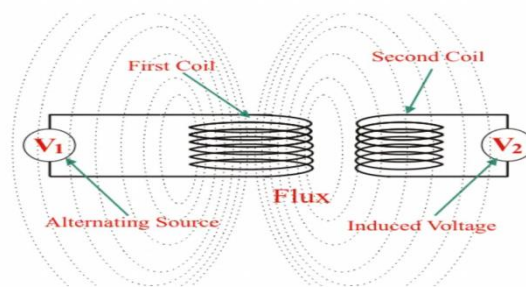
**PROGRAM STUDI SISTEM KOMPUTER
FAKULTAS ILMU KOMPUTER
INSTITUT INFORMATIKA DAN BISNIS DARMAJAYA
2023**

Modul 3

Power Supply Simulation

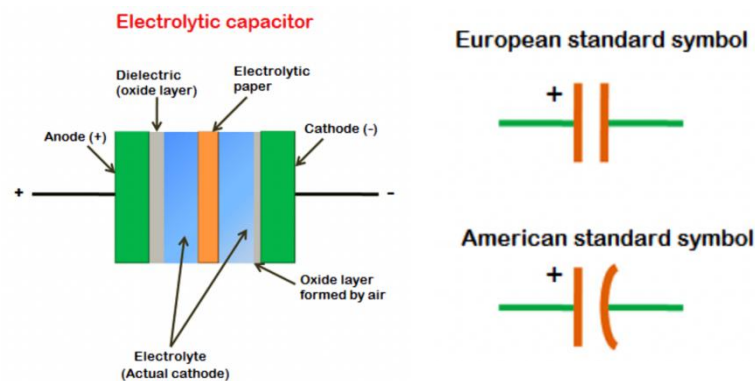
1. Transformator

A transformer is defined as a passive electrical device that transfers electrical energy from one circuit to another through the process of electromagnetic induction. It is most commonly used to increase ('step up') or decrease ('step down') voltage levels between circuits.



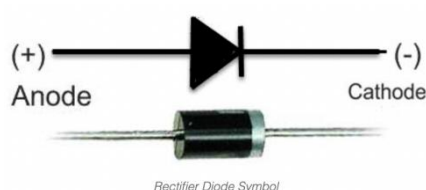
2. Filter (Elco)

An electrolytic capacitor is a type of capacitor that uses an electrolyte to achieve a larger capacitance than other capacitor types. An electrolyte is a liquid or gel containing a high concentration of ions.



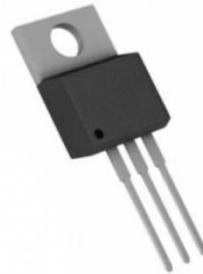
3. Rectifier (Dioda)

A rectifier diode is a semiconductor diode, used to rectify AC (alternating current) to DC (direct current) using the rectifier bridge application. The alternative of rectifier diode through the Schottky barrier is mainly valued within digital electronics.



4. IC Voltage Regulator

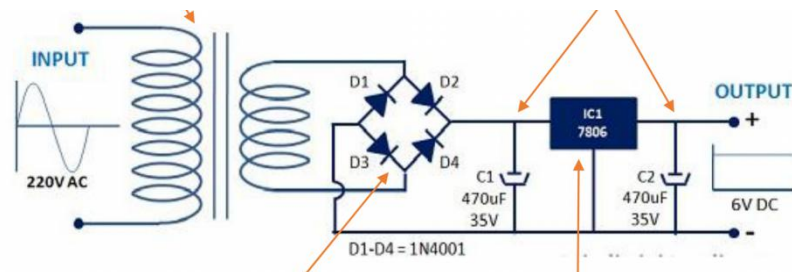
A regulated voltage (without fluctuations & noise levels) is very important for the smooth functioning of many digital electronic devices. A common case is with microcontrollers, where a smooth regulated input voltage must be supplied for the microcontroller to function smoothly



Voltage Regulator IC in TO-220 package

JOB SHEET 3

Lakukan Simulasi Power Suply sederhana seperti pada gambar di bawah ini menggunakan software simulator dan jelaskan tahapan dan hasil simulasinya.



LAPORAN HASIL PERCOBAAN: