

## **ABSTRACT**

*Practicum for student D3 Telecommunications much. For students D3 telecommunications engineering, lab usually more than 3 in each semester. In the lab requires a tool used for lab equipment. One such laboratory Circuit. Practical electrical circuit is usually done in the laboratory. For the portion of D3 telecommunications engineering and quality lab time is not yet fulfilled properly. Olehkarena Lab Kit is made here so that its use can be done in the classroom while teaching and learning.*

*At the end of the project is to design a power supply that consists of two modes of AC and DC. The power supply can be issued for this voltage can be set from 0 to 15.53 volts for AC and from 0 to 14.53 Volts for DC and 94 kHz - 442 kHz Frequency for AC. Besides the voltage can be seen with a small LCD previously made with Atmega 8535. Lab equipment is assembled into a single kit with Analog Multimeter, Digital Multimeter and Projectboard so easy to use for practice. The process of making the final project using several software applications including Altium Designer to design Catudaya, Autocad for casing design and coding codevision for LCD AVR microcontroller ATmega8535.*

*The results of this toolkit is AC = 0 - 15.53 Volt, DC = 0 to 14.53 Volts, AC Frequency = 94 kHz-442 kHz. In addition to the output of the power supply can be read in the LCD microcontroller*

*Keywords: Kit portable lab module, power supply, electrical circuit.*