

## ***ABSTRACT***

*Research in this final project for the purpose of making and realizing micro-coil as a magnetic inductors for wireless power transfer. How to change the magnetic field into the current.*

*This final project through the process of designing and designing and implementation. With the specifications of this coil a distance of 300  $\mu\text{m}$ , coil width of 300  $\mu\text{m}$ , the width between the coil is 300  $\mu\text{m}$ , and coil height of 35  $\mu\text{m}$ . This coil uses chemicals with its substrate material FR4. The SRF want to get is 300KHz, 500KHz, and 1MHz.*

*SRF obtained from mathematical calculations of 297.88KHz, 499,28KHz, and 980.01KHz. The resulting SRF uses a simulator of 300KHz, 500KHz, and 1MHz. The results of the measurement of the realization of micro coil FR4 is 299.5 KHz, 500.2 kHz, and 1MHz.*

*Keywords: wireless power transfer, micro-coil, SRF*