

**FACULTY OF ELECTRICAL ENGINEERING**

**UNIVERSITI TEKNOLOGI MARA**

**PULAU PINANG**

**FINAL REPORT**

**SMART ANTI-CHEAT SENSOR FOR MOBILE PHONE**

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**This report is submitted to the Faculty of Electrical Engineering,**

**Universiti Teknologi MARA ( UiTM ).**

**In partial fulfillment of the requirement for the award of Diploma in Electrical  
Engineering.**

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## **ABSTRACT**

This Smart Anti-Cheat Sensor for Mobile Phone is designed as a mobile transmission detector that can sense the presence of an active mobile phone from a short distance. It can be used to prevent the use of mobile phone in examination halls. The circuit can detect the incoming and outgoing calls, messaging and video transmission even if the phone kept in silent mode. The Smart Anti-Cheat Sensor can sense the radio frequency of 0.9-3GHz nearby mobile phone.

The circuit can detect both the incoming and outgoing calls, Short Message Service (SMS) and video transmission even if the mobile phone is kept in the silent mode. The moment The Smart Anti-Cheat Sensor for Mobile Phone detects radio frequency (RF) transmission signal from an activated mobile phone, it starts Sounding a beep alarm and the light emitting anode (LED) blinks. The alarm continues until the signal transmission ceases.

Assemble the circuit on a general purpose printed circuit board (PCB) as compact as possible and enclose in a small box like junk mobile case. As mentioned earlier, capacitor C3 should have a lead length of 18 mm with lead spacing of 8 mm. Carefully solder the capacitor in standing position with equal spacing of the leads. The response can be optimized by trimming the lead length of C3 for the desired frequency by using the miniature 9V battery of a remote control and a small buzzer to make the gadget pocket-size. The unit will give the warning indication if someone uses mobile phone within a radius of 2 meters.

## **ACKNOWLEDGEMENT**

First and foremost, I would like to express my sincerest gratitude to my supervisor Madam Aiza Mahyuni Mozi whose contribution in stimulating suggestions and encouragement, helped me to coordinate my project especially in writing this report. Furthermore I would like to acknowledge with much appreciation to all others group that sharing the same supervisor and all friends that sharing information to accomplish this Final Year Project. Besides that, a special thanks goes to the lab assistants that give us permission and guide us in achieving our final year project's goals. I have to appreciate the guidance given by the panels Madam Rabiatal Adawiyah and Madam Najwa Rawaida especially in our project presentation that has improve our presentation skills, thanks to their comment and advices.

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ACKNOWLEDGEMENT

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