# DEPARTMENT OF ELECTRICAL ENGINEERING UNIVERSITI TEKNOLOGI MARA CAWANGAN PULAU PINANG

### FINAL REPORT OF DIPLOMA PROJLUI

6v to 12v DC TO DC CONVERTER

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#### ABSTRACT

There are many amazing number of great cars such as VW Beetles and Ford, which still operates on a 6V battery. In such vehicles, there are always problem when trying to install a modern car radio as they require power supply of at least 10.7V. One solution is to incorporate a 6V to 12V converter of the type of describe here. This simple converter provides an output of around 700mA and is relatively inexpensive to construct. This two characteristics; simple and cheap, arise from the concept of the circuit, constrain two integrated audio amplifiers and does not require a transformer. Thus this economical can be applied to car radio cassette, toy car and any other electrical gadgets that need 12 volts to be operated.

In our case, we are trying to discuss about the application of dc to dc converter in the power supply. The energy conversion is one whereby some aspect of an electrical source is changed. One example of this change is the process alternating a DC source voltage from one value to another. The use of a semiconductor switch, which may closely approach of on ideal switch, enables this process to be done in highly efficient manner.

The discussion in this report is suitable for final years students in electrical engineering to understand the function of converter. The early chapters discuss the major semiconductor devices that are used as dc to dc converter

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