Fakulti:	FAKULTI KEJURUTERAAN ELEKTRIK
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SEE 3742

FAKULTI KEJURUTERAAN ELEKTRIK
UNIVERSITI TEKNOLOGI MALAYSIA
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POWER ELECTRONIC LABORATORY

PROBLEM PACK

Buck Converter

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1. Project Guide

Layout Requirement

Buck Converter Power Stage:
For the buck converter power stage we have designed a PCB layout for you. You are required to make a finish PCB at the PCB lab. As such, your works include making PCB, drilling holes and soldering.

PWM Signal Generation on Proto-board:
How you build the circuit you want to test is as critical to its performance as the parts you choose. Properly placed and correctly interconnected your circuit components give you performance that closely follows your calculations and simulation. However, careless placement or poor wiring assures that the large signal from the output contaminates the input, causing oscillations everywhere. In short, to build a working circuit you must be able to:

i. Define the mechanical requirement of the circuit
ii. Identify the critical path
iii. Place the component correctly
iv. Select the correct inter-connector sizes and route signal, power, and circuit common connection.
v. Discuss other concerns