

MIDDLE EAST TECHNICAL UNIVERSITY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

EE464 Simulation Project-2 Report

Isolated Converters & Controller Design

19/04/2018

Hakan Saraç -

Mahmut Enes Kara -

Cem Kavuncu - 2030963

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1. **Introduction**

In this project, we are required to design an isolated DC-DC converter and a controller, respectively. For DC-DC converter, we are supposed to use the topology that we chose for our hardware project. Therefore, since we have chosen to use flyback converter for our hardware project, firstly we need to design a transformer for our flyback converter. Secondly, we are supposed to observe the voltage-current stress in the switches and decide to use any snubber. Also, we are objected to choose our components for our converter. Moreover, we are supposed to design a converter for our specifications in the hardware project and obtain its bode plot and transfer function. Lastly, we are supposed to design a Type-2 controller.

1. **Results**