

Date: 26.04.2019

Attendees: Furkan Karakaya

Location: Electrical Machines Laboratory

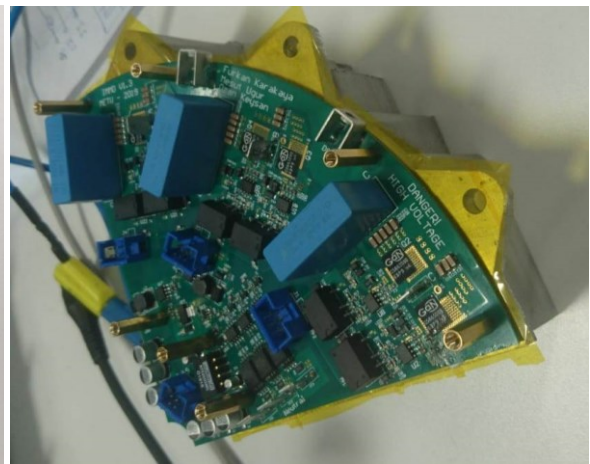
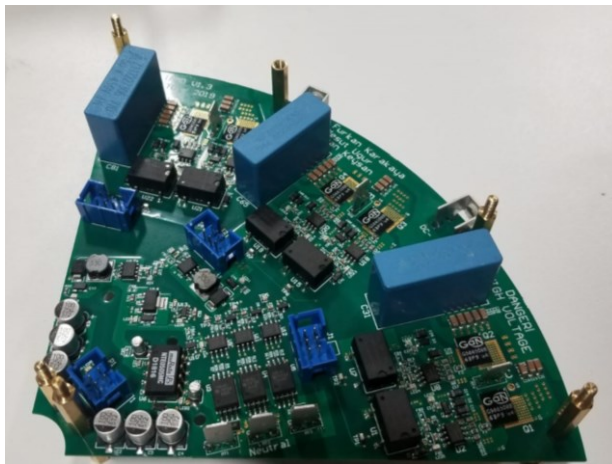
Target: V1.3 Gate Driver Board (#1)

Test type: Inverter test with RL load

Aims before the test:

1. To obtain current waveforms with Rogowski Coil

Conditions: 22 Ohm R_{on} , 2 Ohm R_{off} . 0-300V VDC. RL Load: Five different stages. 10kHz-40kHz fsw. 0.9 power factor. Sinusoidal PWM with 0.9 modulation index.

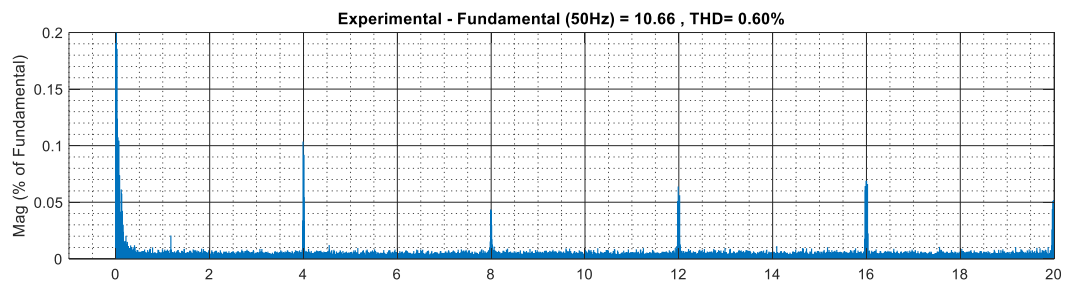
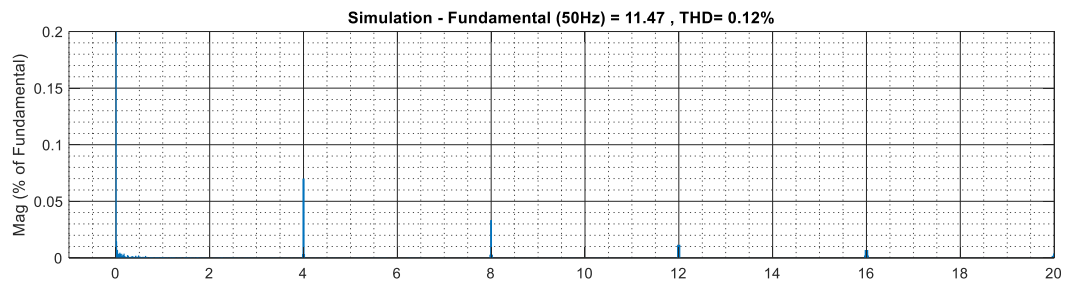


Steps:

1. The phase current is measured with rogowski coil and current probe.
2. The rogowski results are compared with simulation.

Results:

i) 40 kHz switching frequency without any filtering in oscilloscope



ii) 10 kHz switching frequency without any filtering in oscilloscope

