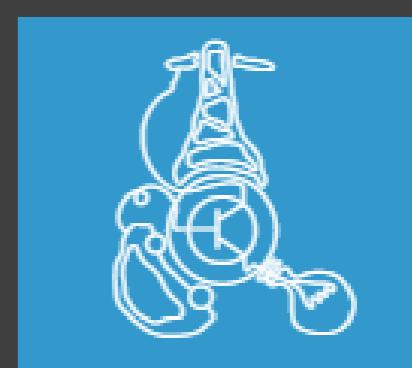


PHYSICAL IMPLEMENTATION of SCALAR CONTROL of INDUCTION MACHINE



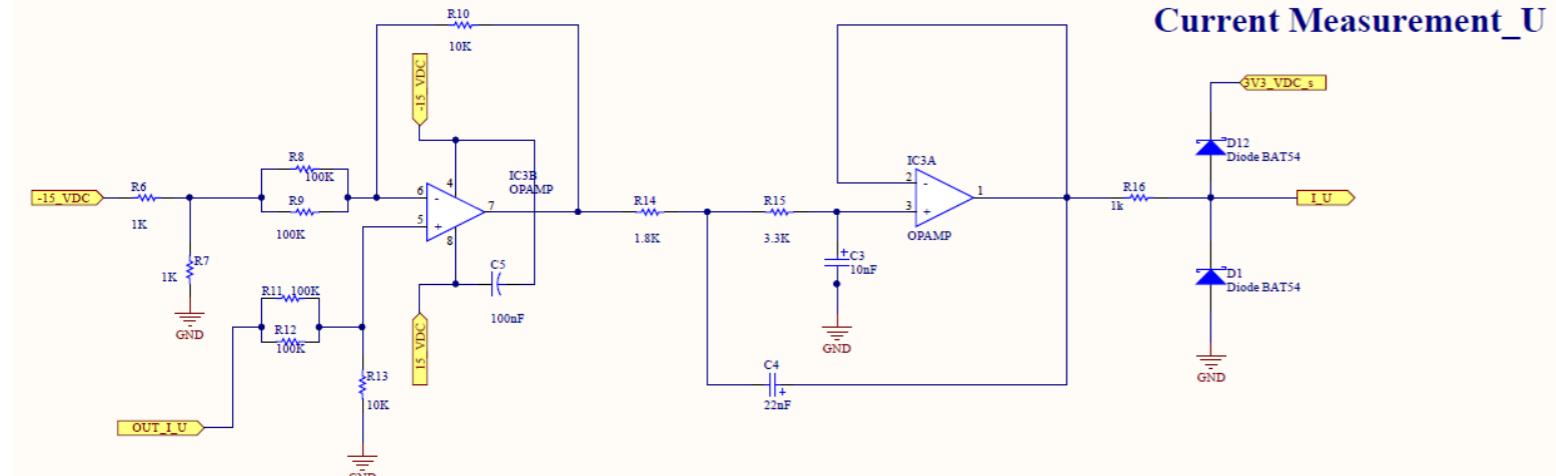
Nyi Nyi Aung, Touseef Ali



EMJMD - Sustainable Transportation and Electrical Power Systems

Signal Adaptation and Filtering

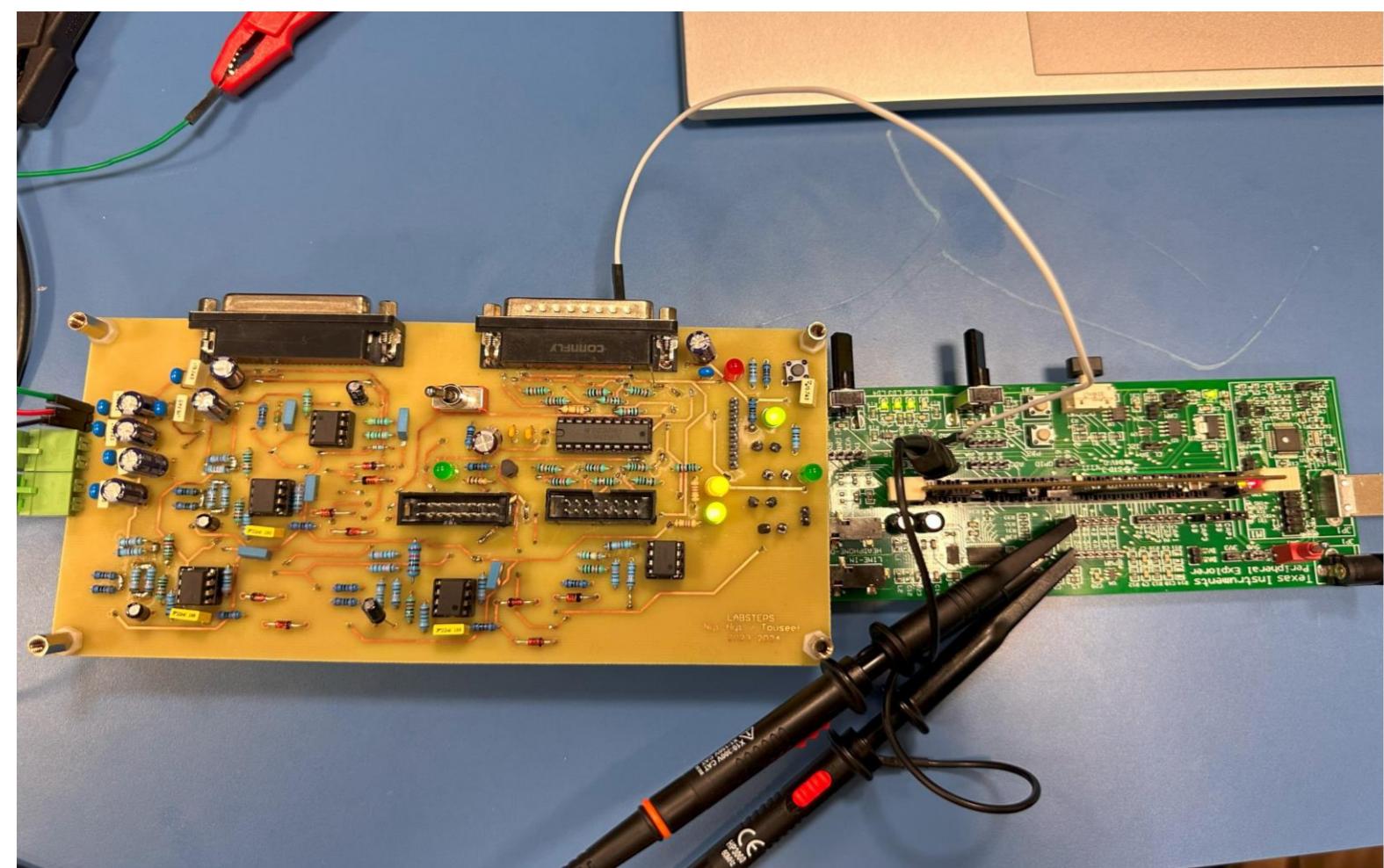
Operational Amplifiers are used to amplify and filter the signals given by the Inverter's built-in sensors.



Schematic for Signal Adaptation and Filtering

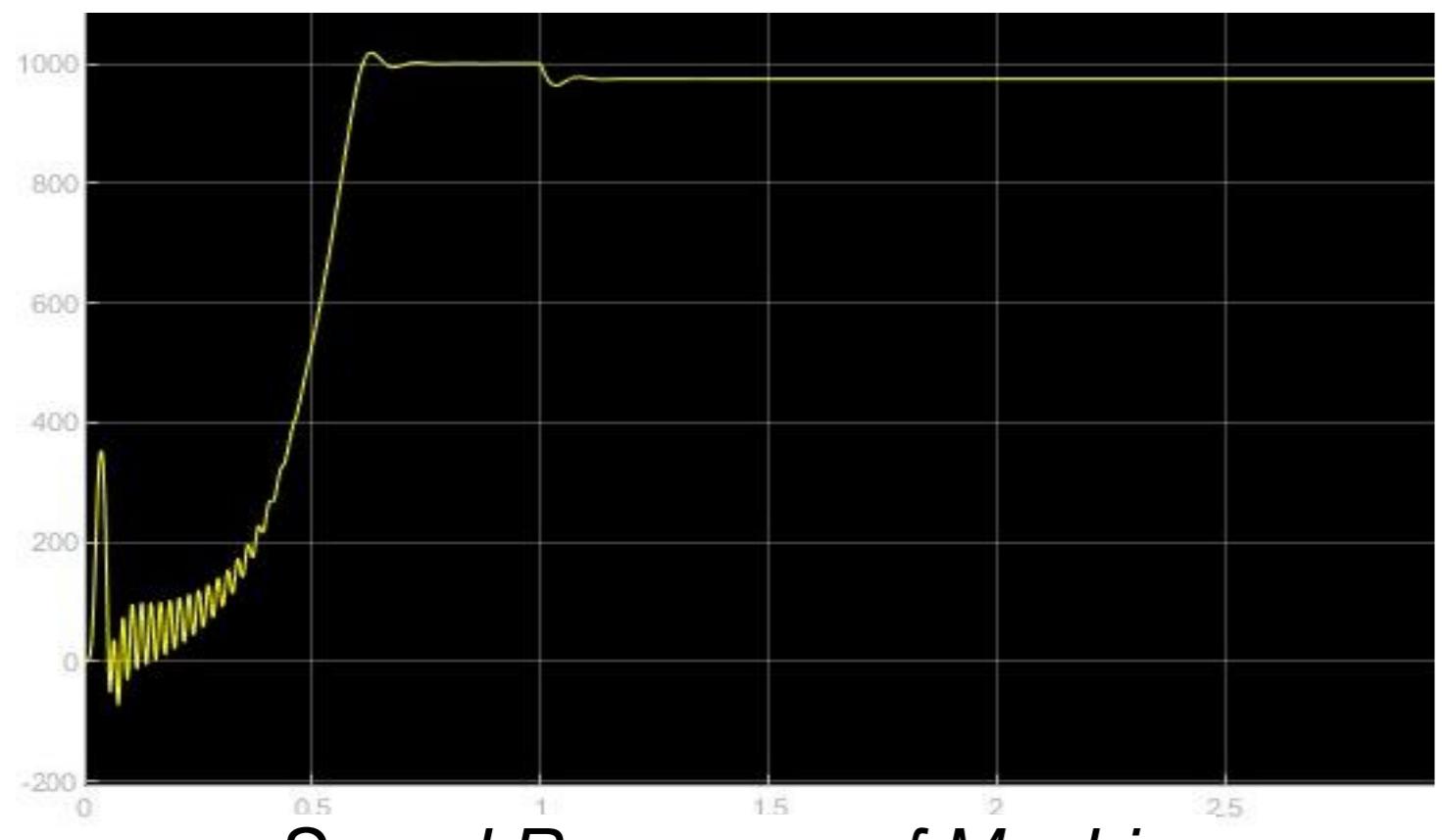
Micro-controller

Micro-controller is used to provide the switching patterns simulated in MatLab, Simulink



PCB and Micro-controller Connection

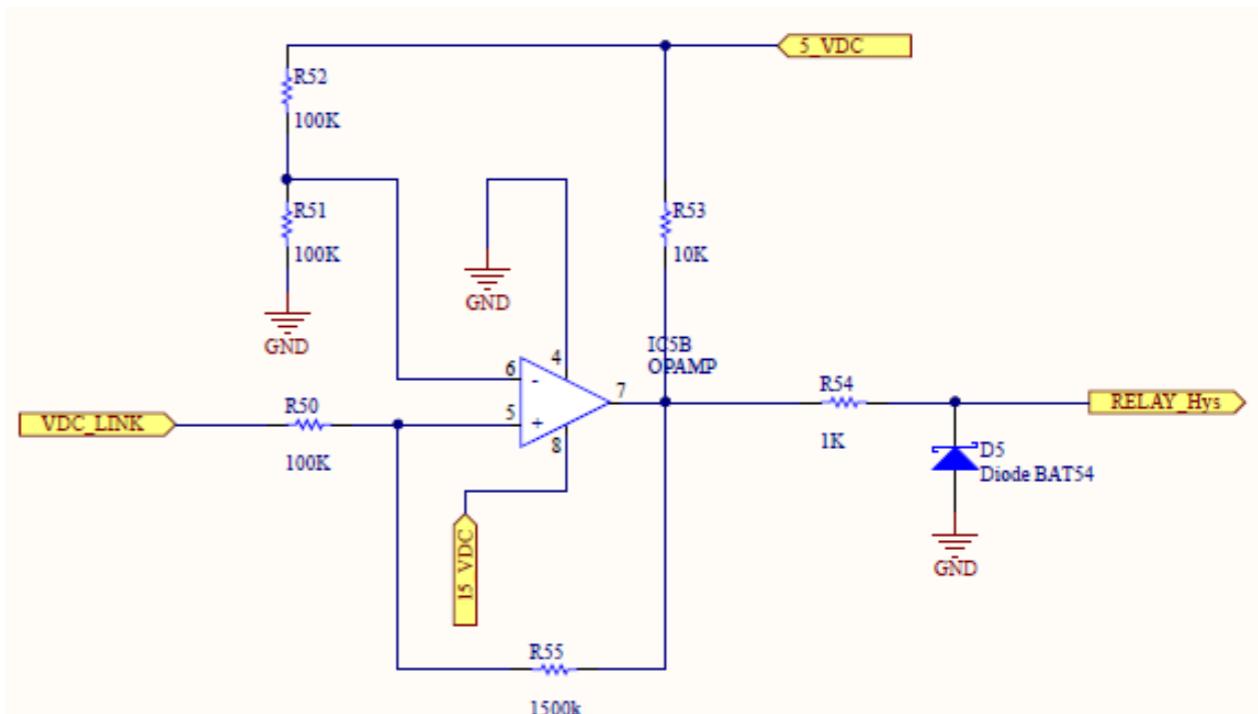
Scalar Control of Machine



Speed Response of Machine

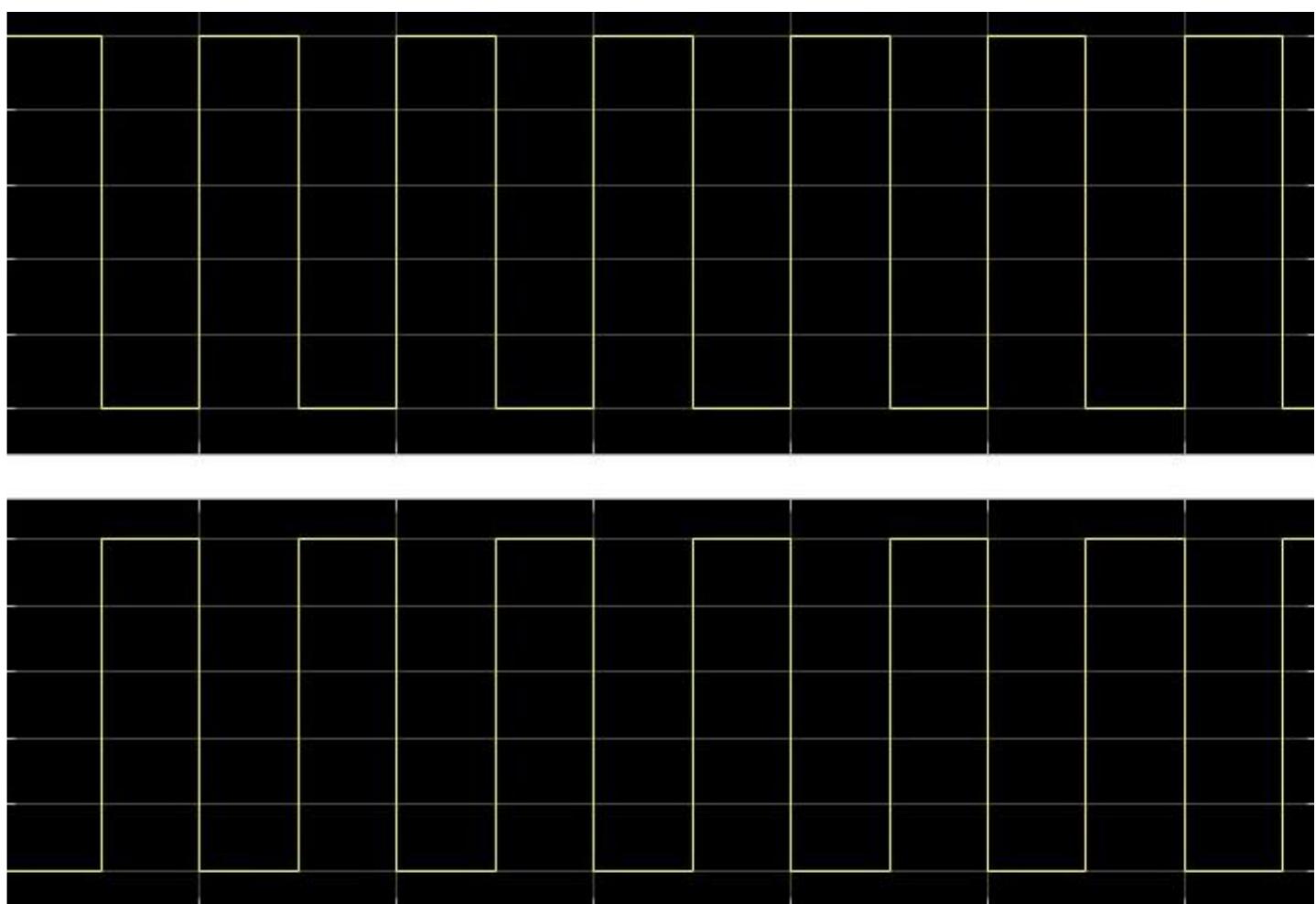
Comparator with Hysteresis

Comparator is used to activate or deactivate the relay when the voltage surpasses the specific limit.



Schematic of Comparator

Switching Pattern for Inverter



Switching Patterns to PCB

Physical Implementation

