

E&E System Engineering Intern Assignment

- 1)** Draw a Vehicle level architecture for 48V system with CAN communication and necessary ECUs. What will be the difference if the voltage level is 400V?
- 2)** How do you do DC-DC converter sizing? Why DC-DC converter is important for EV?
- 3)** What is the importance of Precharge? How do you calculate Precharge Resistor Value and Precharge Time?
- 4)** Can you connect two relays in Parallel to increase current capacity? If yes, then why? If no, then why?
- 5)** Why it is important to have Cell Balancing? Explain about different types of Cell Balancing technologies.
- 6)** How will you charge +12V Auxiliary battery in a vehicle?