Charging of 16S1P After Balancing:

SoC Results:

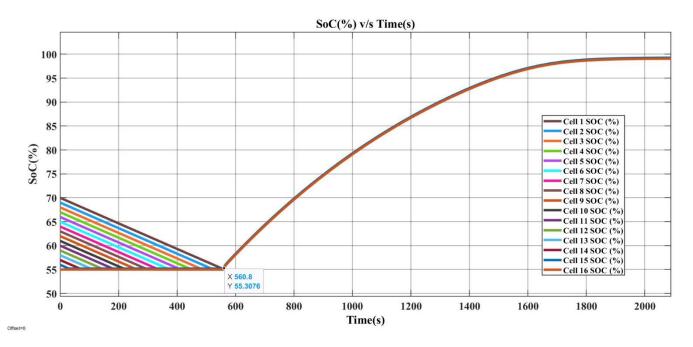


Fig 1: Balancing and Charging by Min SoC BSP Strategy

In **Fig 1** it has shown that after balancing of all 16 cells, all the cells started charging by voltage source of 60 V at decided rate of 1C. All the cells fully charged at around 2000 seconds. The voltage of voltage source should be more than 52.8 V for charging condition because the voltage of 16S1P battery pack is 52.8 V.

Current Results:

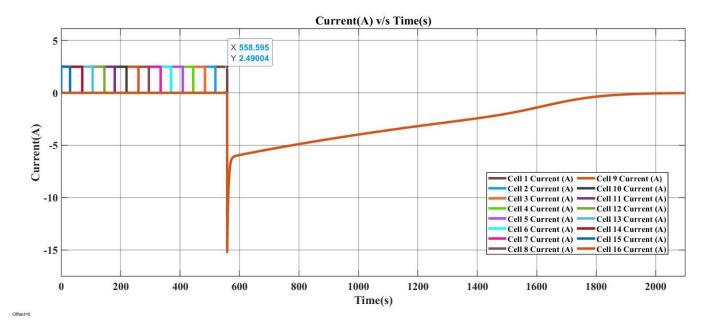


Fig 2: Current Results of Balancing and Charging by Min SoC BSP Strategy

In **Fig 2** it has shown that all the cells droped by 2.5A of current to 0 A, when they get balanced one after the other. When all the cells get balanced at instant the charging switch gets ON, then all the cells started charging and the value of current was 15 A(switching effect for charging condition) at the time of balancing at then it started decreasing till 0 A after 2000 sec.

Voltage Results:

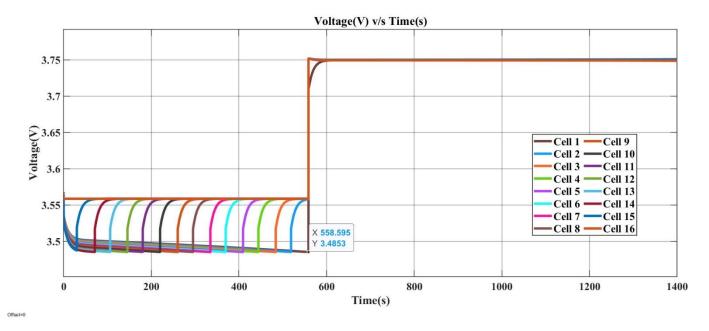


Fig 3: Voltage Results of Balancing and Charging by Min SoC BSP Strategy

In **Fig 3** at the initial all cell had the voltage around 3.55 V, which was droped to 3.48 V when they were balancing one after other. After balancing when the all cells started charging their voltage levels also started increasing and after 558 sec (balancing time), all cells have the voltage around 3.75 V.