Our Problem is that instant loading is only going up to 0.7A load with our SMPS Developed with TI Webench Tool . We want to operate our SMPS up to nearly 2.5A(Approx.2.4A) instant load. Please kindly give a solution to avoid this problem. Please find the different waveforms obtained in our SMPS schematics Testing are given below.

Tested at Vinput=224V AC Supply
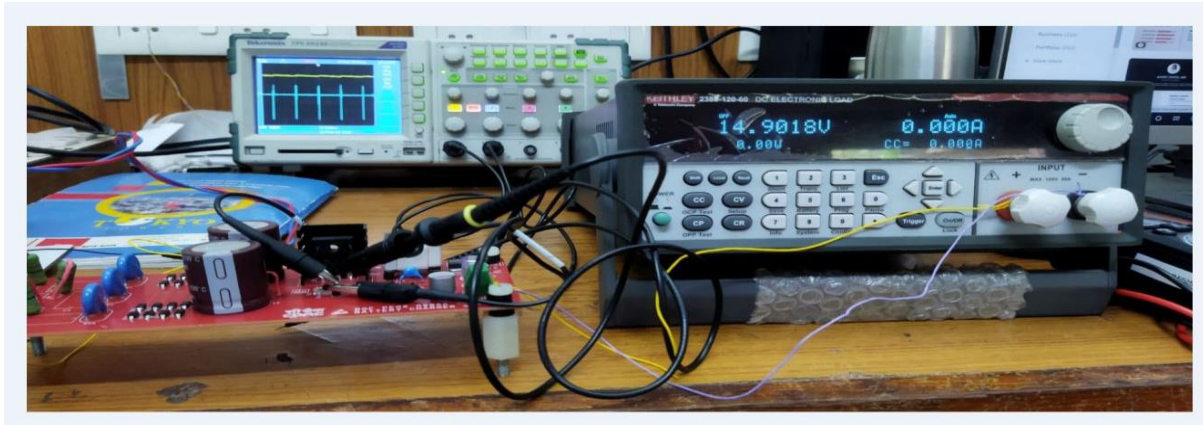
SMPS Waveforms At No Load Condition

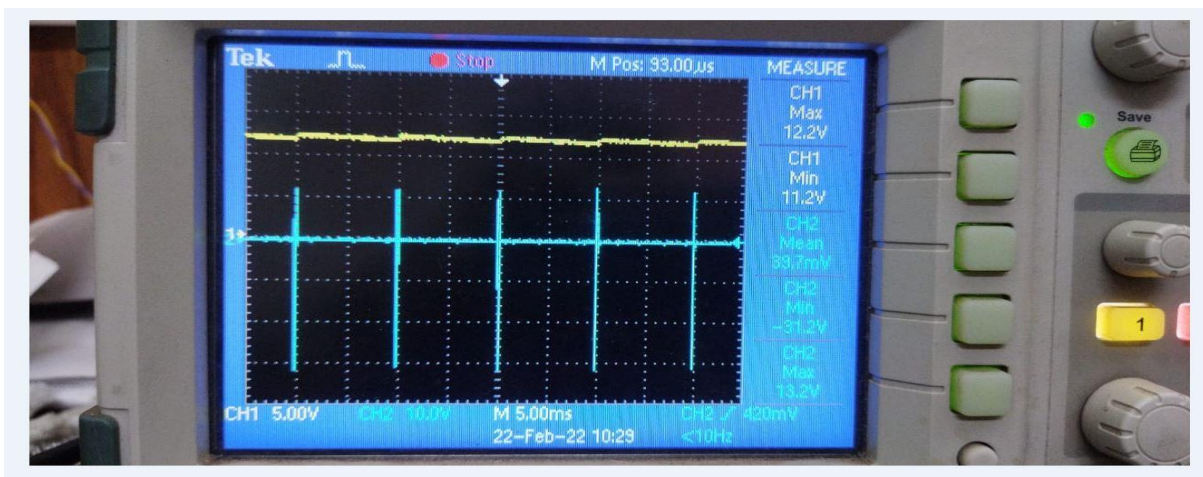Figure1: SMPS PCB board and Electronic load under No load condition

Figure 2: VCC and Vauxilary Waveforms SMPS under No load condition.Channel1(Yellow):VCC and Channel2(Blue):Vauxilary winding.
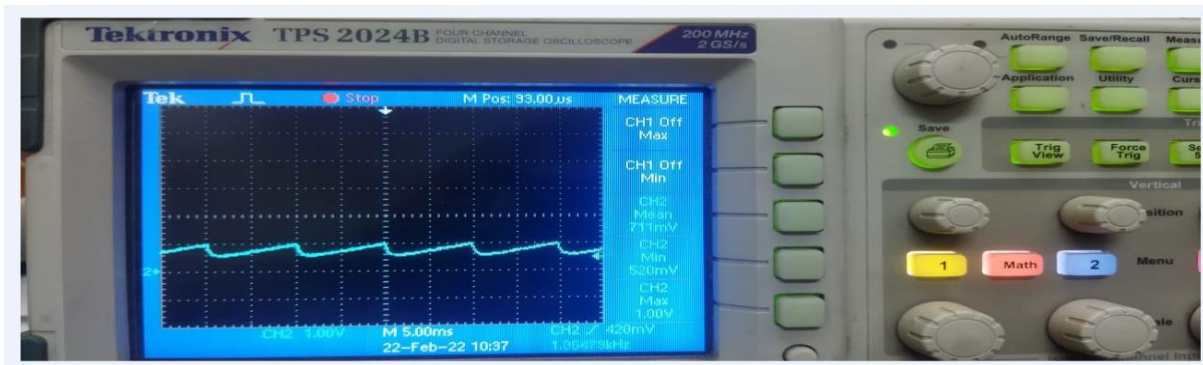

Figure 3: Vcomp Waveform of SMPS under No load condition.
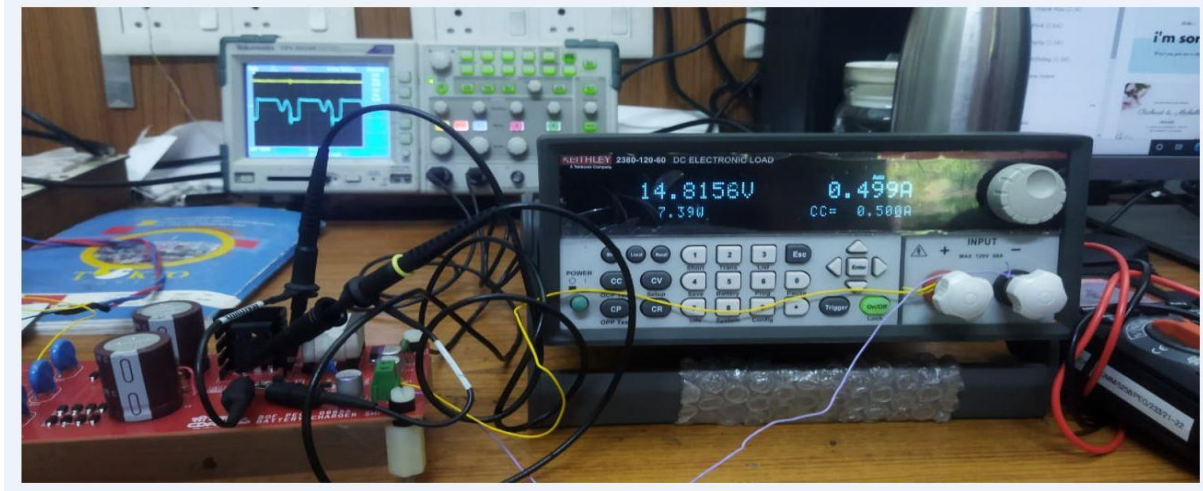
SMPS Waveforms At 0.5A load Condition

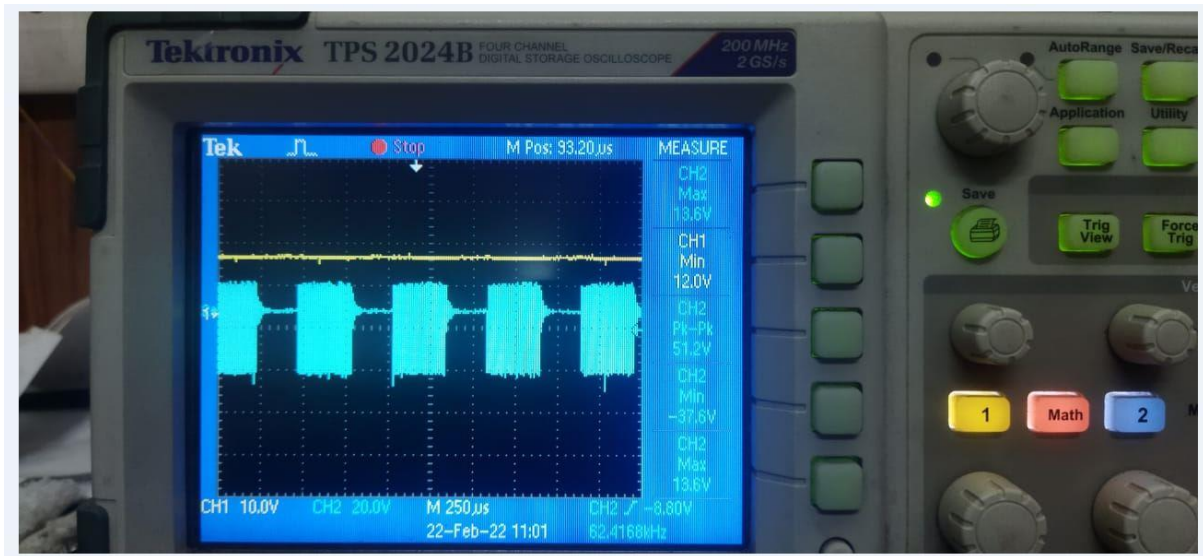Figure 4: SMPS PCB board and Electronic load under 0.5A loaded condition.

Figure 5: VCC and Vauxilary Waveforms SMPS under 0.5A load condition.Channel1(Yellow):VCC and Channel2(Blue):Vauxilary winding.
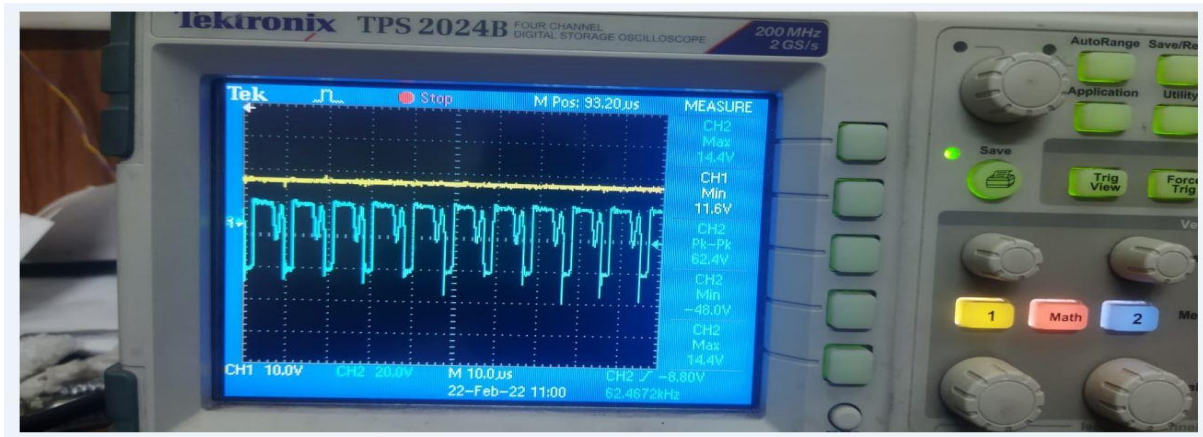

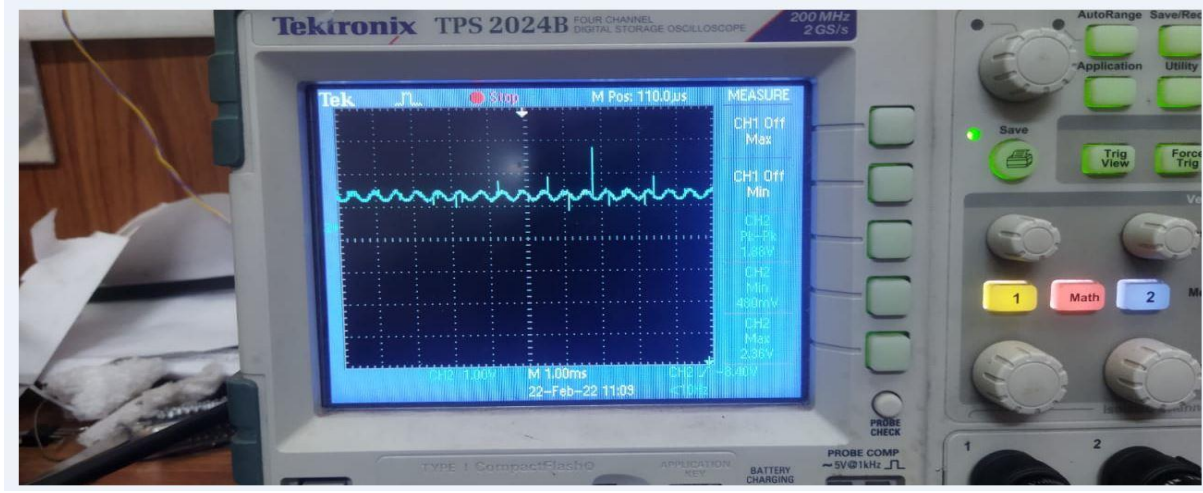Figure 6: Zoomed View of Vauxilary Waveform of SMPS under 0.5A load condition.

Figure 7: Vcomp Waveform of SMPS under 0.5A condition.

SMPS Waveforms At 0.6A load Condition

Figure 8: SMPS PCB board and Electronic load under 0.6A loaded condition.
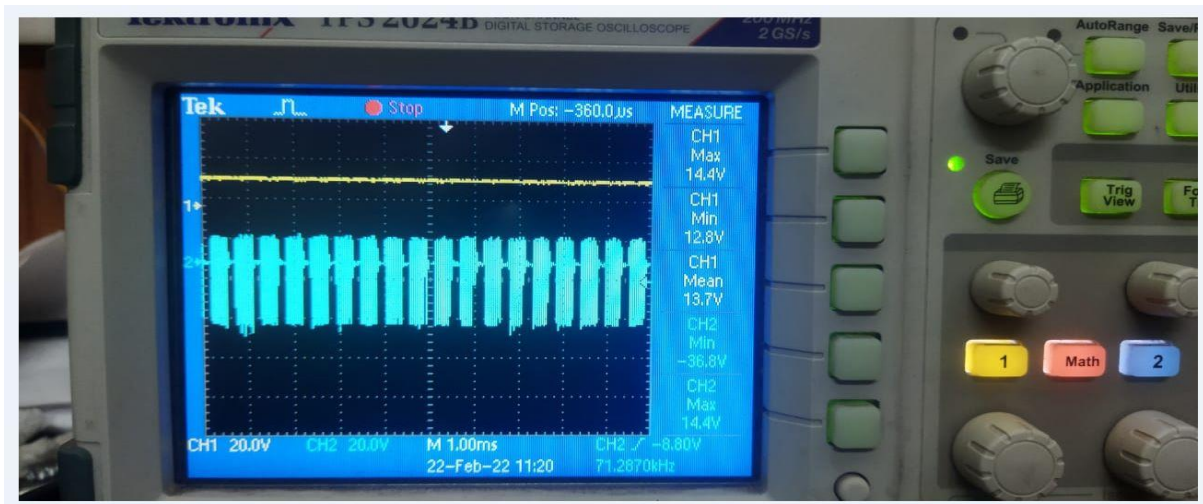
Figure 9: VCC and Vauxilary Waveforms SMPS under 0.6A load condition.Channel1(Yellow):VCC and Channel2(Blue):Vauxilary winding.
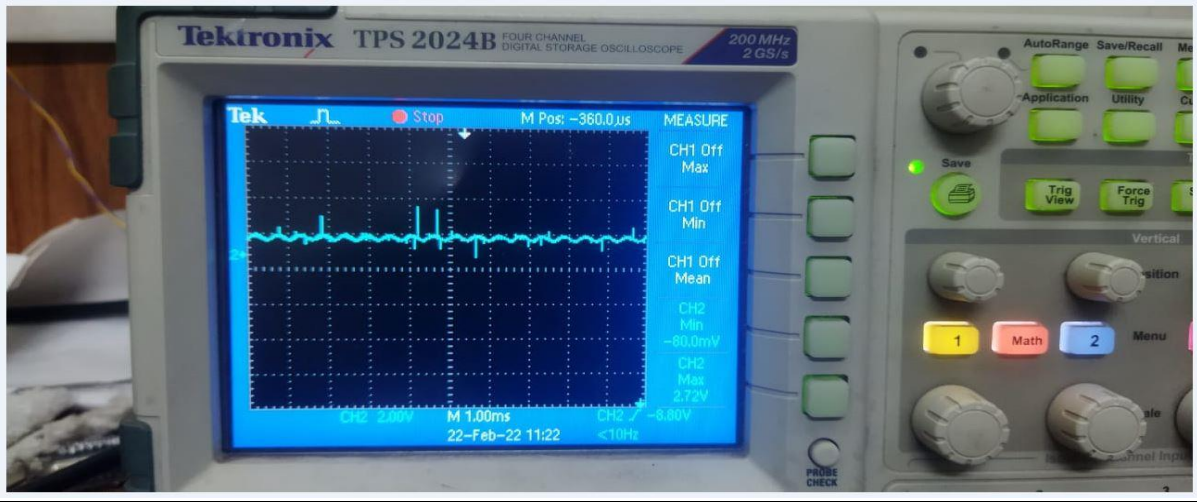
Figure 10: Vcomp Waveform of SMPS under 0.6A condition.

SMPS Waveforms At 0.65A load Condition

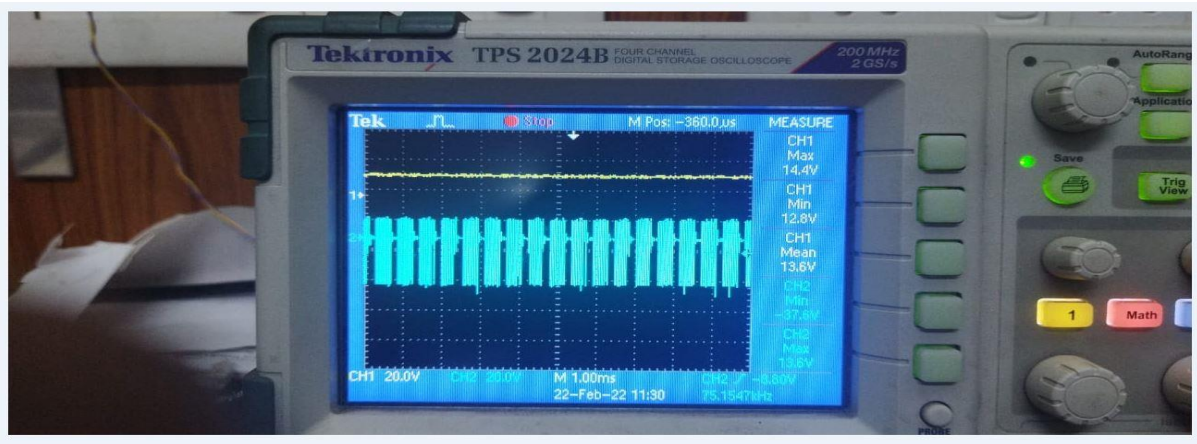Figure 11: SMPS PCB board and Electronic load under 0.65A loaded condition.

Figure 12: VCC and Vauxilary Waveforms SMPS under 0.65A load condition.Channel1(Yellow):VCC and Channel2(Blue):Vauxilary winding.
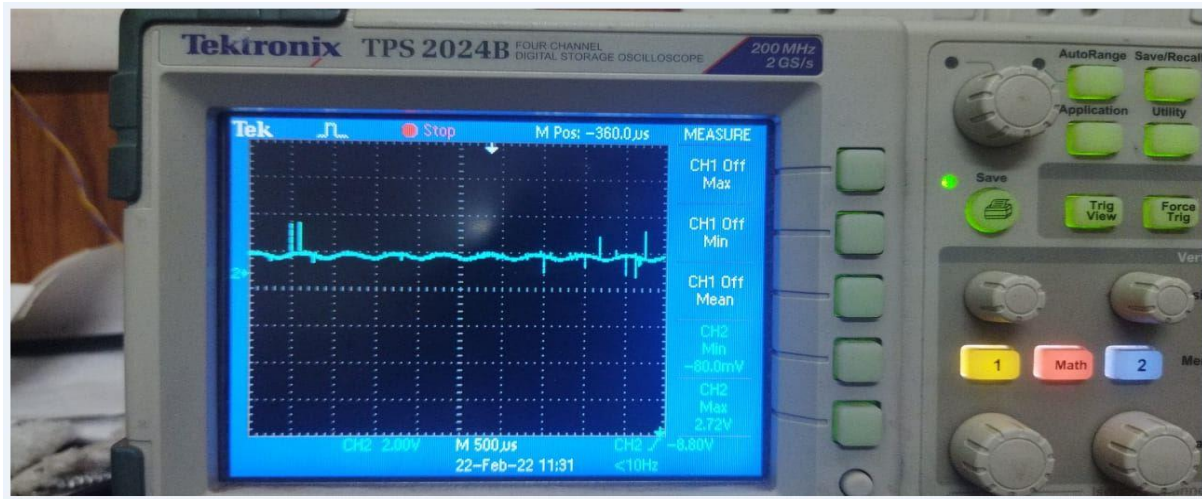
Figure 13: Vcomp Waveform of SMPS under 0.65A condition.
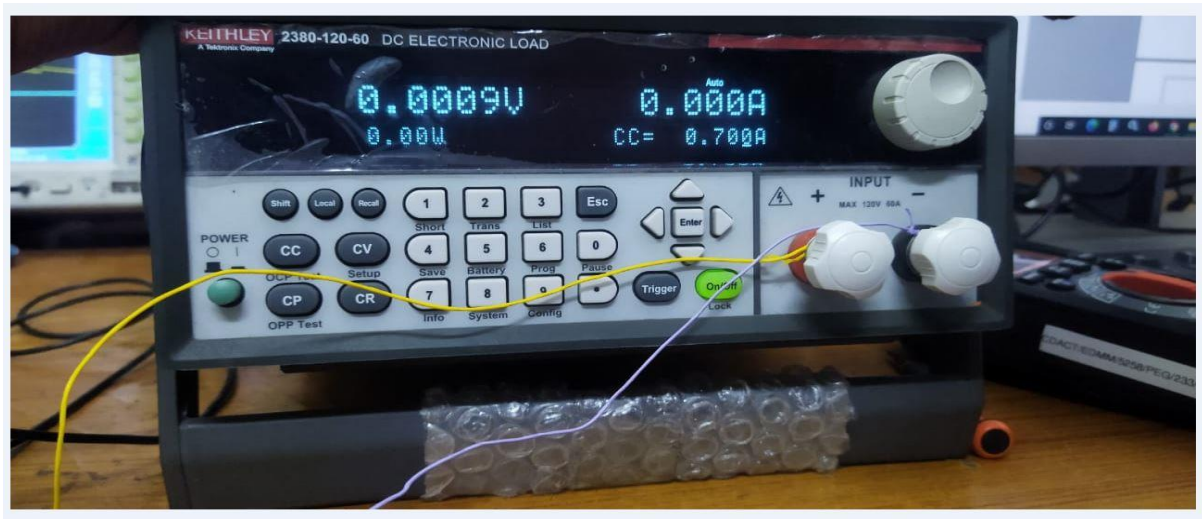
SMPS Waveforms At 0.7A load Condition

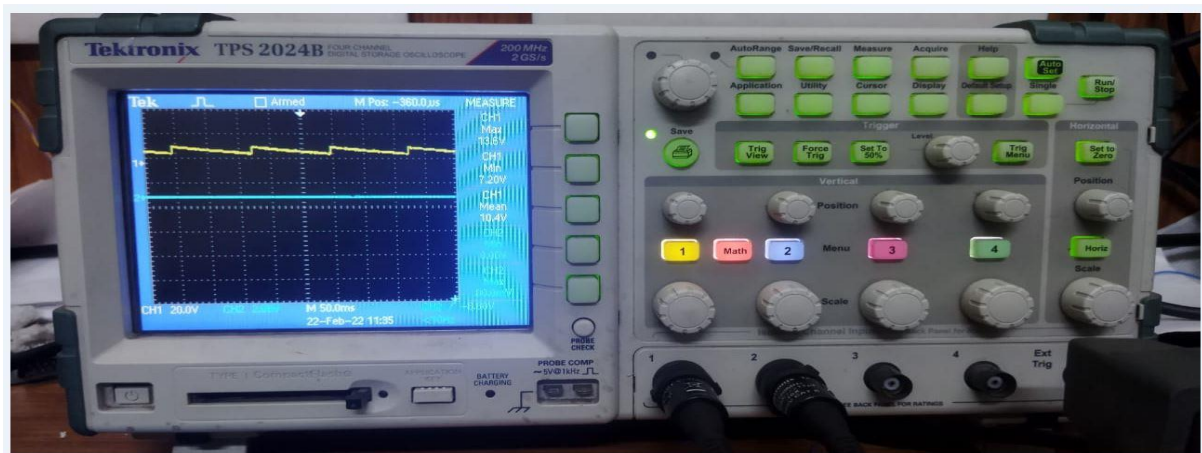Figure 14: SMPS PCB board and Electronic load under 0.7A loaded condition.

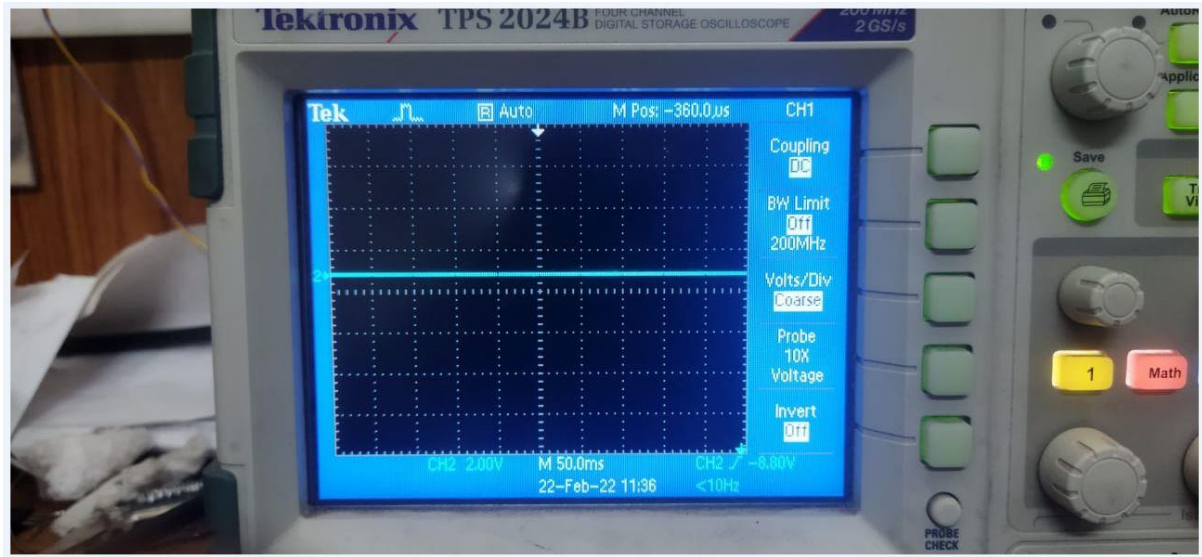Figure 15: VCC and Vauxilary Waveforms SMPS under 0.7A load condition.Channel1(Yellow):VCC and Channel2(Blue):Vauxilary winding.

Figure 16: Vcomp Waveform of SMPS under 0.7A condition.