

# SOC Algorithm Report

The report is the analysis for sinusoidal waveforms before and after applying the SOC algorithm. The SOC algorithm enables the PWMs based on their respective battery's state-of-charge.

## Test results on DSP board

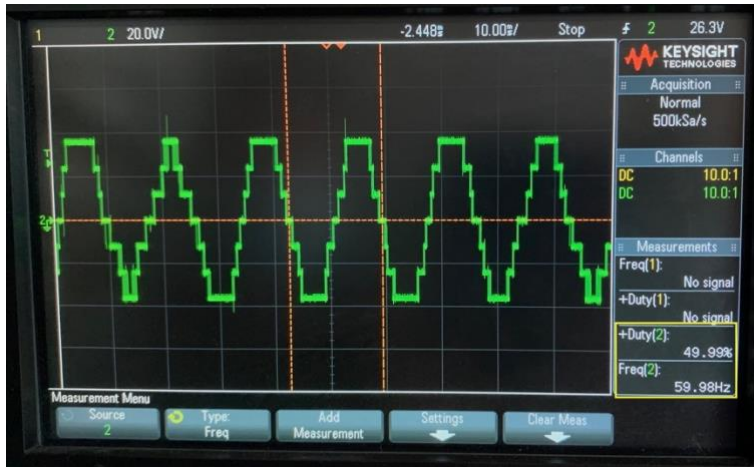
PWM waveforms with level 8 and level 4



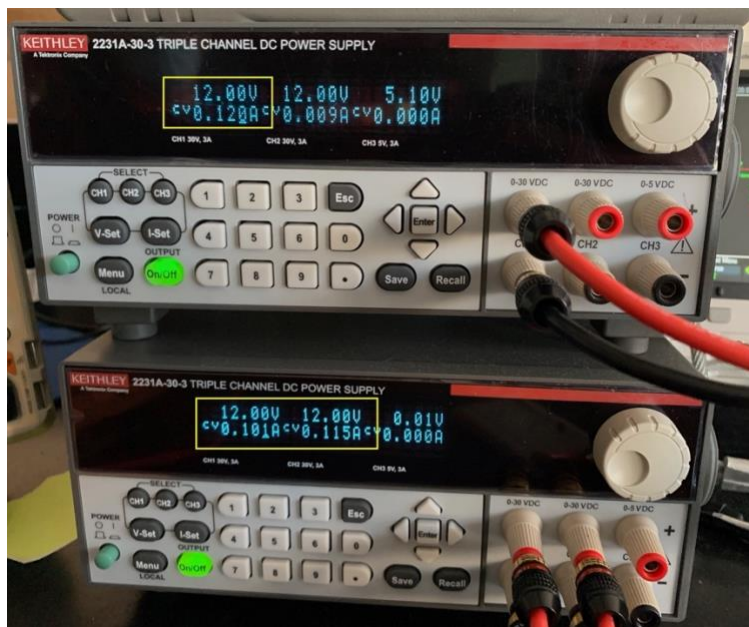
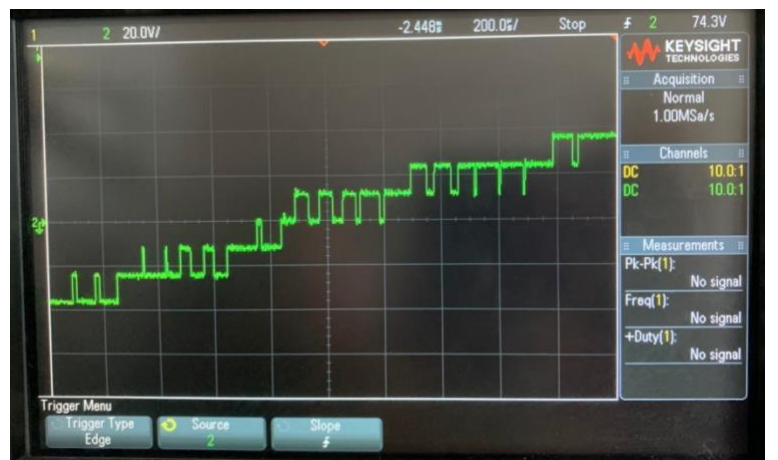
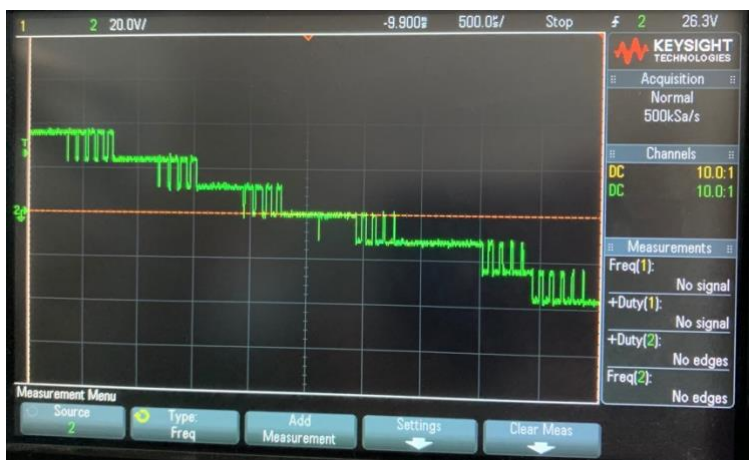
## Lab testing results

Waveforms with level 4

Before SOC Algorithm



After SOC Algorithm





## Other waveforms with SOC algorithm



## Testing SOC algorithm with predefined SOC sets for 8 levels

SOC1: 65,76,23,84,16,74,97,27

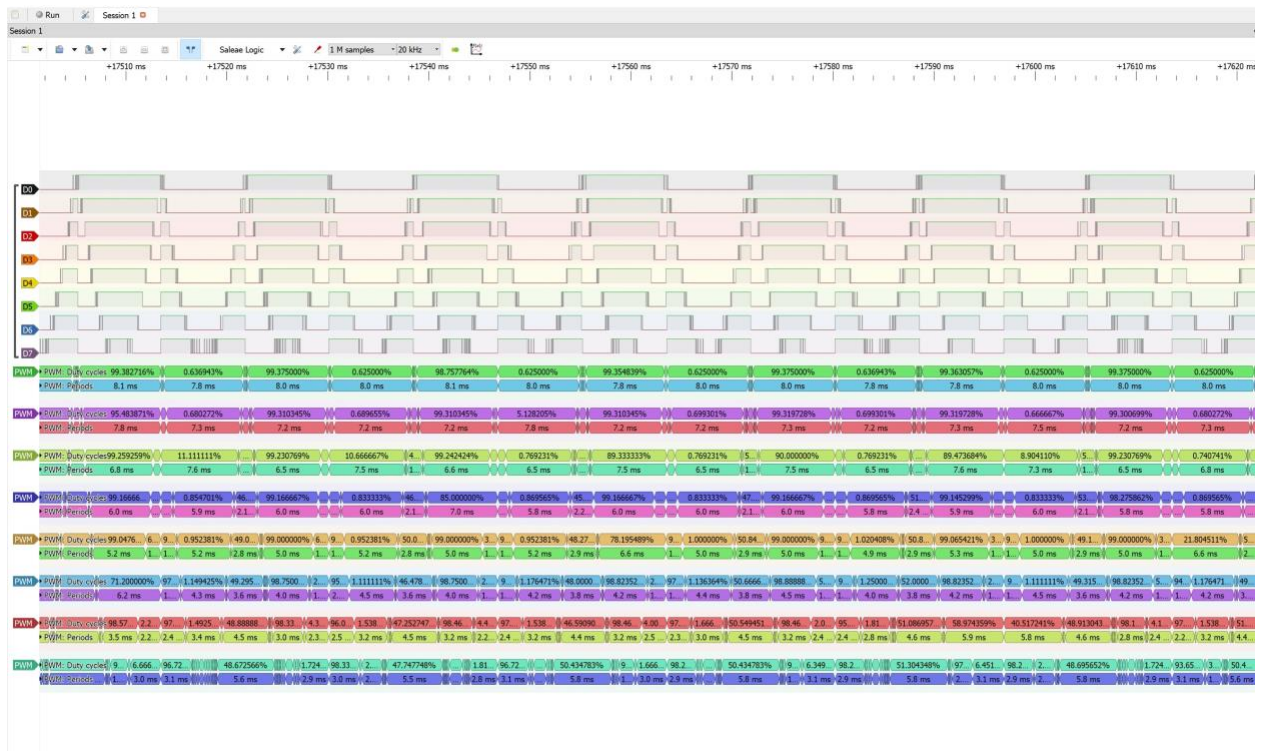


SOC2: 62,65,10,72,35,97,33,85

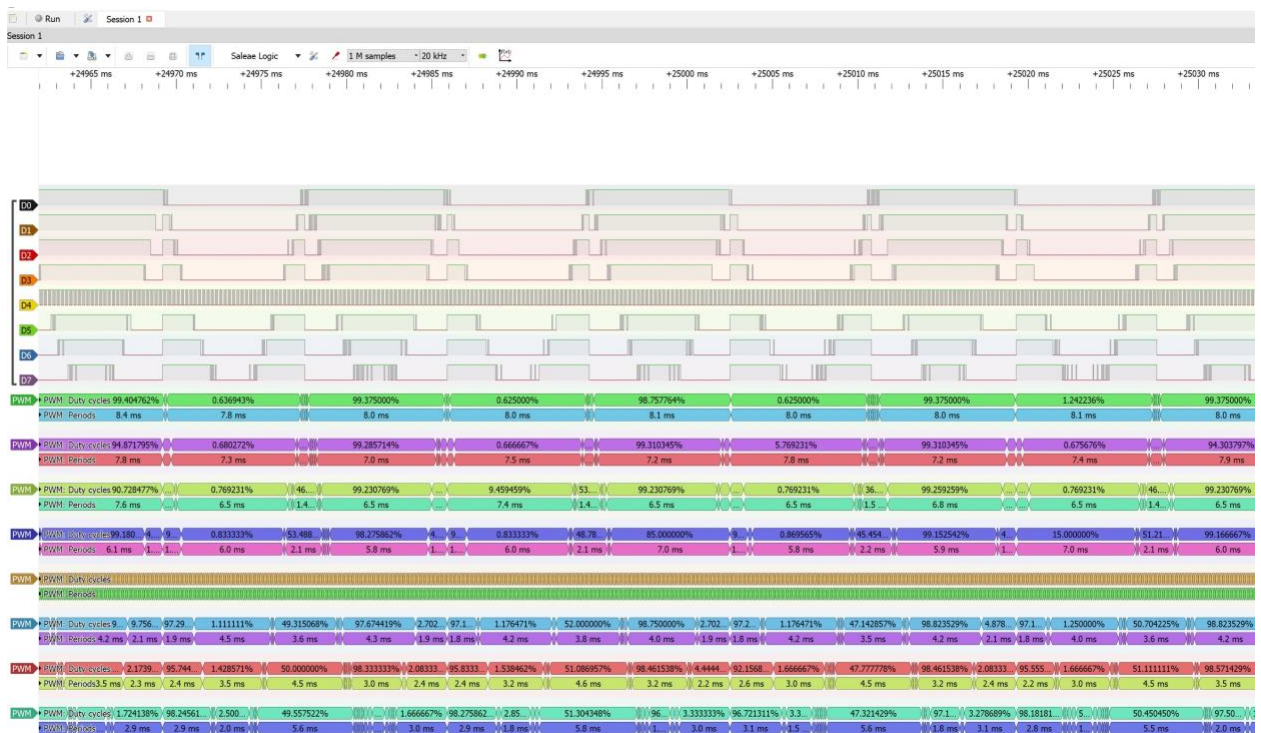


SOC3: 12,27,40,59,79,54,11





SOC4: 65,84,16,16,62,67,72,35



SOC5: 33,85,12,27,40,79,54,11

