

## Load Characterization

Hold fix  $V_{out}$  and measure  $I_{core}$  to store  $I_{core}=f(V_{out})$  in a look-up table



## Waveform Measurement

1. Activate SC-DCDC
2. Measure power  $P_{in}$  drawn from the external supply
3. Measure rippling  $V_{out}$  waveform



## Efficiency Calculation

1. Integrate the power  $P_{out}$  delivered to the load

$$P_{out} = \frac{1}{t_{bm}} \int_0^{t_{bm}} V_{out} \times I_{out} dt = \frac{1}{t_{bm}} \int_0^{t_{bm}} V_{out} \times f(V_{out}) dt$$

2. Compute  $eff = \frac{P_{out}}{P_{in}}$

