Figure 2 For a 3V-dc input (lower trace, horizontal line), the voltage at regulator IC₁'s SW pin reaches a peak of approximately 18V (lower trace, pulsed waveform). The 1-to-6 step-up turns ratio of inductor L₁ further increases the peak output voltage to 160V (upper trace) to produce 100V dc. The upper trace's lower limit goes to $-6 \times V_{in}(-18V)$ due to the tapped inductor.