PROGRAMMED PEAK CURRENT CONTROL WITH COMPENSATION RAMP (PCPM):

We will use programmed current control due to greater stability and control of the plant.

The block diagram in this figure describes the operation of the current control with compensation ramp, this controls the signal from the gate of the MOSFET, that is, our PWM; In this system each clock cycle, the output "Q" of the flip-flop is high until the reset "R" is activated in hTs, this happens when the input signal (current flowing through the inductance) is equal to value of the artificial ramp at that time.





This plot shows the artificial ramp



And this plot shows the Inductance current behavior and compensation ramp

