Model Usage Notes:

A. Features have been modelled

1. Switching Characteristics and variation with VIN
2. RON and variation with VIN
3. Peak, Valley current limit
4. Selectable Power Save / Forced PWM Mode
5. 100% duty cycle operation
6. Output discharge functionality
7. Output voltage programmability.

B. Features have not been modelled

1. Operating Quiescent Current
2. Shutdown Current
3. Temperature dependent characteristics
4. SDA and SCL pins are not modelled.

C. Application Notes

1. The parameter STEADY_STATE has been used to reach the steady state faster.
   Keep STEADY_STATE = 0 to observe startup behaviour.
   Keep STEADY_STATE = 1 and appropriate IC on Inductor and capacitor to observe for faster Steady state.
2. After enabling the device (EN>1V), there is an enable delay (tDelay)= 500us before the device starts switching.
   After tDelay output voltage ramps up the value set by VSEL pin depending on low and high value in 125us.
   After 125us the device checks the value at VSEL pin. If VSEL value is low, then VOUT with ramp up or down to the value VOUT_REG1
3. SOFTWARE_ENABLE= 0 - Disable the device. All registers values are still kept.
   SOFTWARE_ENABLE= 1 - Re-enable the device with a new startup without the tDelay.
4. If ENABLE_FPWM_DURING_VOUT_CHANGE=1 and ENABLE_FPWM=0, and if the device goes from CCM to DCM, 128 cycles of FPWM is activated.
   After that the device goes to PFM.If ENABLE_FPWM_DURING_VOUT_CHANGE= 0,then ENABLE_FPWM takes control.
5. The ramp speed is defined by VOUT_RAMP_SPEED (0-->10mV/µs,1-->5 mV/µs,2-->1 mV/µs and 3-->0.1 mV/µs).
6. Vout parameter is used to set desired output voltage.
7. When ENABLE_OUTPUT_DISCHARGE=1, VOUT discharges through Discharge Resistor. Else discharge is only through load
8. Ground Pins have been tied to 0V internally and hence model does not support Inverting topologies.