

Model Usage Notes:

A. Features have been modelled

1. Min Ton and Min Toff
2. Current Limit
3. Internal fixed Soft Start Time
4. Dynamic voltage scaling with adjustable slew rate
5. Enable functionality
6. Under Voltage Protection
7. Over Voltage Protection
8. VIN UVLO and EN UVLO
9. Power Good and It's UV thresholds depends on STRICT bit

B. Features have not been modelled

1. Operating Quiescent Current
2. Shutdown Current
3. Temperature dependent characteristics
4. Ground Pins have been tied to 0V internally and hence model does not support Inverting topologies.

C. Application Notes

1. To observe startup behaviour select SS parameter to 0
To observe steady state behaviour select SS parameter to 1
2. Parameter STRICT refers to STRICT bit (1 bit) of CONFIG1 register.
3. Below are the SLEW parameter settings for dynamic voltage scaling
Parameter SLEW refers to SLEW bits (3 bits) of SLEW register.
 - a. SLEW=0 = 160 $\mu\text{s}/\text{step}$ (0.0625 mV/ μs at 10 mV per step)
 - b. SLEW=1 = 80 $\mu\text{s}/\text{step}$ (0.125 mV/ μs at 10 mV per step)
 - c. SLEW=2 = 40 $\mu\text{s}/\text{step}$ (0.250 mV/ μs at 10 mV per step)
 - d. SLEW=3 = 20 $\mu\text{s}/\text{step}$ (0.500 mV/ μs at 10 mV per step)
 - e. SLEW=4 = 10 $\mu\text{s}/\text{step}$ (1.0 mV/ μs at 10 mV per step)
 - f. SLEW=5 = 5 $\mu\text{s}/\text{step}$ (2.0 mV/ μs at 10 mV per step)
 - g. SLEW=6 = 2.5 $\mu\text{s}/\text{step}$ (4.0 mV/ μs at 10 mV per step)
 - h. SLEW=7 = 0.1 $\mu\text{s}/\text{step}$ (0.1 V/ μs at 10 mV per step)