

Model Usage Notes:

A. Features have been modelled

1. Soft start with programmable output voltage slew rate
2. Current Limit
3. Shutdown through EN pin

B. Features have not been modelled

1. Multi-phase support
2. Power Good
3. AVS support with configurable slew-rate
4. Automatic mode control based on the loading (PFM or PWM mode) or Forced-PWM mode operation
5. External clock synchronization
6. Voltage Monitor
7. Operating Quiescent Current
8. Temperature dependent characteristics
9. 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 STEADY_STATE parameter to 0
To observe steady state behaviour select STEADY_STATE parameter to 1
2. Parameter FREQ_SEL refers to BUCK1_FREQ_SEL bits (2 bits) of FREQ_SEL Register.
3. Parameter BUCK_SEL has been used to select the Bucks from 1 to 5.
BUCK_SEL=0 selects the Bucks=1-4 and BUCK_SEL=1 selects the Buck=5
4. Parameter MULTI_PHASE =0 to set the model in single phase usecase and
MULTI_PHASE =1 to set the model in multiphase usecase.
5. Parameter SLEW_RATE refers to BUCK1_SLEW_RATE bits (3 bits) of BUCK1_CONF Register.
 - a. SLEW_RATE =0 = 33.3mV/ μ s
 - b. SLEW_RATE =1 = 20mV/ μ s
 - c. SLEW_RATE =2 = 10mV/ μ s
 - d. SLEW_RATE =3 = 5mV/ μ s
 - e. SLEW_RATE =4 = 2.5mV/ μ s
 - f. SLEW_RATE =5 = 1.25mV/ μ s
 - g. SLEW_RATE =6 = 0.625mV/ μ s
 - h. SLEW_RATE =7 = 0.3125mV/ μ s
6. High EN signal, startup the model. Low EN signal, shutdown the model.