

TPSM8A29 PSPICE Transient Model Features and Limitations

```
*****
**
*
* Model Usage Notes:
*
* A. Features have been modelled
*   1.   Output Voltage Setting
*   2.   Internal Fixed Soft-Start and External Adjustable Soft-start
*   3.   External REFIN for Output Voltage Tracking
*   4.   Frequency and Operation Mode Selection
*   5.   Low-side FET Zero-Crossing
*   6.   Current Sense and Positive Overcurrent Protection (OCP)
*   7.   Low-side FET Negative Current Limit
*   8.   Power Good
*   9.   Over Voltage Protection (OVP)
*   10.  Under Voltage Protection (UVP)
*   11.  Out-Of-Bounds (OOB) Operation
*   12.  Output Voltage Discharge
*   13.  UVLO Protection
*   14.  BOOT functionality
*   15.  Remote Sense
*
*
* 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. Therefore, this model cannot be
*         used for inverting topologies.
*
*
* 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, ILOAD = load current value and appropriate IC on
*         capacitor to observe for faster Steady state.
*   2.   Please do not provide external reference signal at SS/REFIN when using
*         parameter STEADY_STATE=1.
*         This may lead to false SS/REFIN detection.
*
*****
**
```