

# TPS62933 PSPICE Transient Model Features and Limitations

\*\*\*\*\*

\*\*

\*

## \* Model Usage Notes:

### \* A. Features have been modelled

- \* 1. Output Voltage Setting
- \* 2. External Adjustable Soft-start
- \* 3. Adjustable UVLO
- \* 4. Frequency Selection
- \* 5. Low-side FET Zero-Crossing
- \* 6. Current Sense and Positive Overcurrent Protection(OCP)
- \* 7. Over Voltage Protection(OVP)
- \* 8. Under Voltage Protection(UVP)
- \* 9. UVLO Protection
- \* 10. BOOT functionality

\*

### \* B. Features have not been modelled

- \* 1. Operating Quiescent Current
- \* 2. Shutdown Current
- \* 3. Temperature dependent characteristics

\*

### \* 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. The parameter EN\_FSS has been used to Enable/Disable FSS behaviour.  
Keep EN\_FSS = 0 to disable Frequency Spread Spectrum  
Keep EN\_FSS = 1 to observe Frequency Spread Spectrum after 1.5\*Tss.

\*

\*\*\*\*\*

\*\*