

Model Features and Limitations

A. Features that have been modelled

1. Control Modes (PH/EN, PWM, Independent Half-Bridge)
2. Configurable Slew Rate
3. Integrated Current Sense
4. Configurable Current Regulation
5. Proportional Load Current Output on IPROPI pin
6. UVLO, Logic Level, Tri-level logic
7. Protection and diagnostic features with configurable fault reaction (latched or retry)
 - a. Load diagnostics in the off-state
 - b. Voltage monitoring on supply VM
 - c. Over current protection
 - d. Over temperature protection
 - e. Fault indication on nFAULT pin
8. Current IVMQ and IVMS in Sleep and Standby state
9. Temperature dependency on RDS(on) of integrated Power FETs
10. Cycle skipping in ENPH/PWM mode

B. Model Limitations and Features that haven't been modelled

1. Spread Spectrum clocking for low EMI
2. EC parameters from Table 7.5.8 [AI_ERR, AI_ERR_M, OffsetIPROPI, BWIPROPI]

C. Model Parameter(s)

1. Temp_Amb: Sets the ambient temperature from -40C to 125C