LTspice Model
PFC Controller
Texas Instruments
UCC28064A

Model Information

Model	A macro model
Call Name	UCC28064A
Pin Assign	1:ZCDB 2:VSENSE 3:TSET 4:PHB 5:COMP 6:AGND 7:VINAC 8:HVSEN 9:BRST 10:CS 11:GDB 12:VCC 13:PGND 14:GDA 15:VREF 16:ZCDA
File List	Model Library MDC_UCC28064A_LT.lib
	Model Report MDC_UCC28064A_LT.pdf(this file)

Verified Simulator Version   LTspice XVII

Note

References

The information which was used for modeling is as follow:

[Data Sheet]
- ●Date/Version   JAJSFJ9B –DECEMBER 2017–REVISED OCTOBER 2019
- ●Product name   UCC28064A
- ●Company name   Texas Instruments Incorporated

[Characteristics listed]
- ●Characteristics

  Transient
  Brown Out
  Drop Out
  Open Loop
  Over Current
  Over Voltage
  Light Load

Simulation Condition

This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Condition	Unit
Temperature	25	deg C

○ : Implemented
× : Not Implemented
― : Not applicable

Model Functions Table

Functions	RANK=2	
	RANK	Implemented
Control Method(PWM,PFM)	1	○
Enable Function	1	○
Soft Start	1	○
Line Regulation	1	―
Load Regulation	1	―
Synchronous External Oscillation	1	―
UVLO	1	○
Line Transient	2	―
Load Transient	2	―
Light Load Current Mode	2	○
Spread Spectrum	2	―
Over Current Protection	2	○
Over Voltage Protection	2	○
Forward/Flyback Other Device in Circuit	3	―
Brown IN/OUT Function	2	○
ZT Pin OVP Function	―	―

Transient Testbench
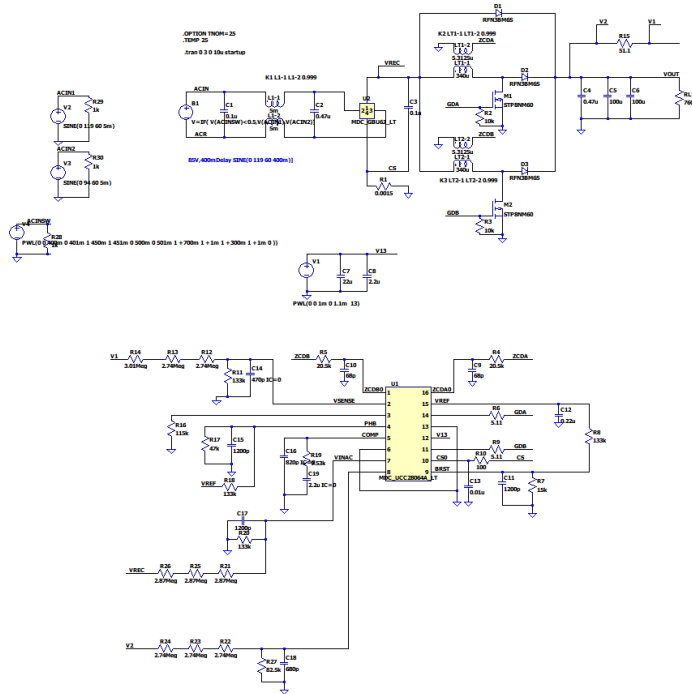
Referred to Data Sheet
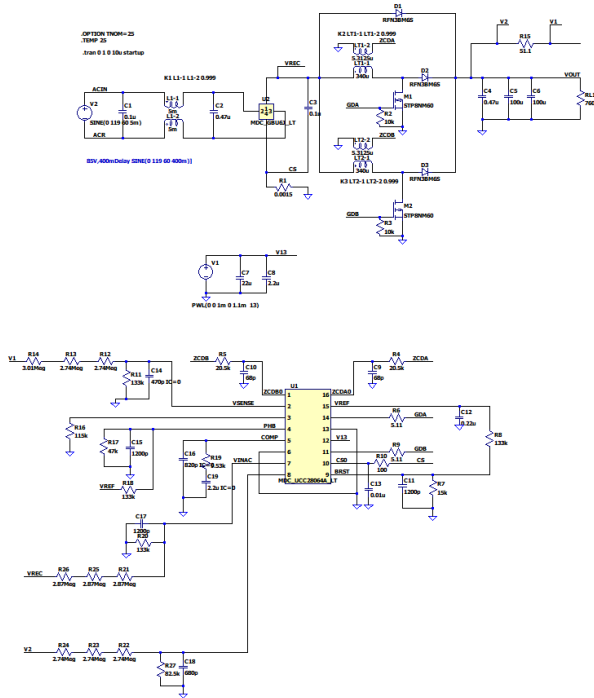
Simulation results are following.
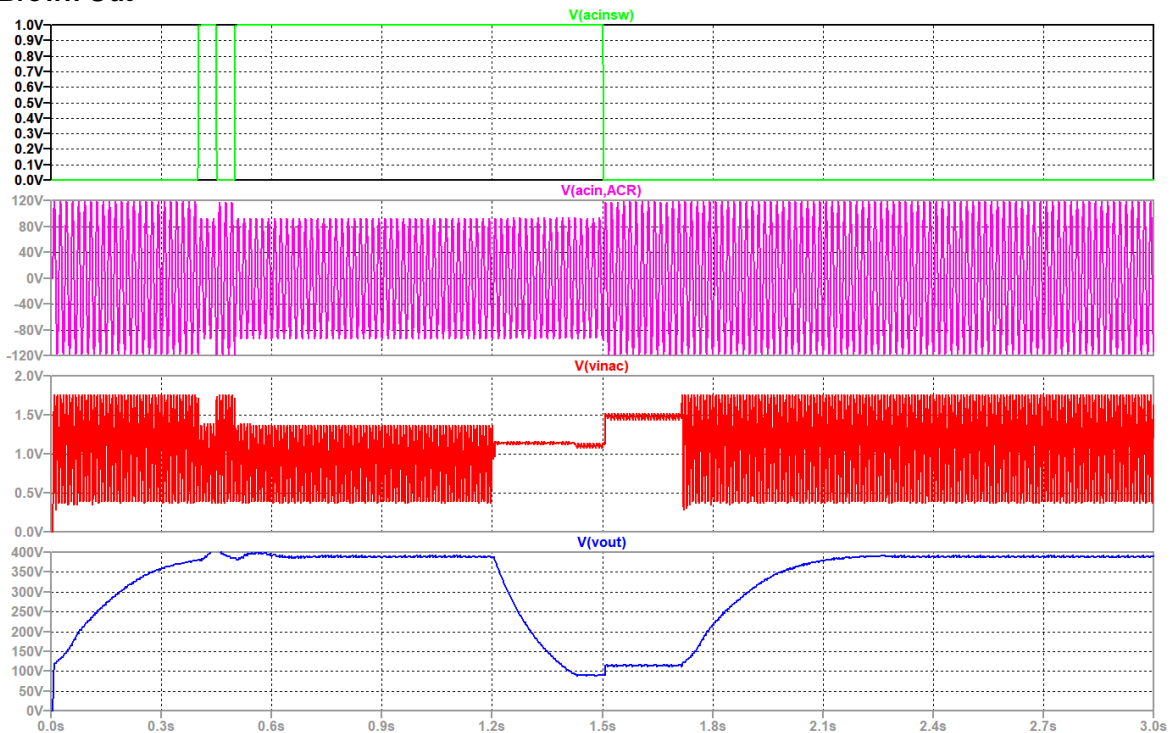Explanatory notes　　— : simulated

Transient
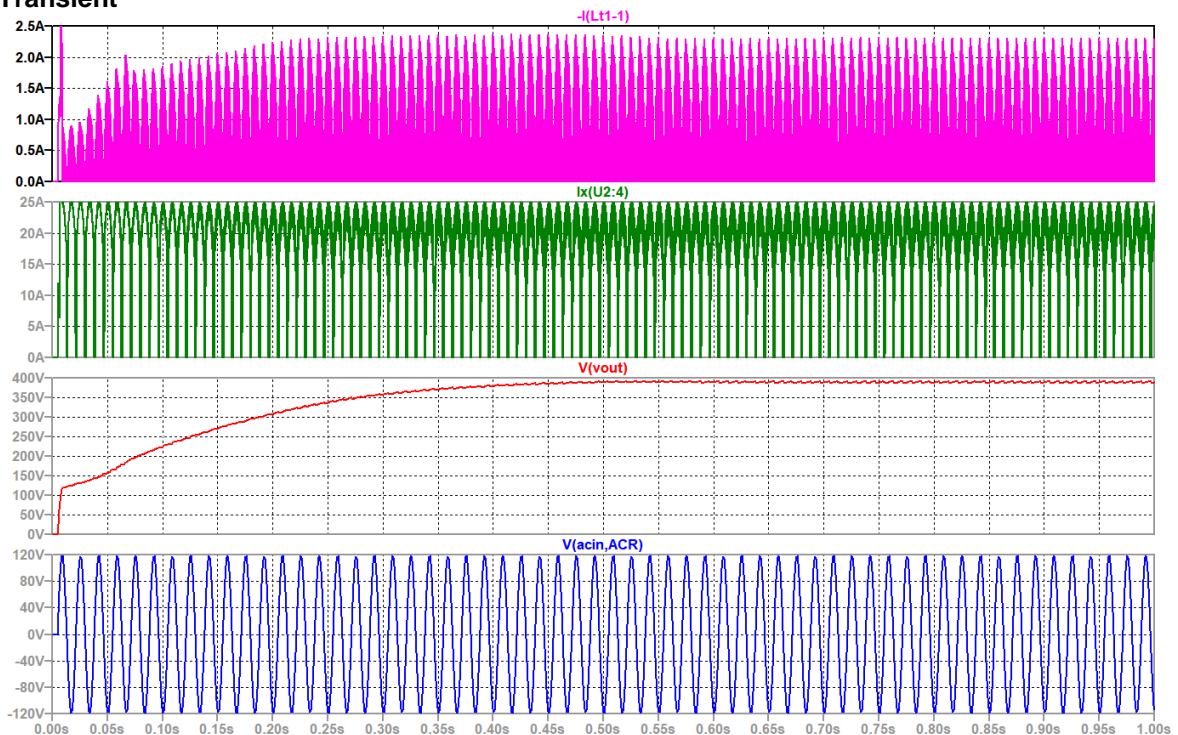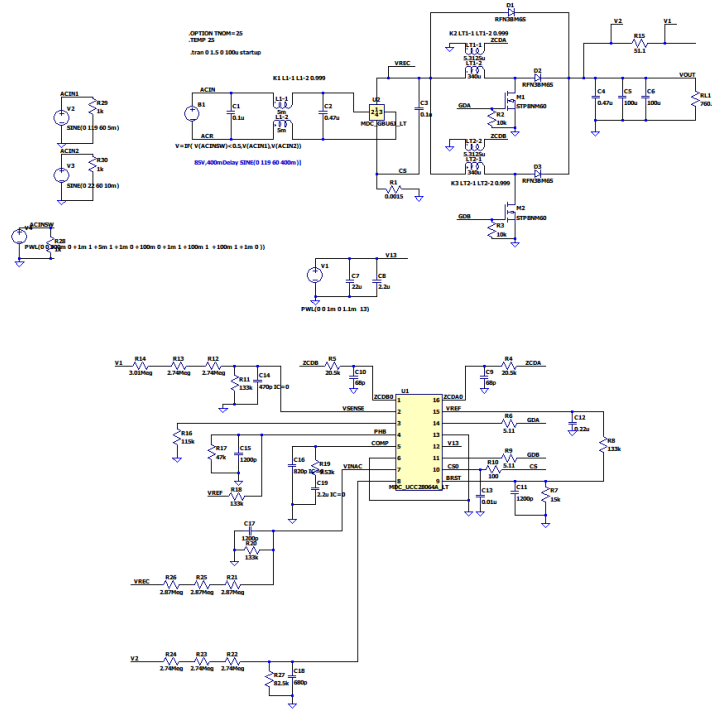
Brown Out Testbench

Referred to Data Sheet

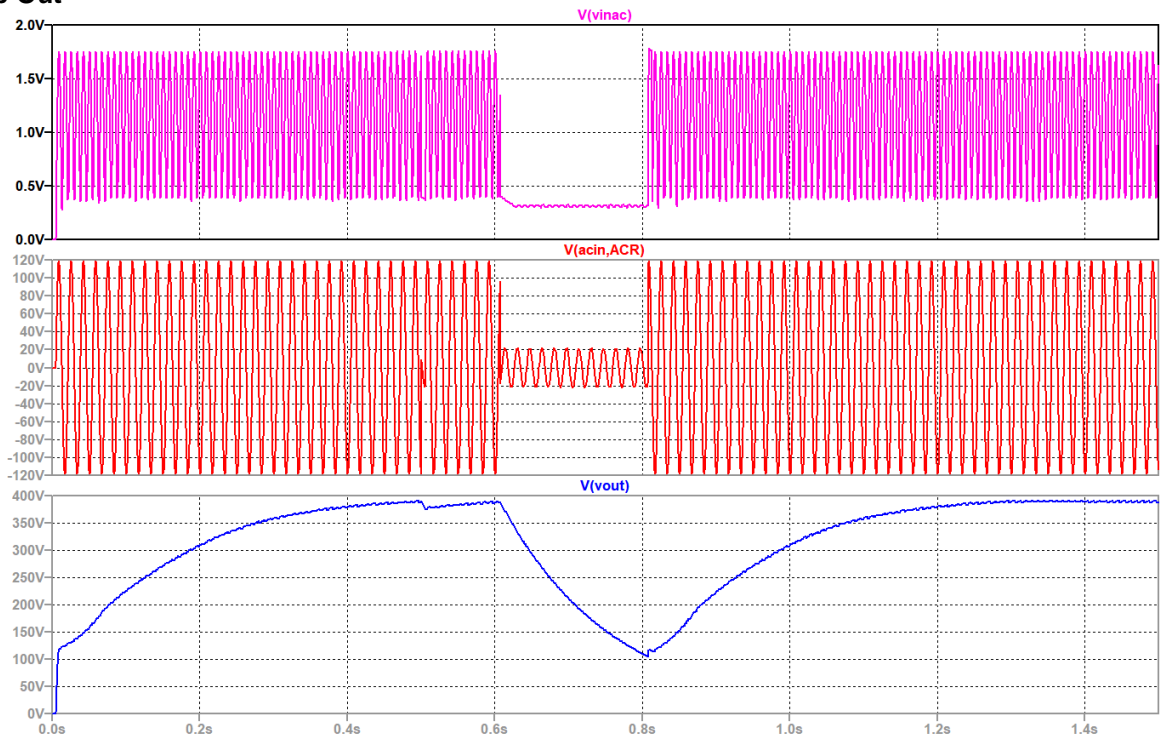Simulation results are following.
Explanatory notes　　─ : simulated

Brown Out

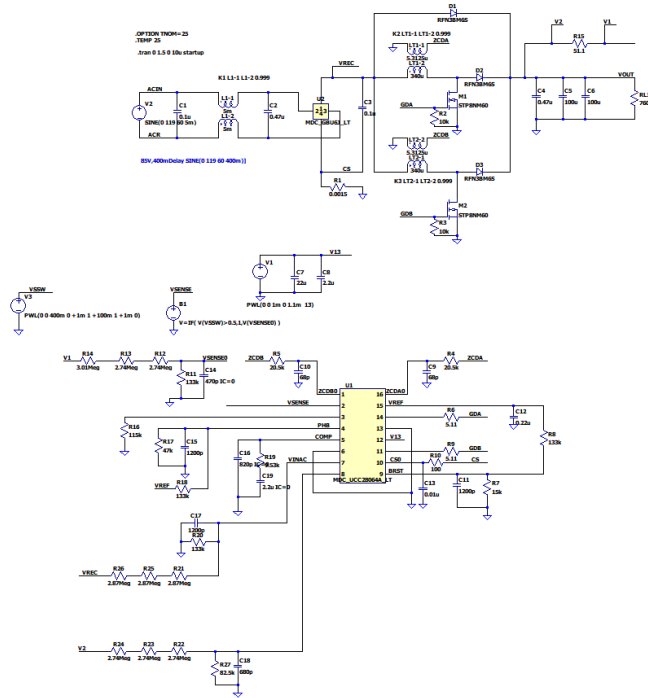**Drop Out Testbench**

Referred to Data Sheet

Simulation results are following.
Explanatory notes   — : simulated
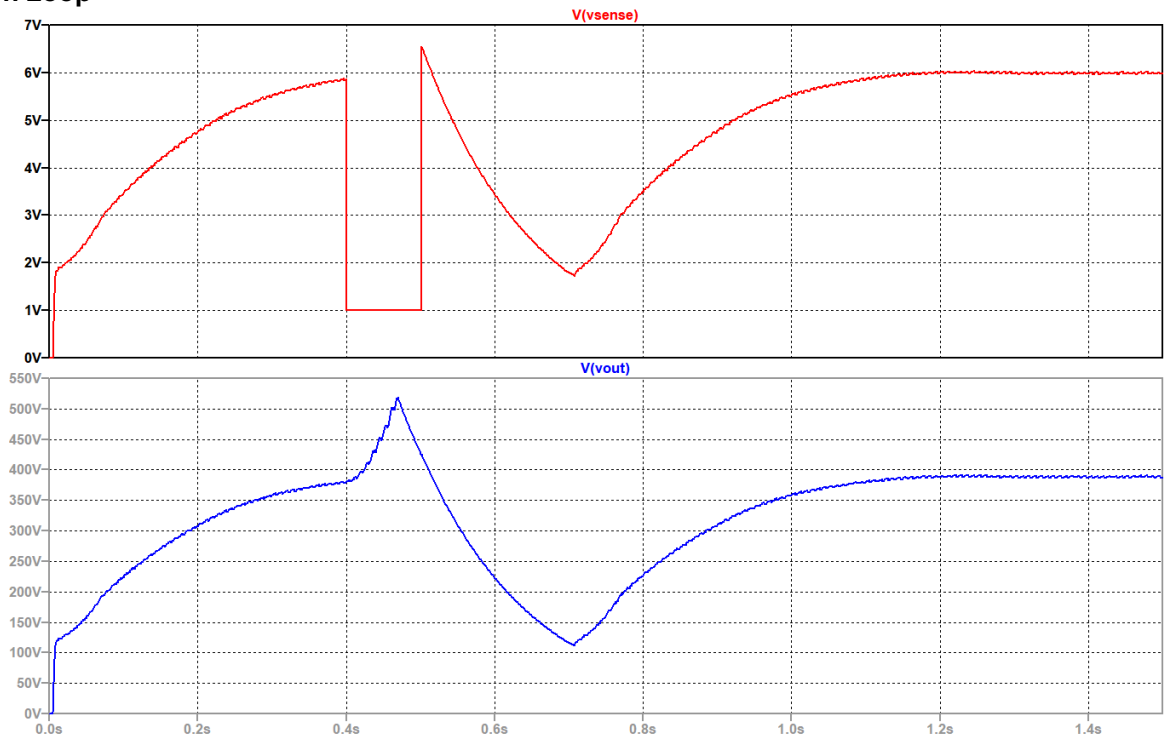
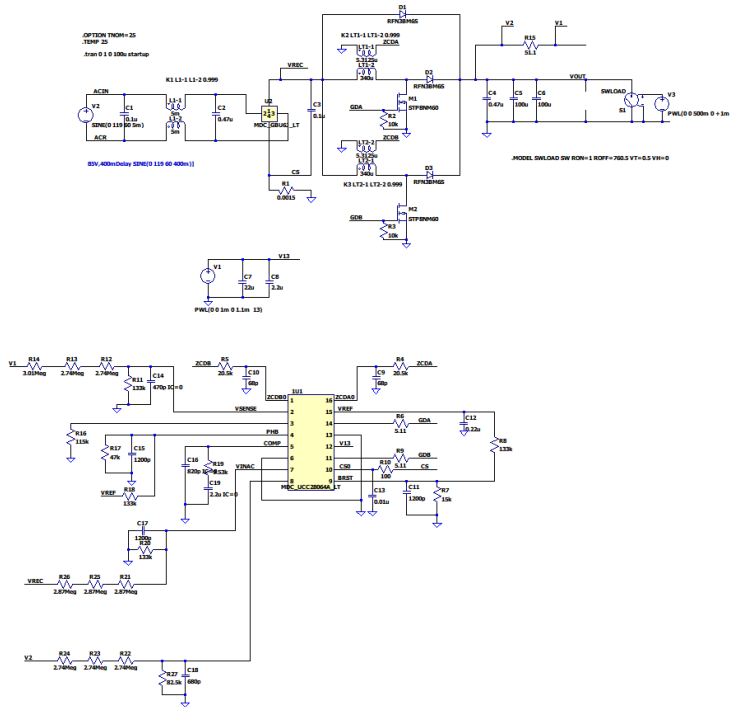## Drop Out

Open Loop Testbench

Referred to Data Sheet

Simulation results are following.
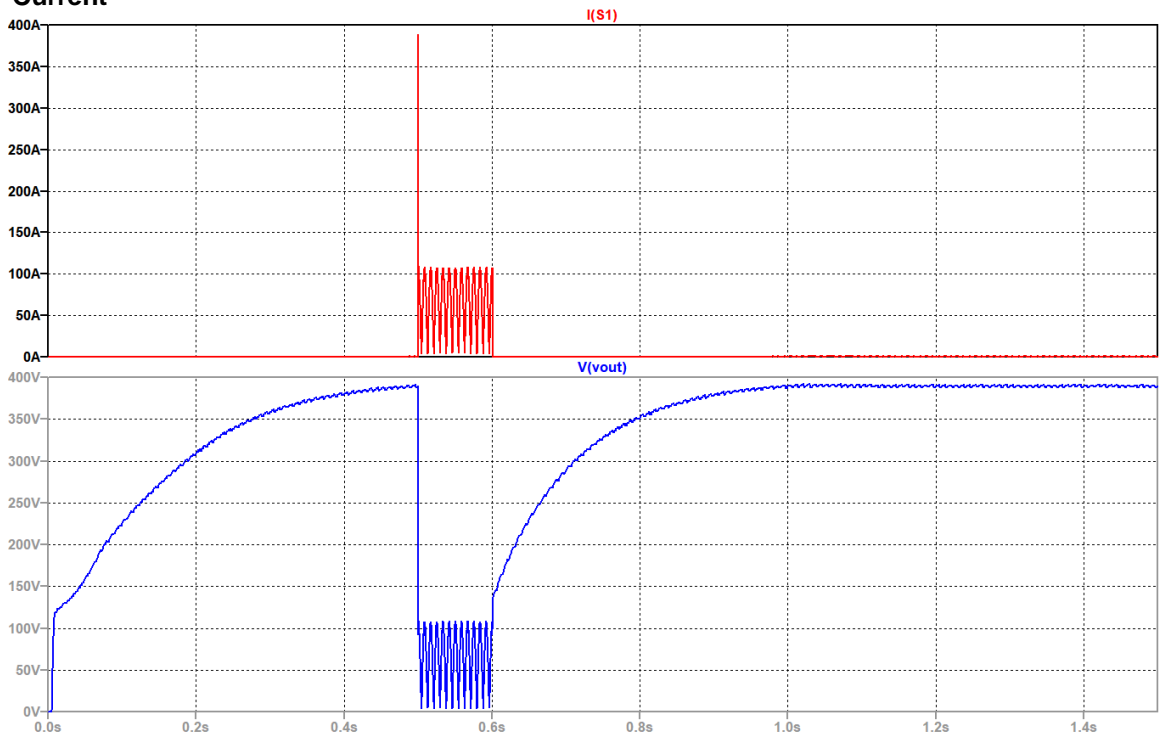Explanatory notes   — : simulated

Open Loop

Over Current Testbench

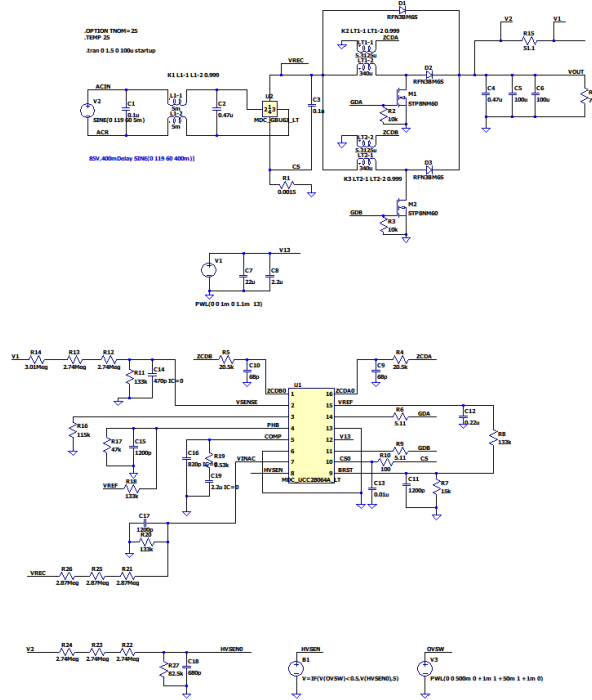# Referred to Data Sheet

Simulation results are following.
Explanatory notes   － : simulated
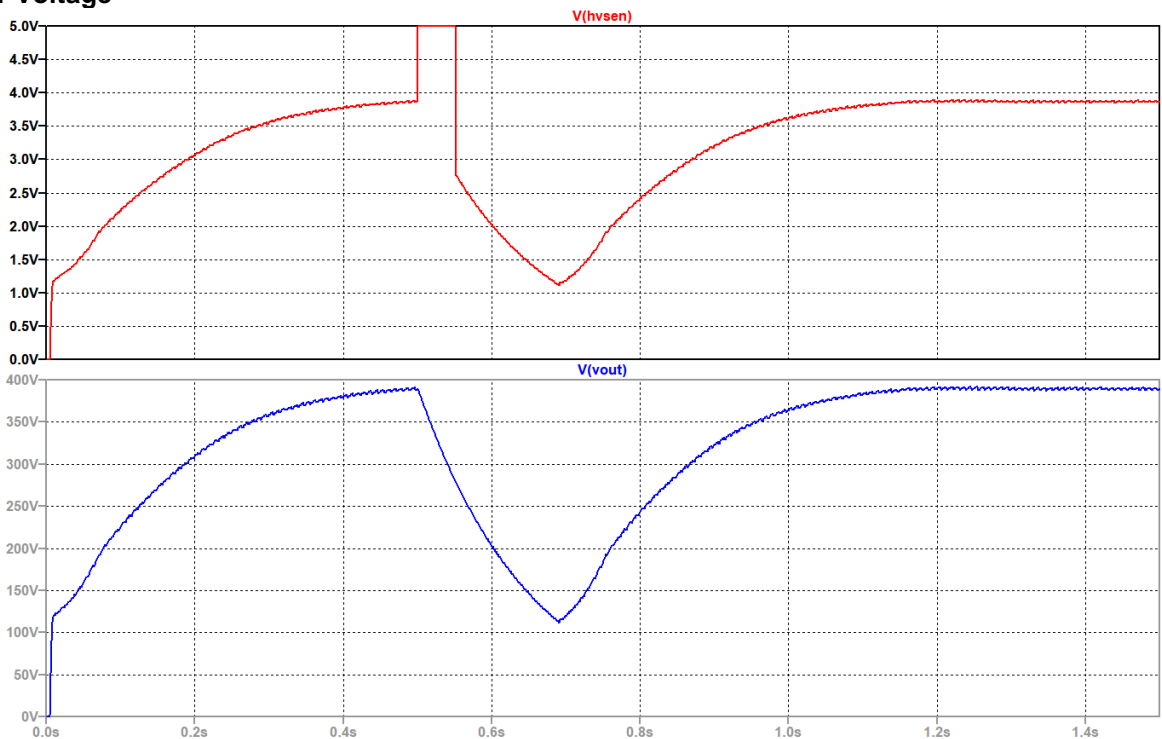
Over Current

Over Voltage Testbench

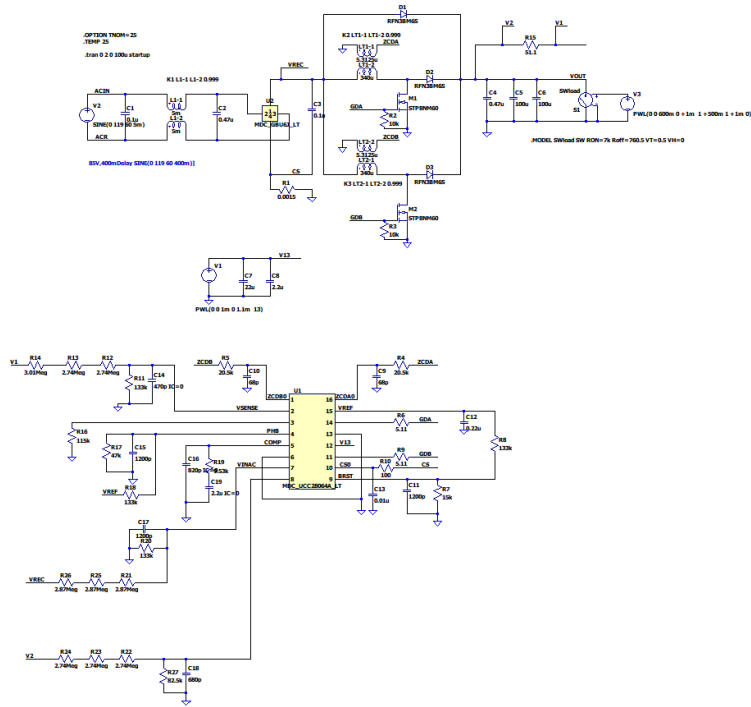# Referred to Data Sheet

Simulation results are following.
Explanatory notes   — : simulated
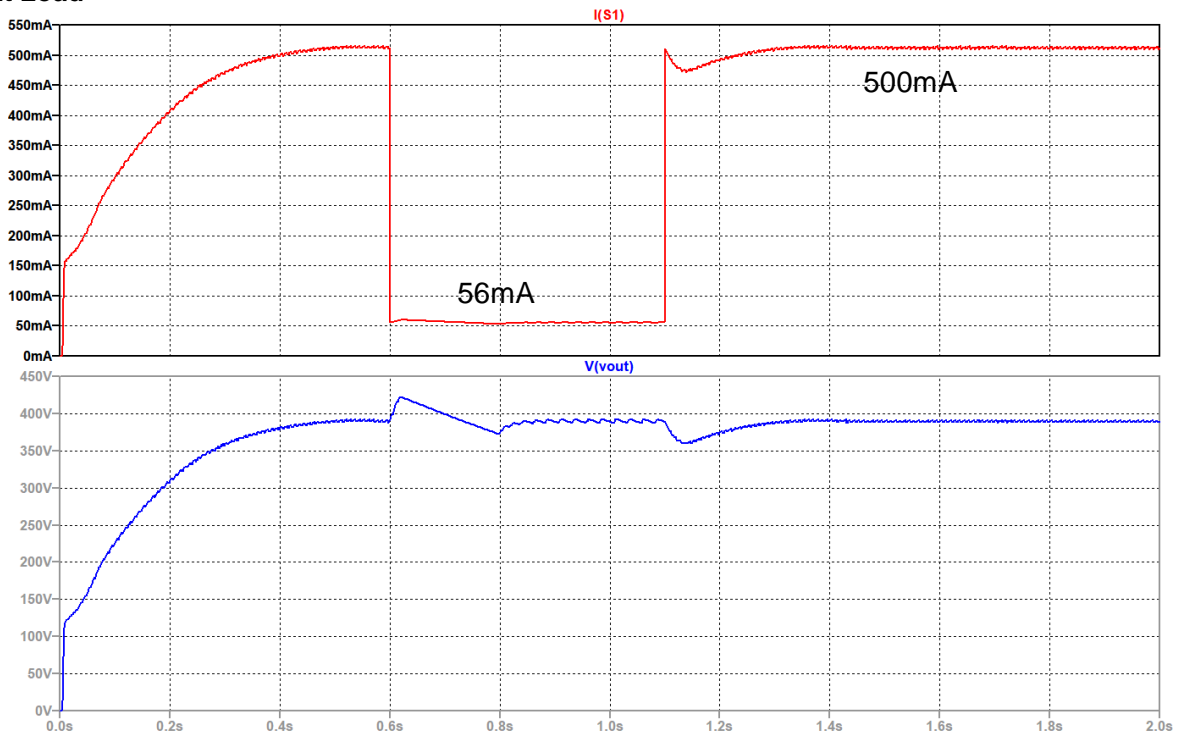
Over Voltage

Light Load Testbench

Referred to Data Sheet

Simulation results are following.
Explanatory notes   — : simulated

Light Load

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