LTspice Model
No-Opto Isolated Flyback Converter
Maxim Integrated
MAX17692B

Model Information

Model	A macro model
Call Name	MDC_MAX17692B_LT
Pin Assign	1:VIN 2:GND 3:VCC 4:SYNC/DITHER 5:RT 6:TC/VCM 7:SS 8:SET 9:COMP 10:EN/UVLO 11:FB 12:LX 13:EP
File List	Model Library MDC_MAX17692B_LT01.lib Model Report MDC_MAX17692B_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 Rev 0; 12/20
- ●Product name MAX17692B
- ●Company name Maxim Integrated

[Characteristics listed]

- ●Characteristics VENR, VENF, VENSHDN, VCC, VDO
  VVCC-UVR, VC-UVF, fSWRT, ISS, tSS
  DMAXOSC, tON_MIN, tOFF_MIN, RDSON
  ILX-PEAK-MAX, LX-PEAK-MIN, VSET

Simulation Condition

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

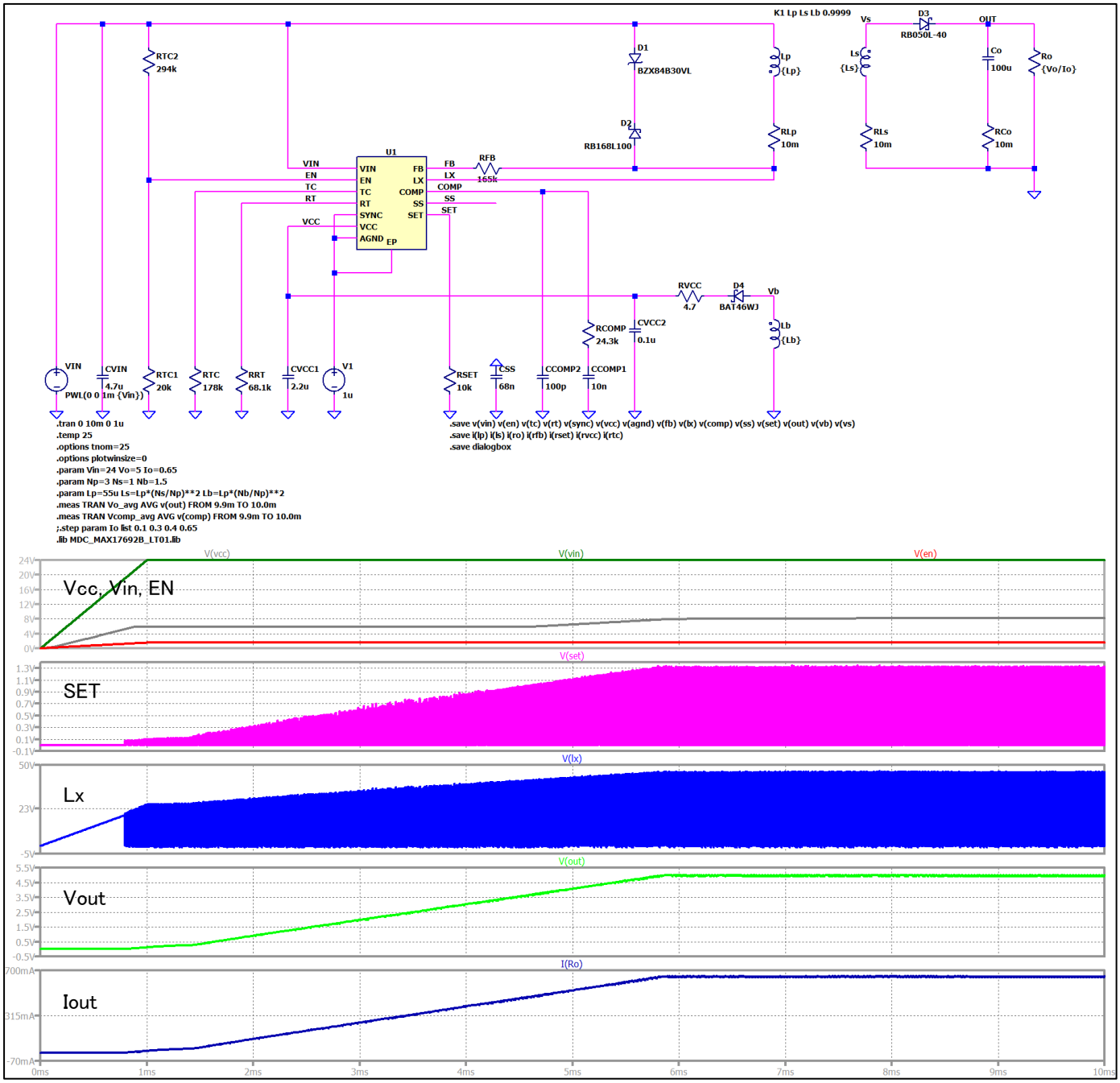
Item	Condition			Unit
	Min	Typ	Max	
Supply voltage	4.2		60.0	V
Temperature		25		deg C

Model Functions Table

Functions	Implemented
Eliminates the Optocoupler and Secondary-Side Error Amplifier	○
Soft-Start	○
Frequency Dithering Supports Low-EMI, Spread-Spectrum Operation	–
Switching Frequency Synchronization to External Clock	–
Output Diode Forward Voltage Temperature Compensation	–
Hiccup Current-Limit Protection	–
Programmable EN/UVLO Threshold	○

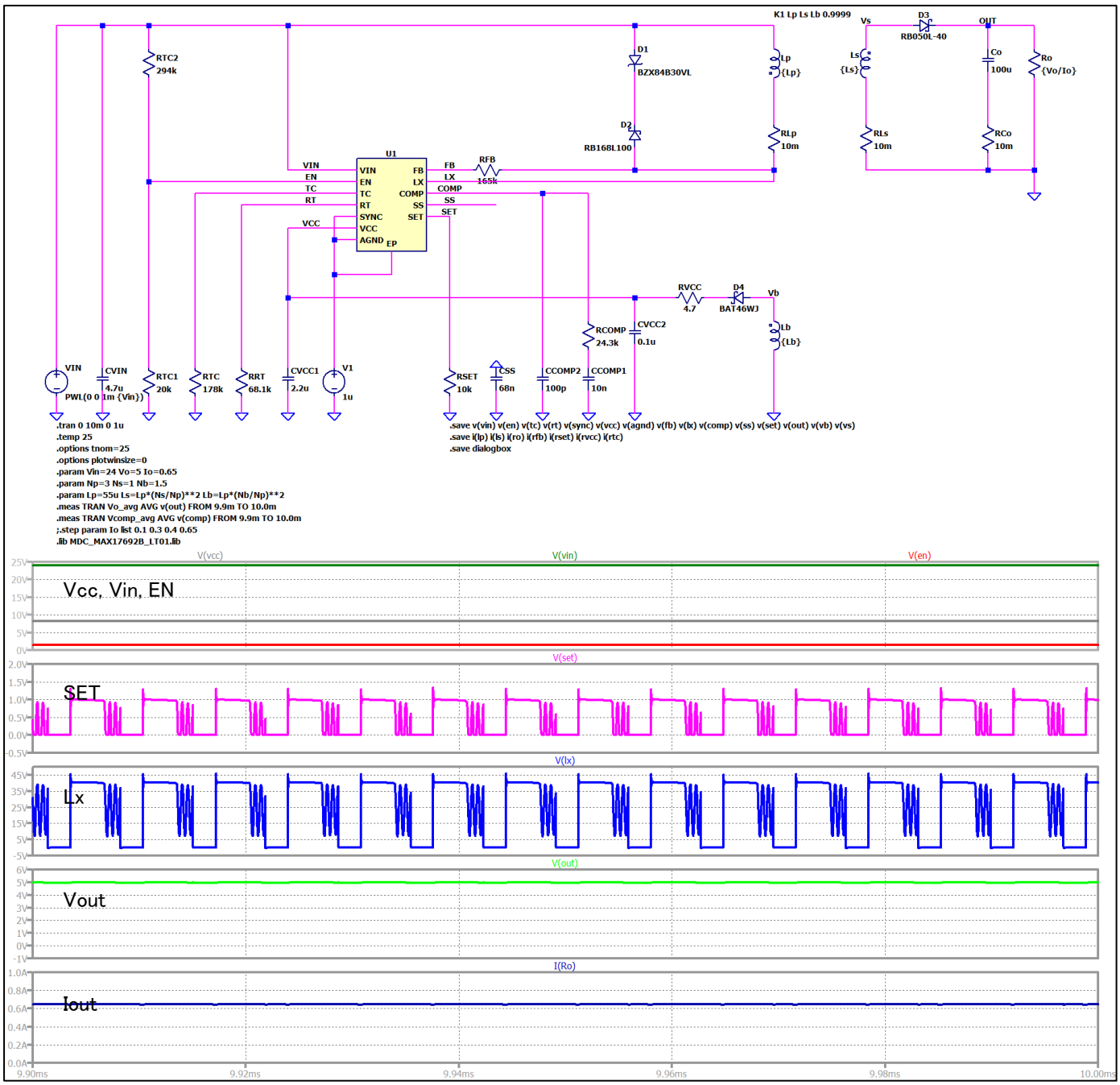
Testbench for Line/Load regulations (Vin=24[V] Fsw=146[kHz] Vout=5[V] Iout=650[mA])

Referred to Data Sheet



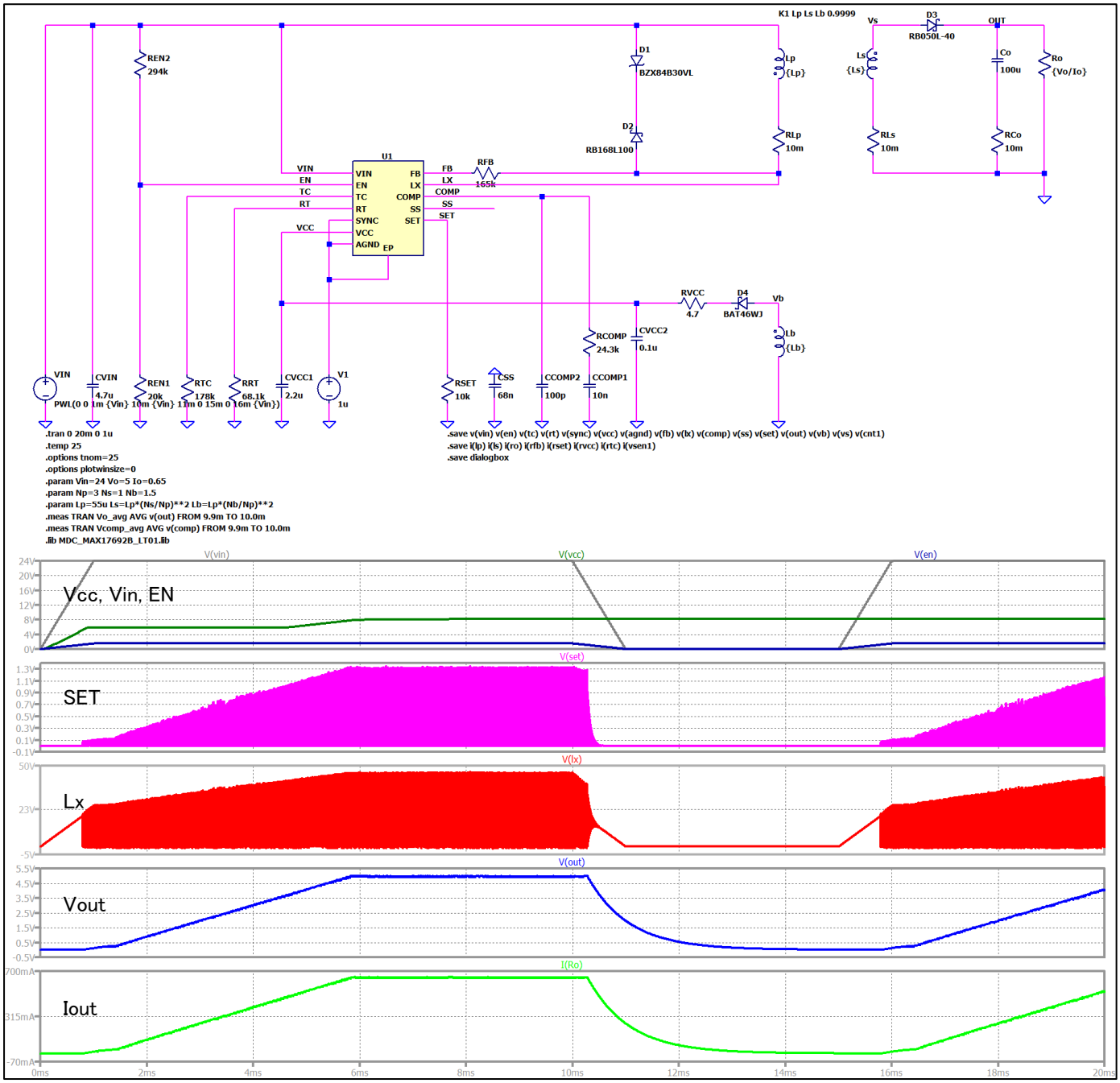
Testbench for Line/Load regulations (Vin=24[V] Fsw=146[kHz] Vout=5[V] Iout=650[mA])

Referred to Data Sheet



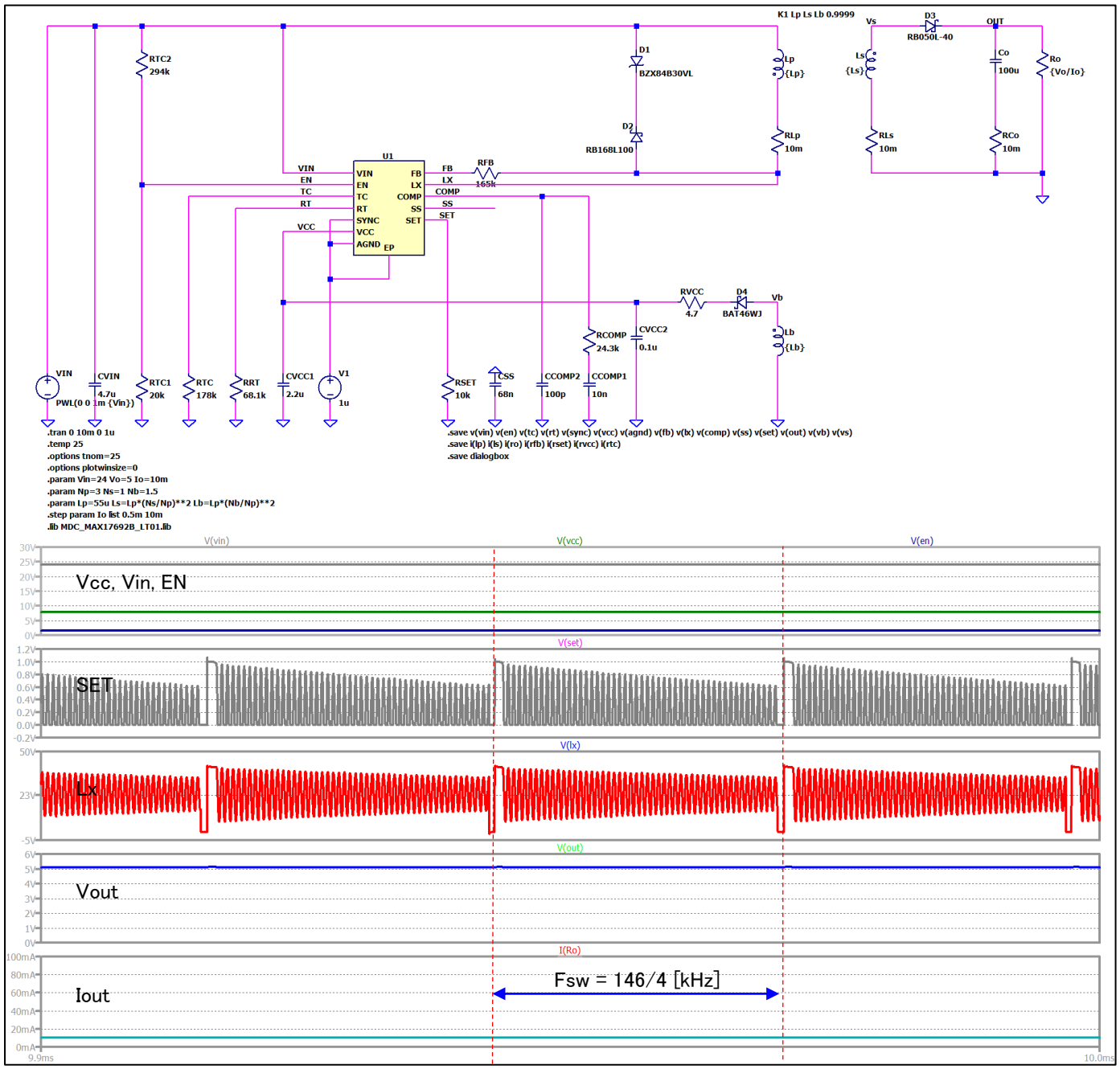
Testbench for Line/Load regulations (Vin=24[V] -> 0[V] -> 24[V] Fsw=146[kHz] Vout=5[V] Iout=650[mA])

Referred to Data Sheet



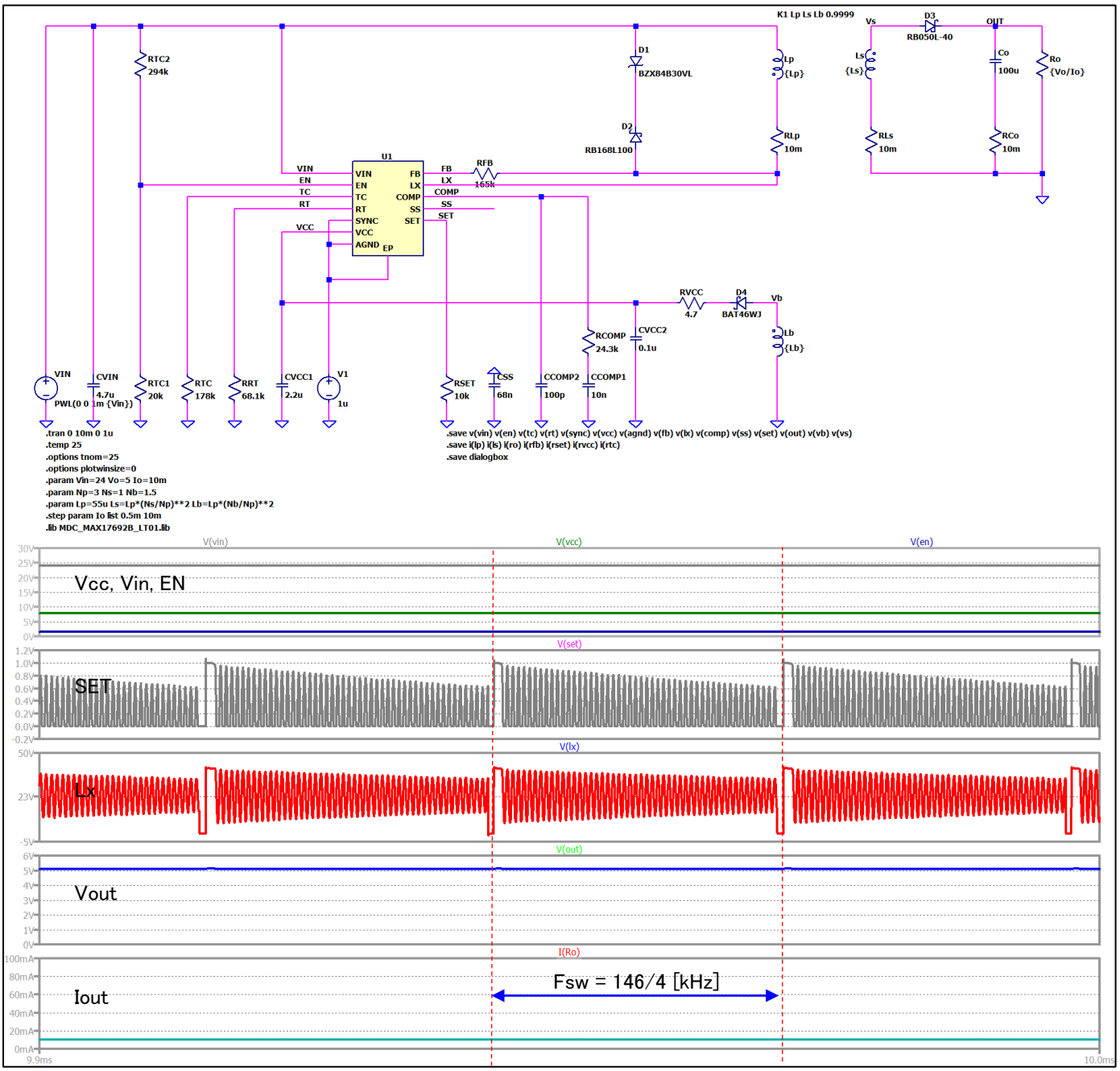
Testbench for Line/Load regulations (Vin=24[V] Fsw=146[kHz] Vout=5[V] Iout=10[mA])

Referred to Data Sheet



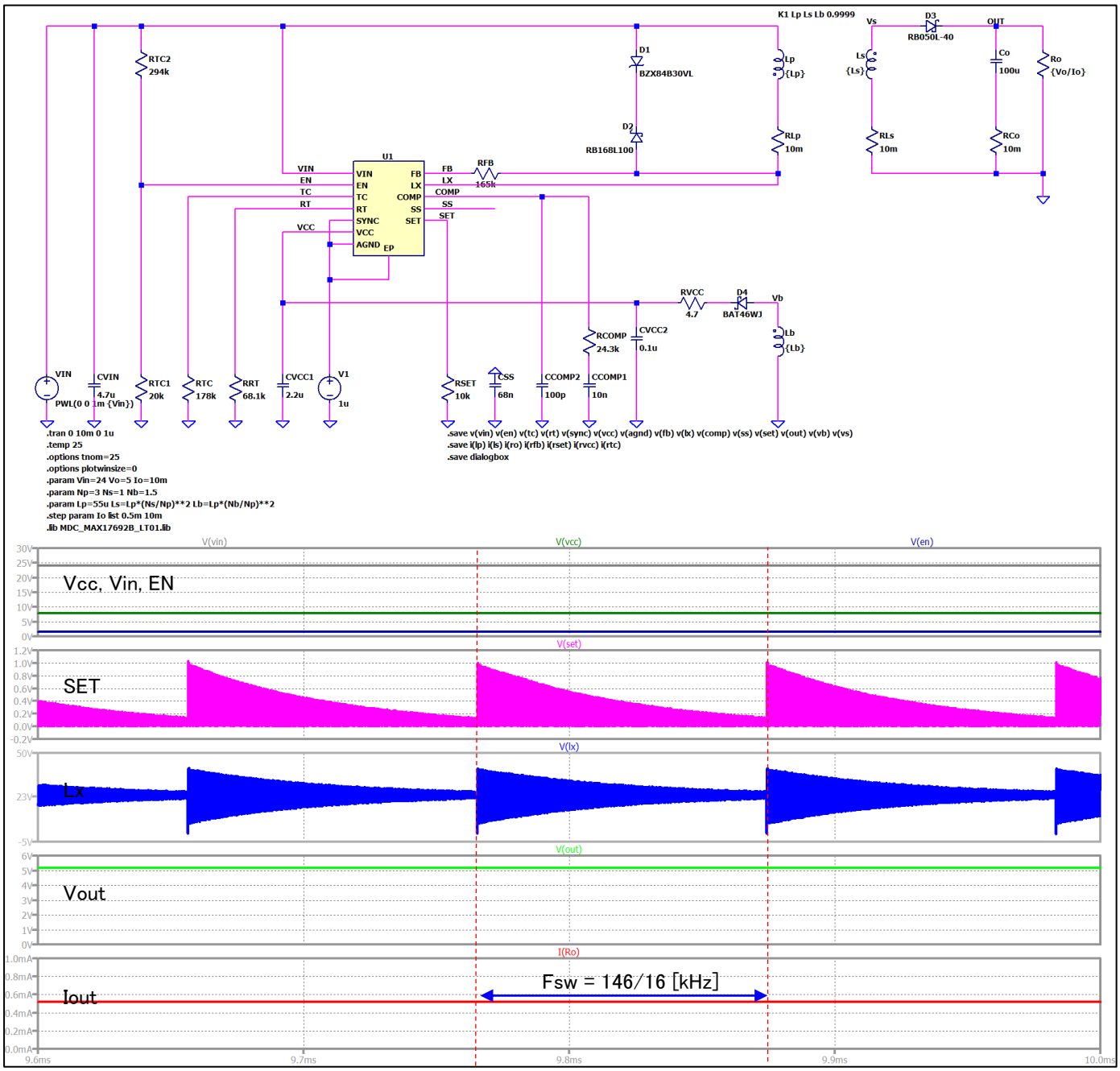
Testbench for Line/Load regulations (Vin=24[V] Fsw=146[kHz] Vout=5[V] Iout=10[mA])

Referred to Data Sheet



Testbench for Line/Load regulations (Vin=24[V] Fsw=146[kHz] Vout=5[V] Iout=0.5[mA])

Referred to Data Sheet



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