LTspice Model
DC Brush Motor Drivers
ROHM
BD62321HFP-TR

Model Information

Model	A macro model
Call Name	MDC_BD62321HFP-TR_LT
Pin Assign	1:VCC 2:OUT1 3:FIN 4:GND 5:RIN 6:OUT2 7:VCC 8(FIN):GND
File List	Model Library MDC_BD62321HFP-TR_LT.lib
	Model Report MDC_BD62321HFP-TR_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 2014.09.09 Rev.003
- ●Product name BD62321HFP-TR
- ●Company name ROHM

[Characteristics listed]

- ●Characteristics Icc, Istby
  VIH, VIL
  IH, RON
  fMAX

Simulation Condition

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

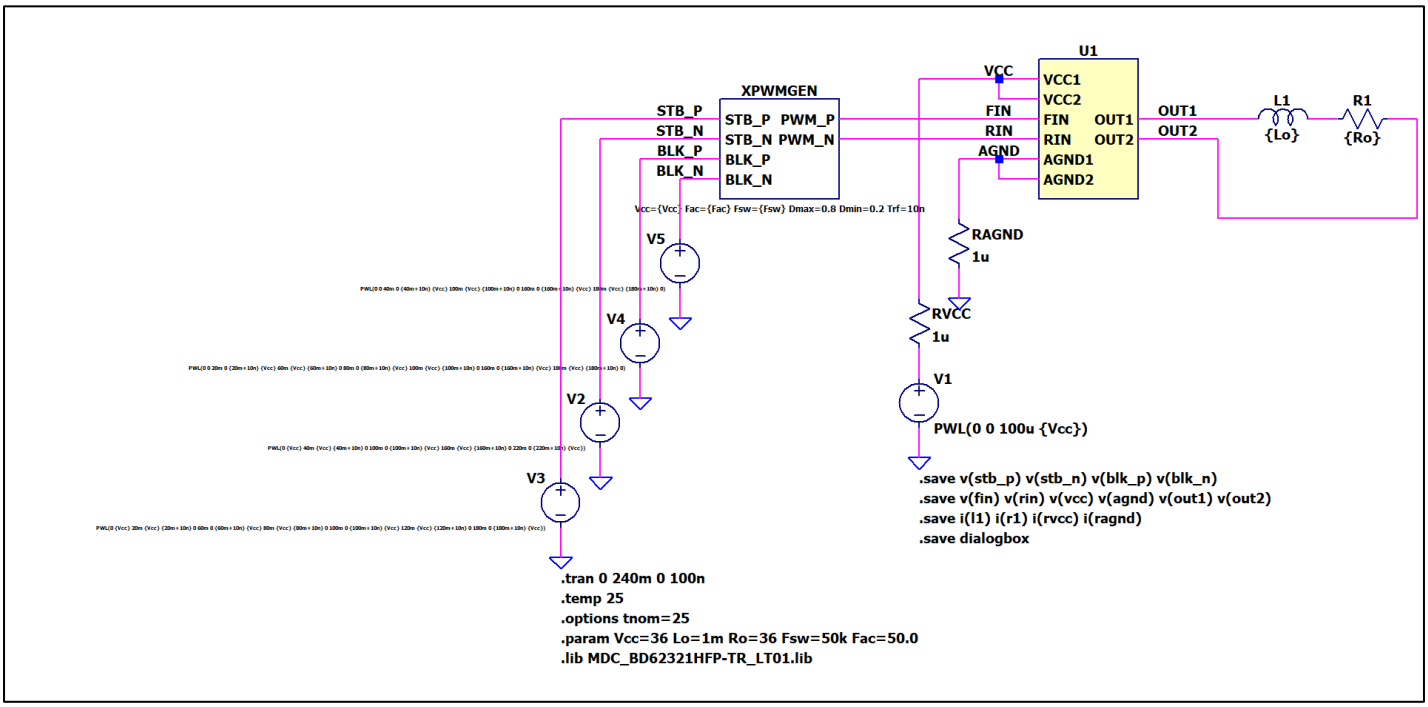
Item	Condition	Unit
Temperature	25	deg C

Model Functions Table

Functions	Implemented
Cross-Conduction Prevention Circuit	○
OCP	○
OVP	○
UVLO	○

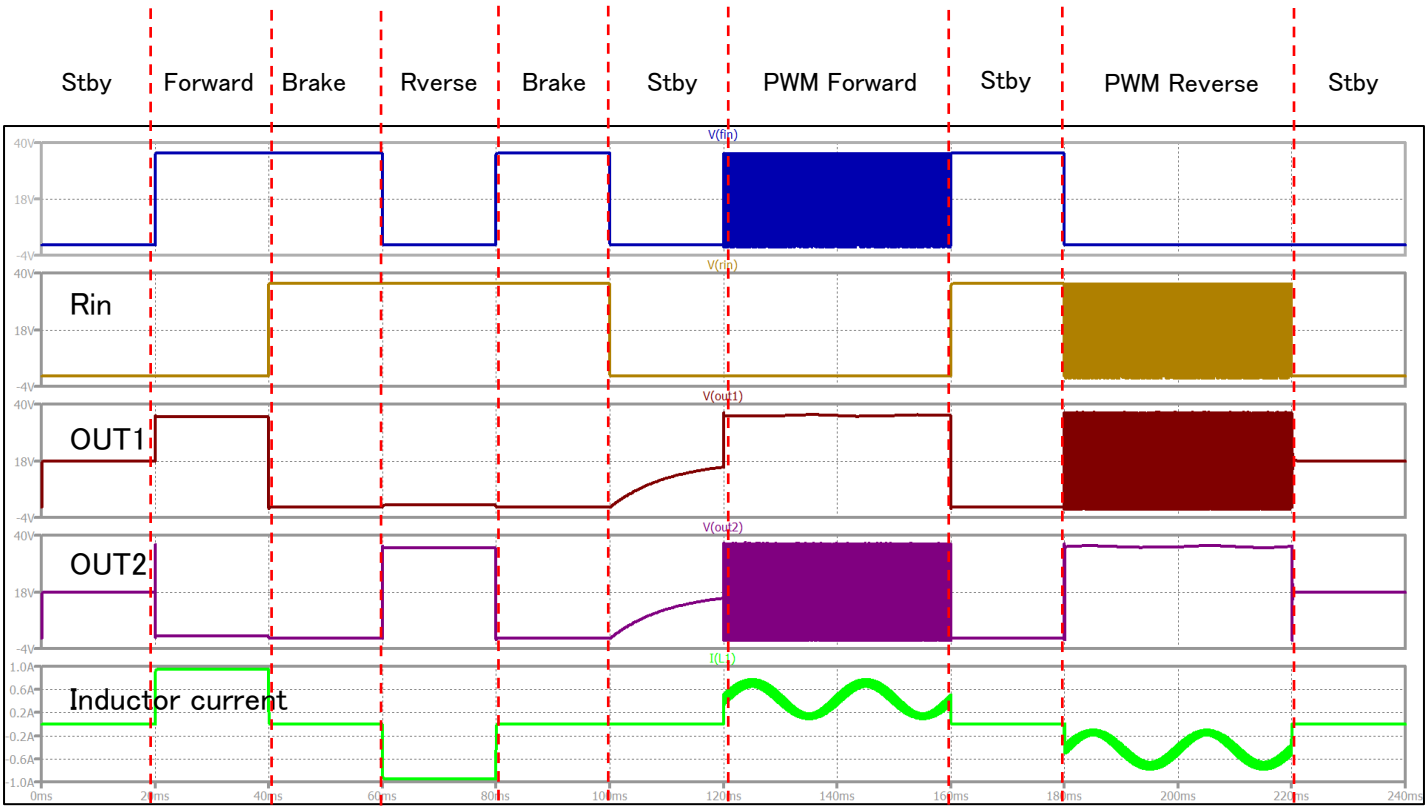
Stand-by mode, Forward, Reverse, Brake, PWM control Testbench
(PWM:Fin=50[Hz] Fc=50[kHz], Lout=1[mH], Rout=1[A])

Referred to Data Sheet



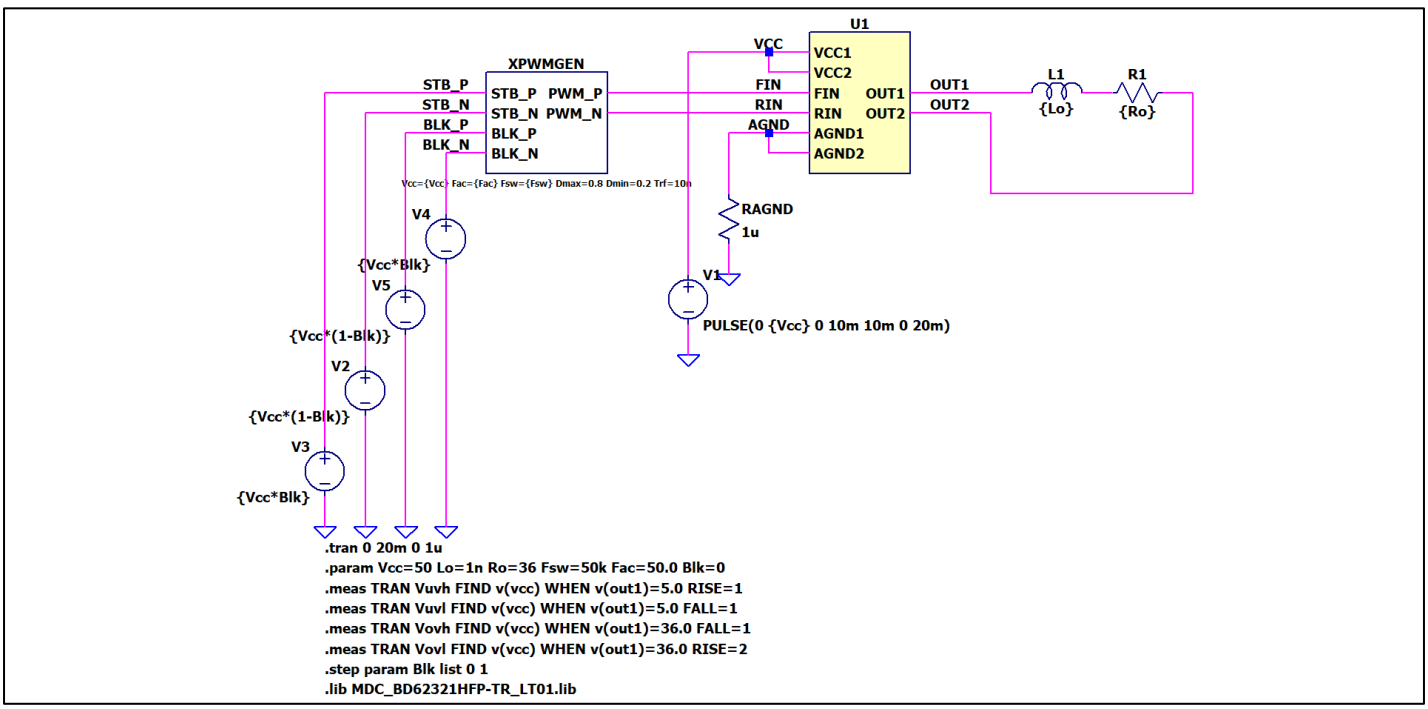
Simulation results are following.
Explanatory notes　— : simulated

Stand-by mode, Forward, Reverse, Brake, PWM control Testbench
(PWM:Fin=50[Hz] Fc=50[kHz], Lout=1[mH], Rout=36[ohm])



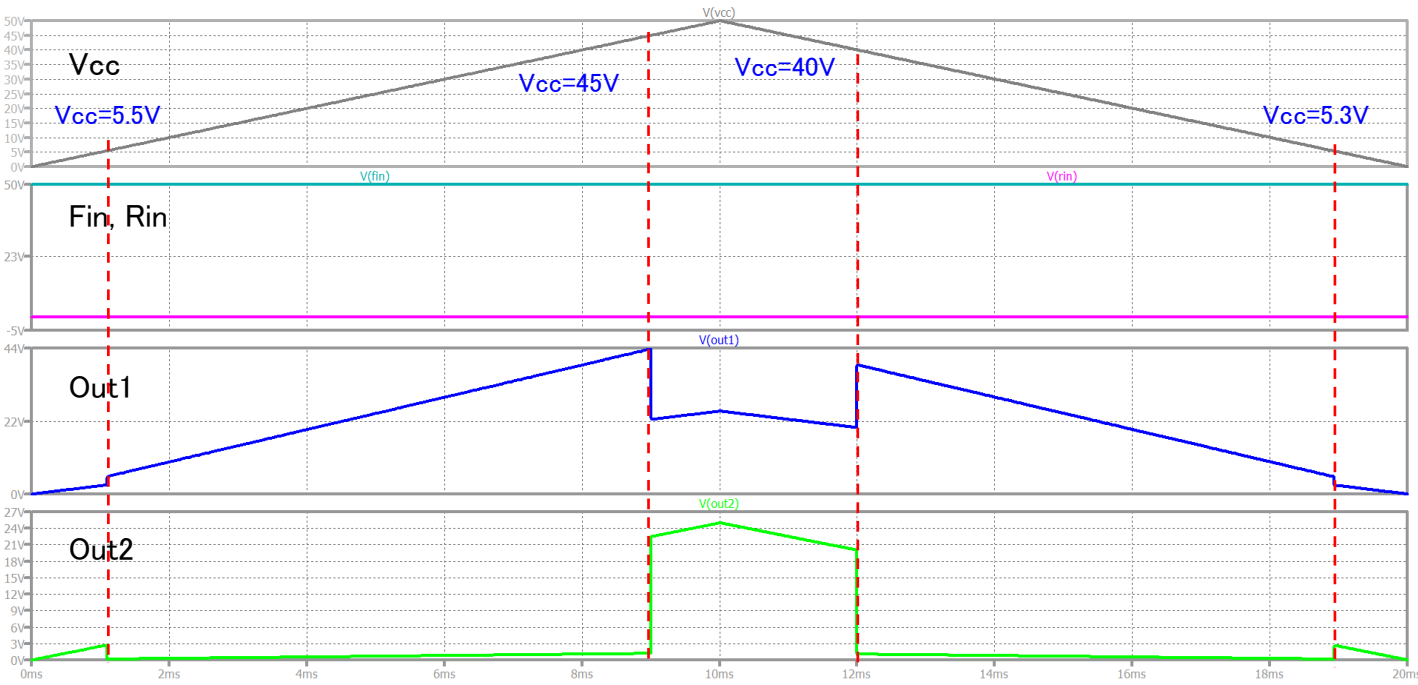
UVLO and OVP Testbench (Forward mode, Lout=1[nH] Rout=36[ohm])

Referred to Data Sheet



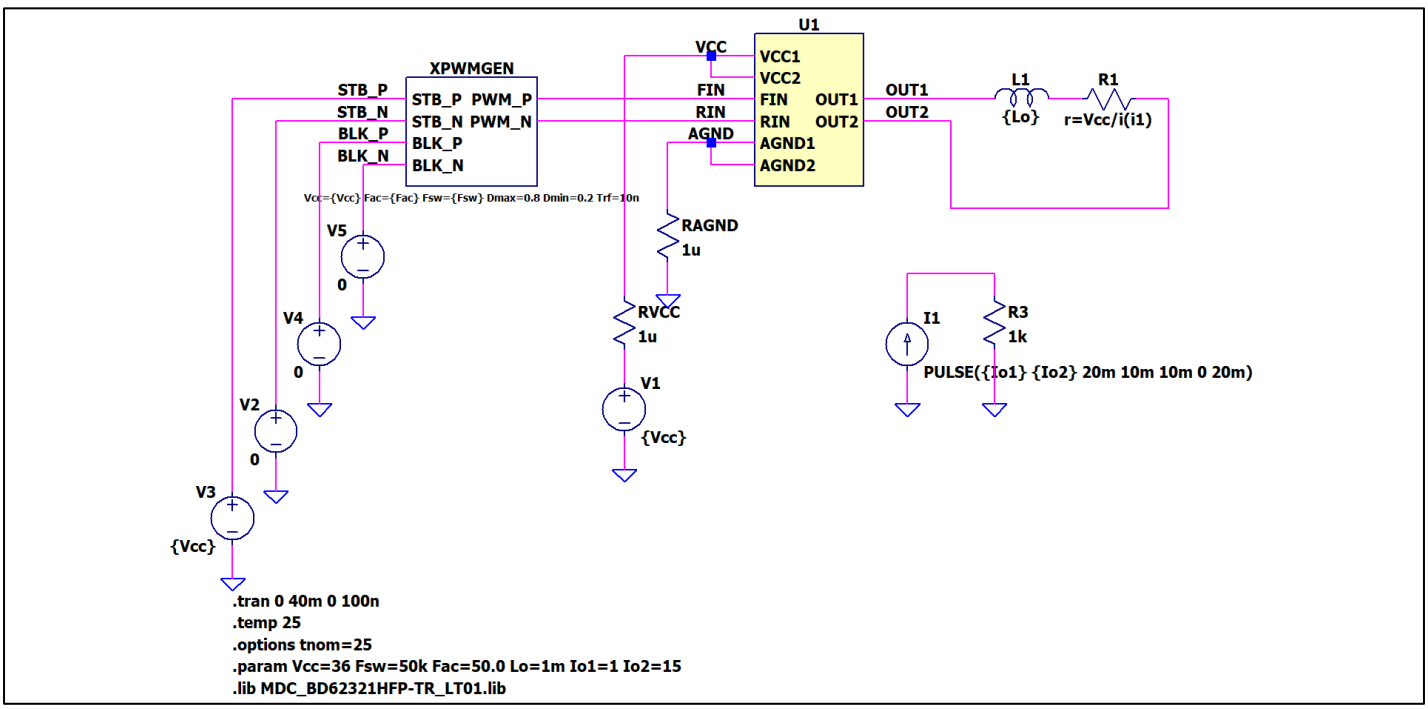
Simulation results are following.
Explanatory notes — : simulated

UVLO and OVP Testbench (Forward mode, Lout=1[nH] Rout=36[ohm])



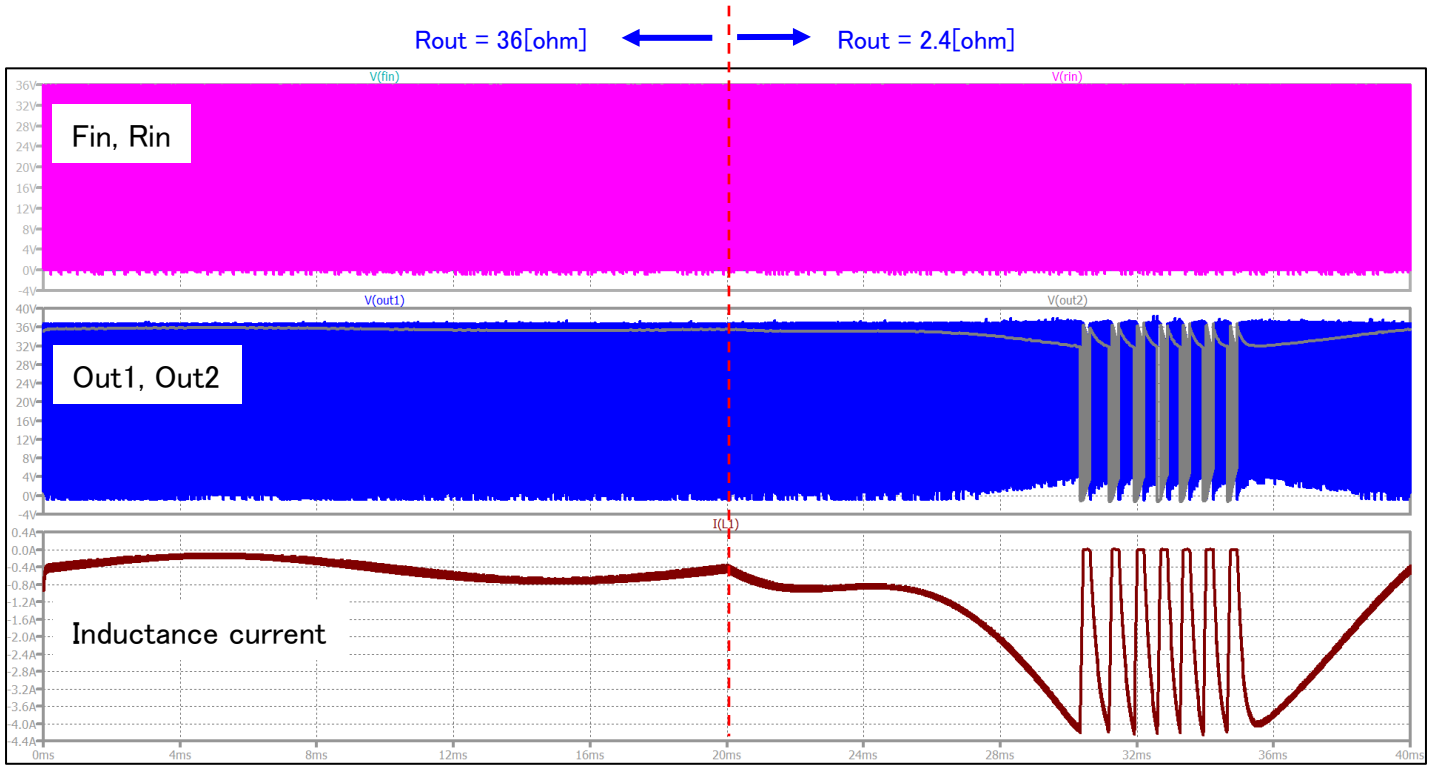
OCP Testbench
(PWM forward mode, PWM:Fin=50[Hz] Fc=50[kHz], Lout=1[mH], Rout=36[ohm] -> 2.4[ohm])

Referred to Data Sheet



Simulation results are following.
Explanatory notes — : simulated

OCP Testbench
(PWM forward mode, PWM:Fin=50[Hz] Fc=50[kHz], Lout=1[mH], Rout=36[ohm] -> 2.4[ohm])



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