

LTspice Model Buck Converter Power Integrations LNK3205D

Model Information

Model A macro model
Call Name MDC_LNK3205D_LT
Pin Assign 1:BP/M 2:FB 4:D 5:S1 6:S2 7:S3 8:S4
File List Model Library MDC_LNK3205D_LT01.lib
 Model Report MDC_LNK3205D_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 September 2020 Rev. M 10/20
- Product name LNK3205D
- Company name Power Integrations

[Characteristics listed]

- Characteristics 12 V,120 mA Constant Voltage Output

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

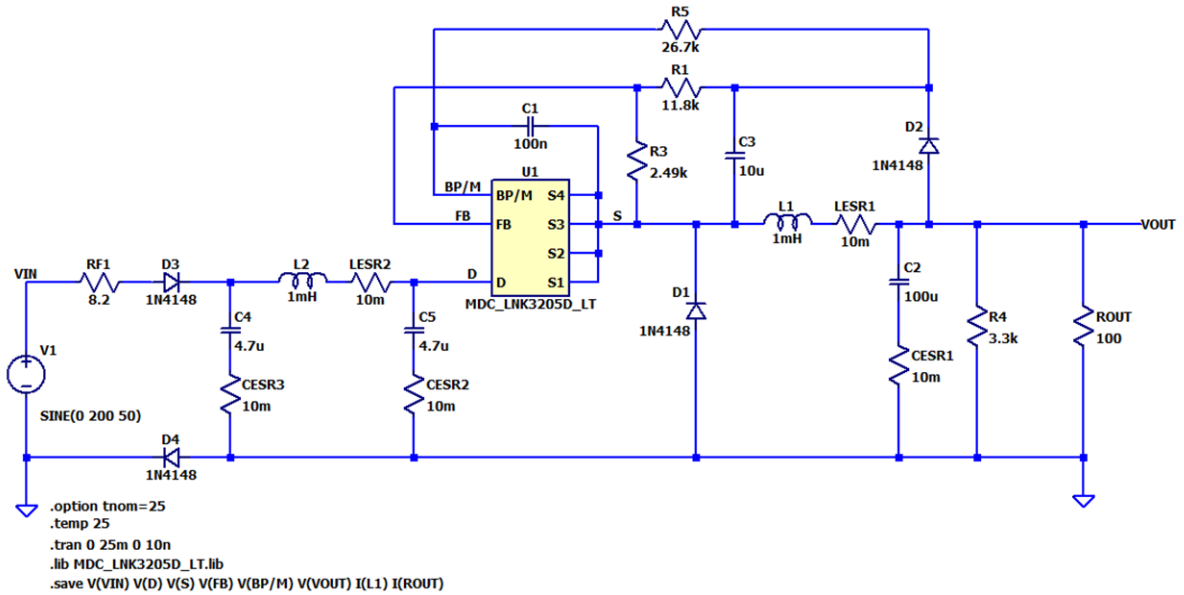
Switching Regulator

○ : Implemented
× : Not Implemented
— : Not applicable

Model Functions Table
RANK=2

Functions	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	○
Forard/Flyback Other Device in Circuit	3	—
Brown IN/OUT Function	—	—
ZT Pin OVP Function	—	—

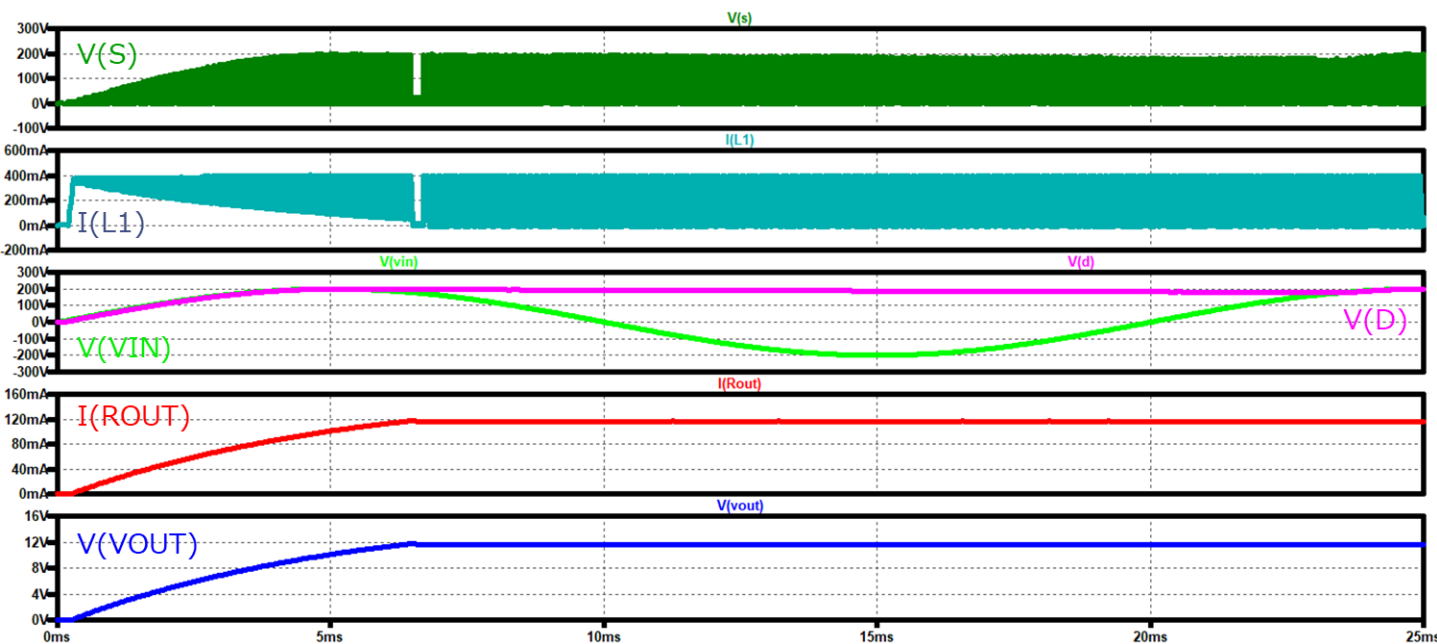
12 V, 120 mA Constant Voltage Output Testbench



Simulation results are following.
 Explanatory notes — : simulated

12 V, 120 mA Constant Voltage Output

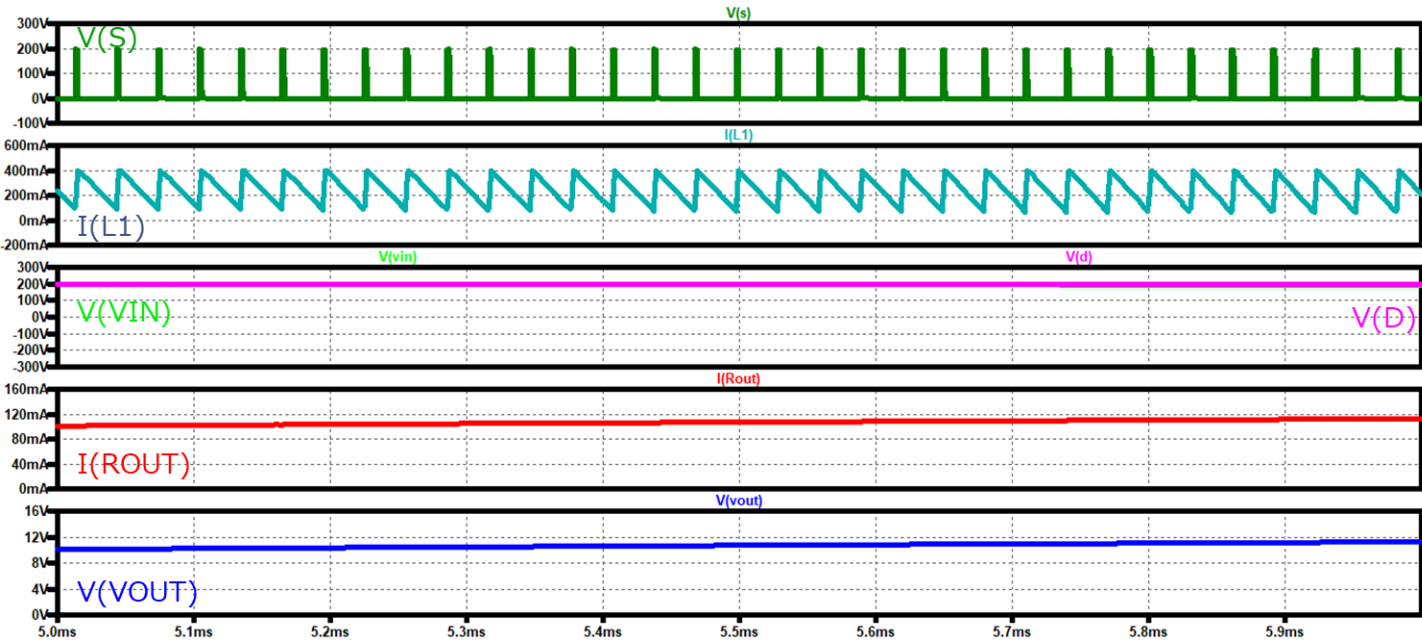
• 0 ms - 25 ms



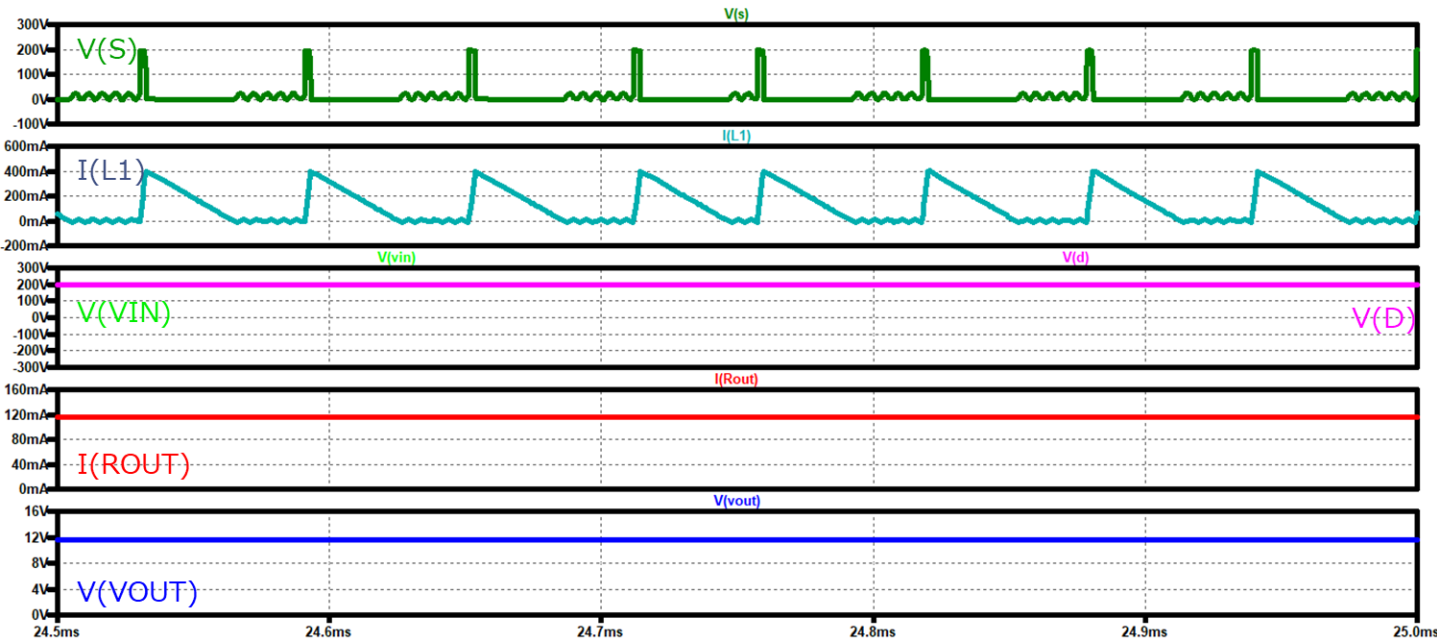
Simulation results are following.
 Explanatory notes — : simulated

12 V, 120 mA Constant Voltage Output

• 5 ms – 6 ms



• 24.5 ms - 25 ms



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MoDeCH Inc.

Head Office

Location: 5-15 Yokoyama-cho, Hachioji-Shi, Tokyo 192-0081, Japan

Tel:+81-42-656-3360

E-Mail:model-on-support@modech.co.jp

URL:<http://www.modech.com/en/>