

LTspice Model LDO TOREX XC6701D702PR-G

Model Information

Model A macro model

Call Name MDC_XC6701D702PR-G_LT

Pin Assign 1:VOUT 2:VSS 3:VIN

File List Model Library MDC_XC6701D702PR-G_LT01.lib

Model Report MDC_XC6701D702PR-G_LT_LT.pdf(this file)

Verified Simulator Version

Note

References

The information which was used for modeling is as follow:

[Data Sheet]

Date/Version JTR0334_012bProduct name XC6701D702PR-G

Company name TOREX

[Characteristics listed]

● Characteristics V_{IN}-V_{OUT}, Vdif, I_{OUT}-V_{OUT} Input Rising Response

Input Rising Response
Input Transient Response
Load Transient Response

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
V _{IN} -V _{OUT}	0
Vdif	0
I _{OUT} -V _{OUT}	0
Input Rising Response	0
Input Transient Response	0
Load Transient Response	0

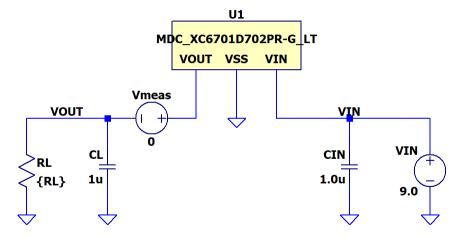


V_{IN}-V_{OUT} Testbench

Referred to Data Sheet

.option TNOM=25 .temp 25 .dc VIN 6.0 28 0.01

.lib MDC_XC6701D702PR-G_LT.lib

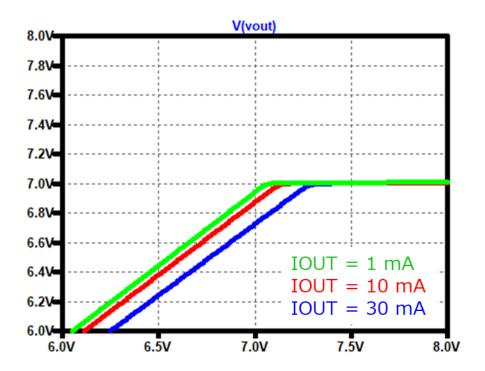


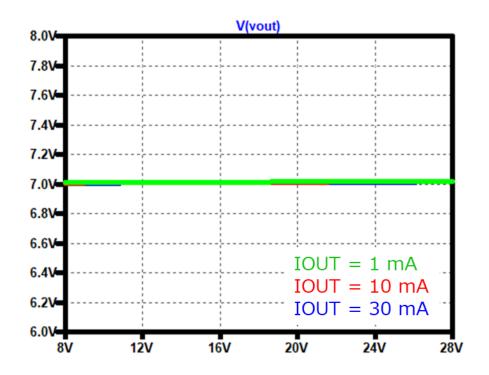
.step param RL list 7.0k 700 233.333



Simulation results are following. Explanatory notes — : simulated

 V_{IN} - V_{OUT}

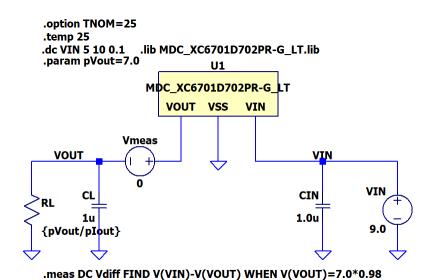






Vdif Testbench

Referred to Data Sheet

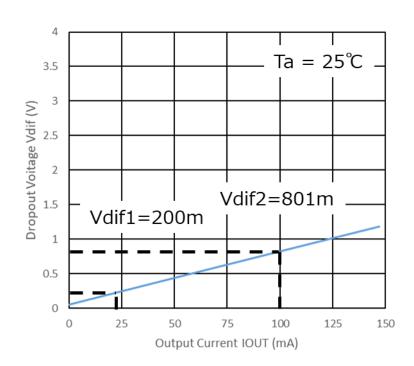


.meas DC Iout FIND I(Vmeas) WHEN V(VOUT)=7.0*0.98 .step param plout list 0 20m 25m 50m 75m 100m 125m 150m

Simulation results are following.

Explanatory notes — : simulated

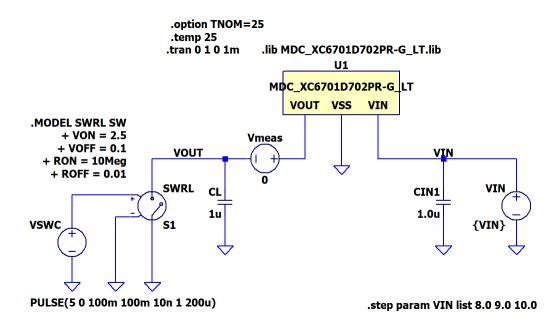
Vdif





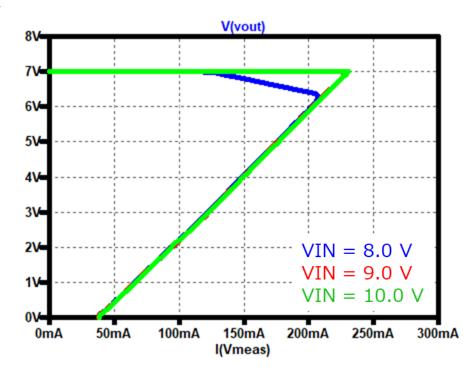
 I_{OUT} - V_{OUT} Testbench

Referred to Data Sheet



Simulation results are following. Explanatory notes — : simulated

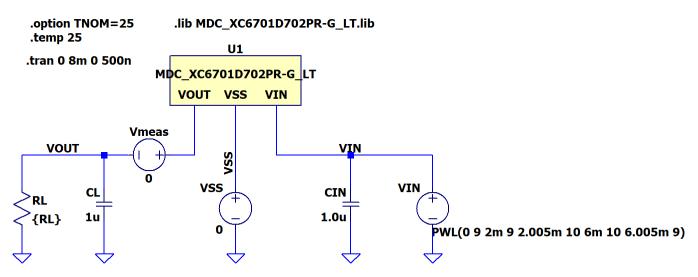
I_{OUT} - V_{OUT}





Input Rising Response Testbench

Referred to Data Sheet

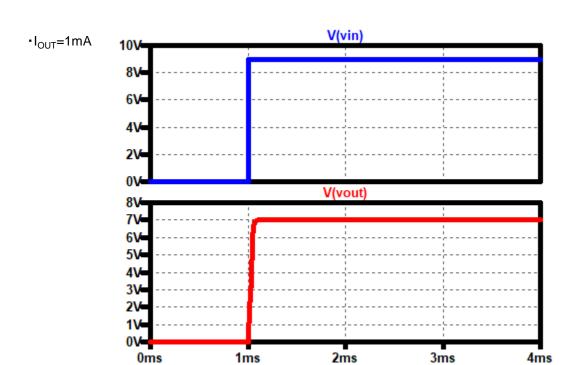


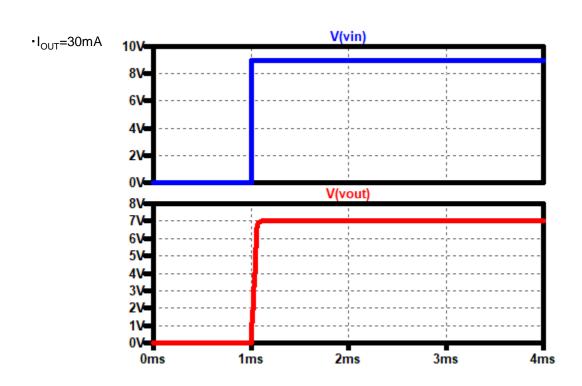
.step param RL list 7.0k 233.333



Simulation results are following. Explanatory notes — : simulated

Input Rising Response

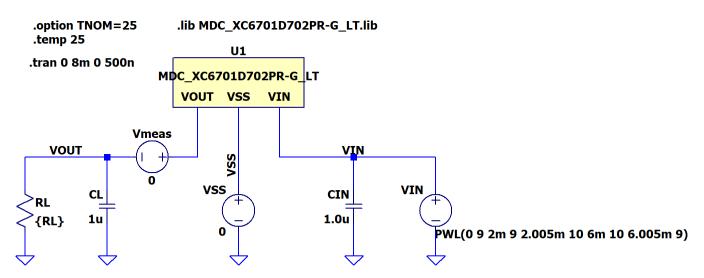






Input Transient Response Testbench

Referred to Data Sheet

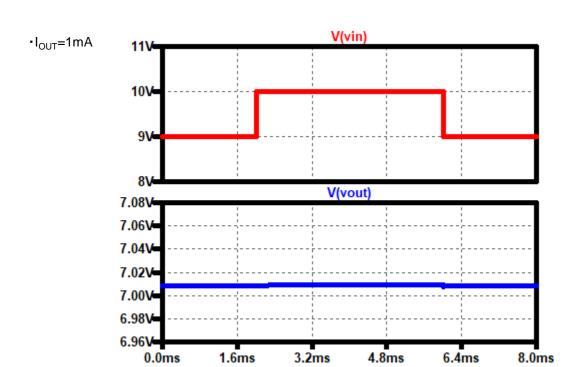


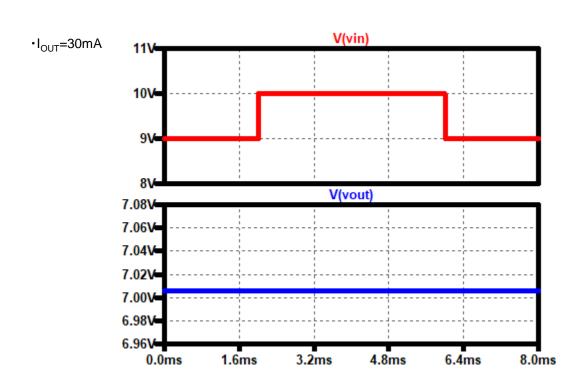
.step param RL list 7.0k 233.333



Simulation results are following. Explanatory notes — : simulated

Input Transient Response





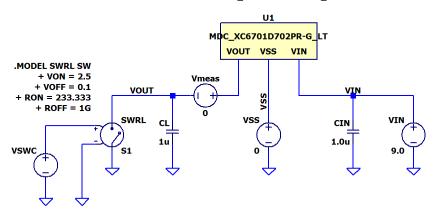


Load Transient Response Testbench

Referred to Data Sheet

.option TNOM=25 .temp 25 .tran 0 8m 0 500n

.lib MDC_XC6701D702PR-G_LT.lib



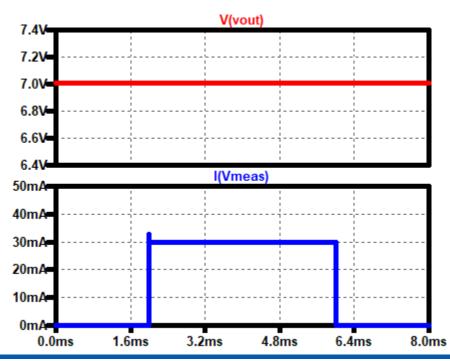
PWL(0 0 2m 0 2.005m 5 6m 5 6.005m 0)

Simulation results are following.

Explanatory notes — : simulated

Load Transient Response

•I_{OUT}:0mA to 30mA





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