

LTspice Model

Quasi-Resonant Controllers

Sanken Electric Co., Ltd.

STR-Y6763A

Model Information

Model A macro model
Call Name MDC_STR-Y6763A_PS
Pin Assign 1:D/ST 2:S/OC 3:VCC 4:GND 5:FB/OLP 6:BD 7:NF
File List Model Library MDC_STR-Y6763A_PS01.lib
 Model Report MDC_STR-Y6763A_PS.pdf(this file)

Verified Simulator Version PSpice version 17.2

Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version Unknown
- Product name STR-Y6763A
- Company name Sanken Electric Co., Ltd.

[Characteristics listed]

- Characteristics Vcc(on), Vcc(off)
Fosc, tss
Vbd(TH1), Vbd(TH2)
Rds(on), Tf

Simulation Condition

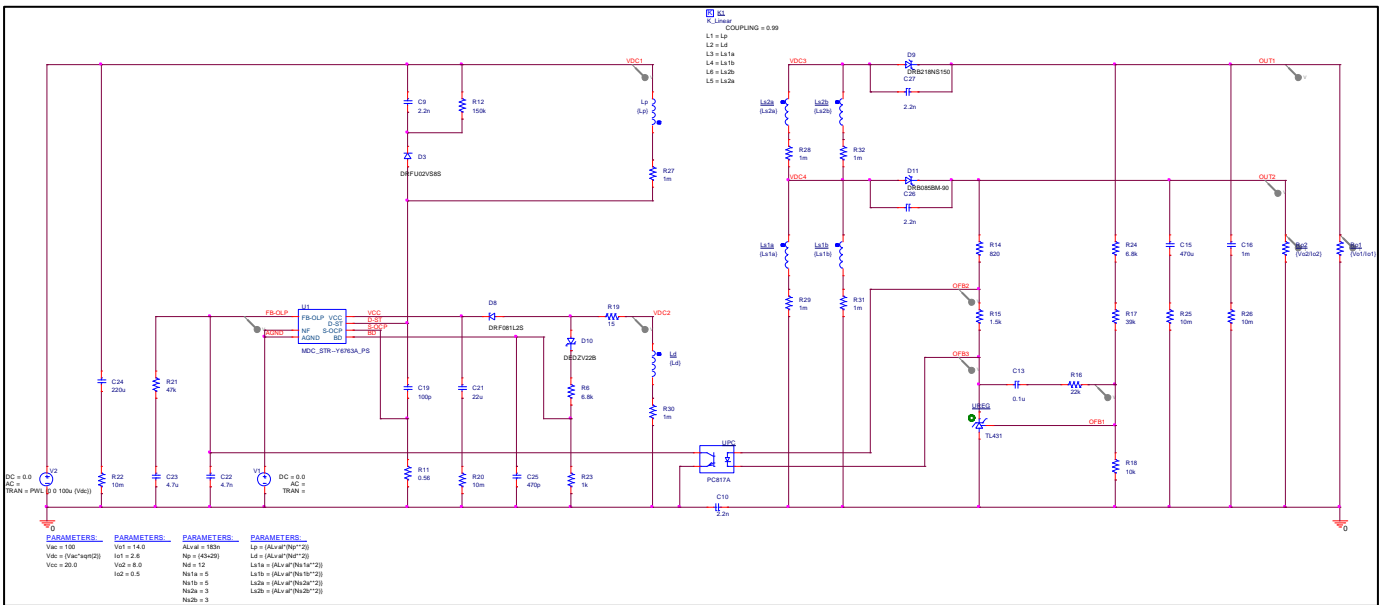
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Condition	Unit
Temperature	25	deg C

Model Functions Table

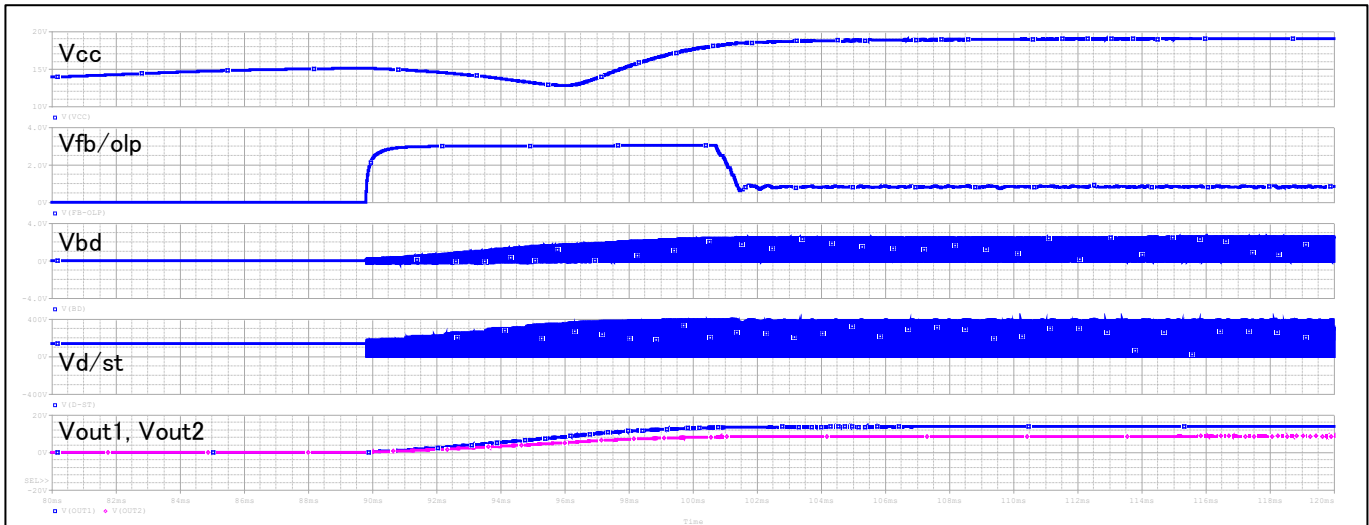
Functions	Implemented
Startup Operation	○
Leading Edge Blanking Function	○
Bias Assist Function	○
Soft Start Function	○
Constant Output Voltage Control	○
Leading Edge Blanking Function	○
Quasi-Resonant Operation	○
BD Pin Blanking Time	○
Multi-mode Control	–
Maximum On-Time Limitation Function	○
Overcurrent Protection 1 (OCP1)	○
Overcurrent Protection 2 (OCP2)	–
OCP1 Input Compensation Function	–
Overload Protection (OLP)	–
Overvoltage Protection (OVP)	–
Thermal Shutdown (TSD)	–

Quasi-Resonant Operation ($V_{dc} = 100V$, $V_{out1} = 14V$, $I_{out1} = 2.6A$, $V_{out2} = 8V$, $I_{out2} = 0.5A$) Testbench
 Referred to Data Sheet



Simulation results are following.
 Explanatory notes — : simulated

40V Synchronous Boost Regulator with Input Disconnect (VIN = 5V, IOUT = 0.2A) Testbench



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