How to add (change) a new component

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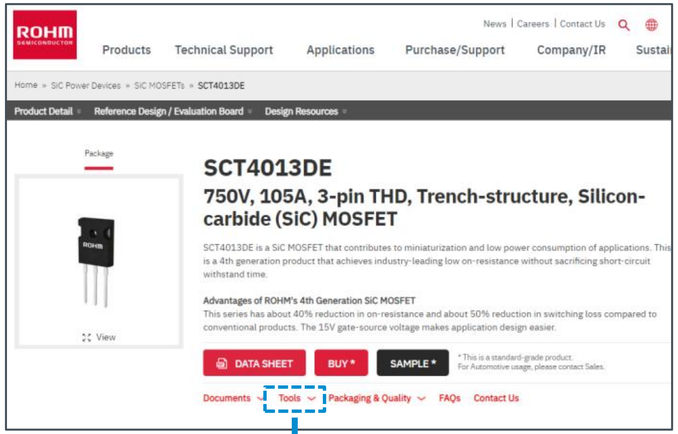
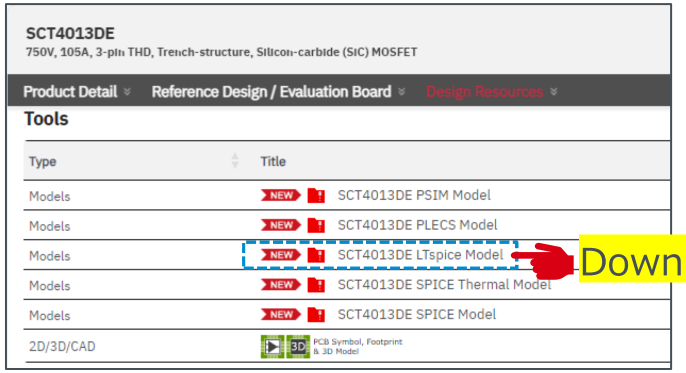
Download LTspice® model from ROHM website.

Save LTspice® model in the same folder as the schematic file.

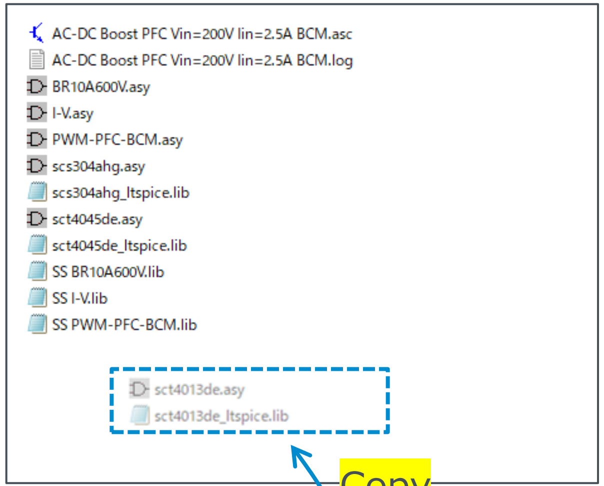
Click on the “Component” icon from the toolbar to add a new component to the schematic.





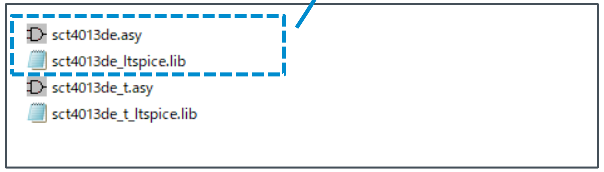
Download

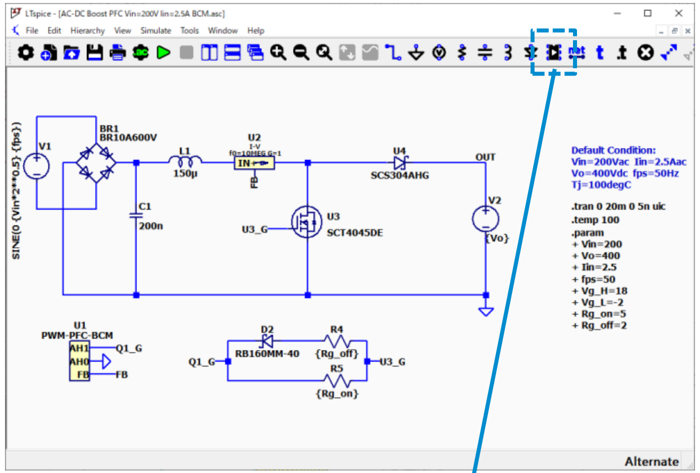
LTspice® schematic file

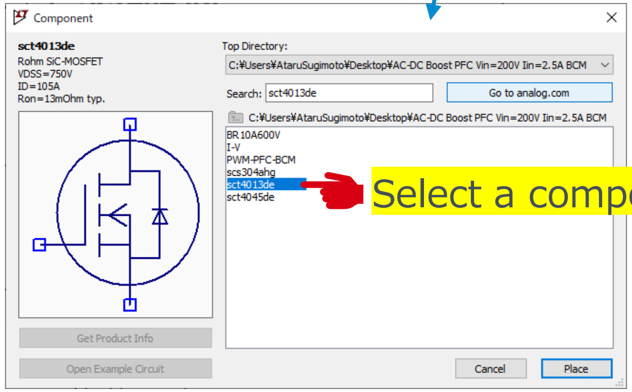


Copy

LTspice® model



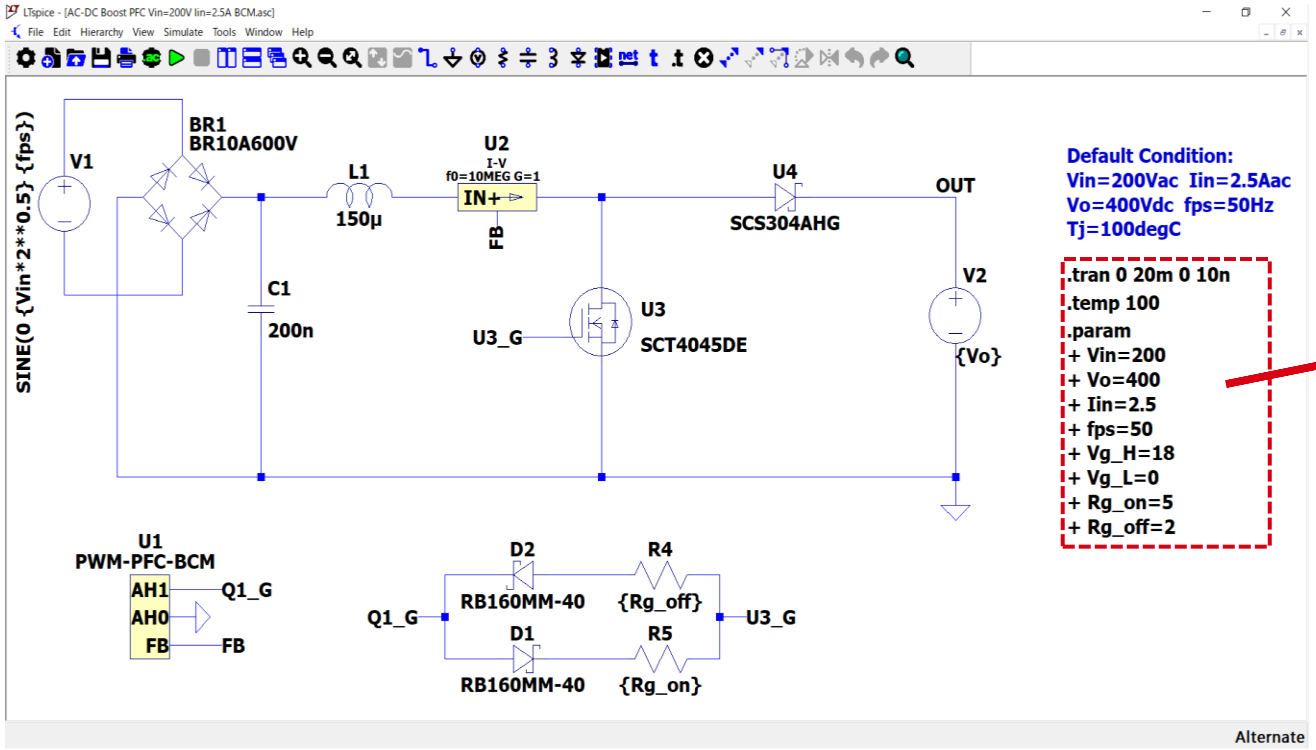


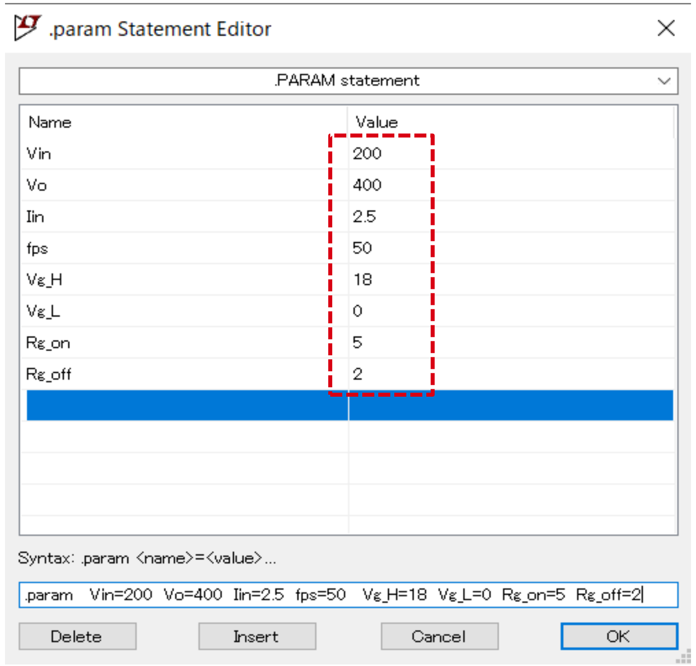


Select a component

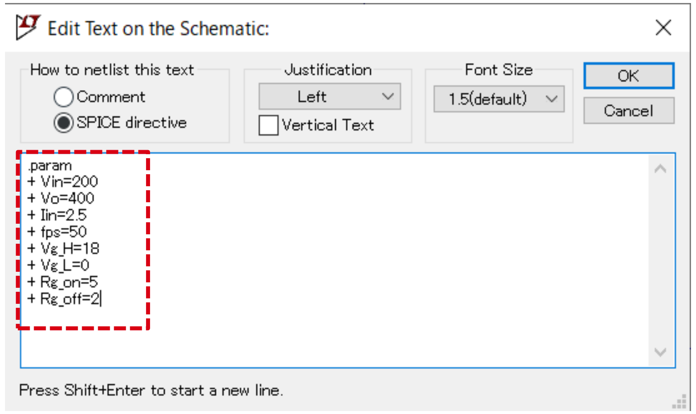
How to change the Simulation Conditions

Simulation Schematic





or



Right-click on the ".param" text on the schematic to launch the ".param Statement Editor" or "Text Editor. Change the parameters as necessary.

B-006. 3-Phase 3-Wire Inverter Pout=15kW (HSDIP)

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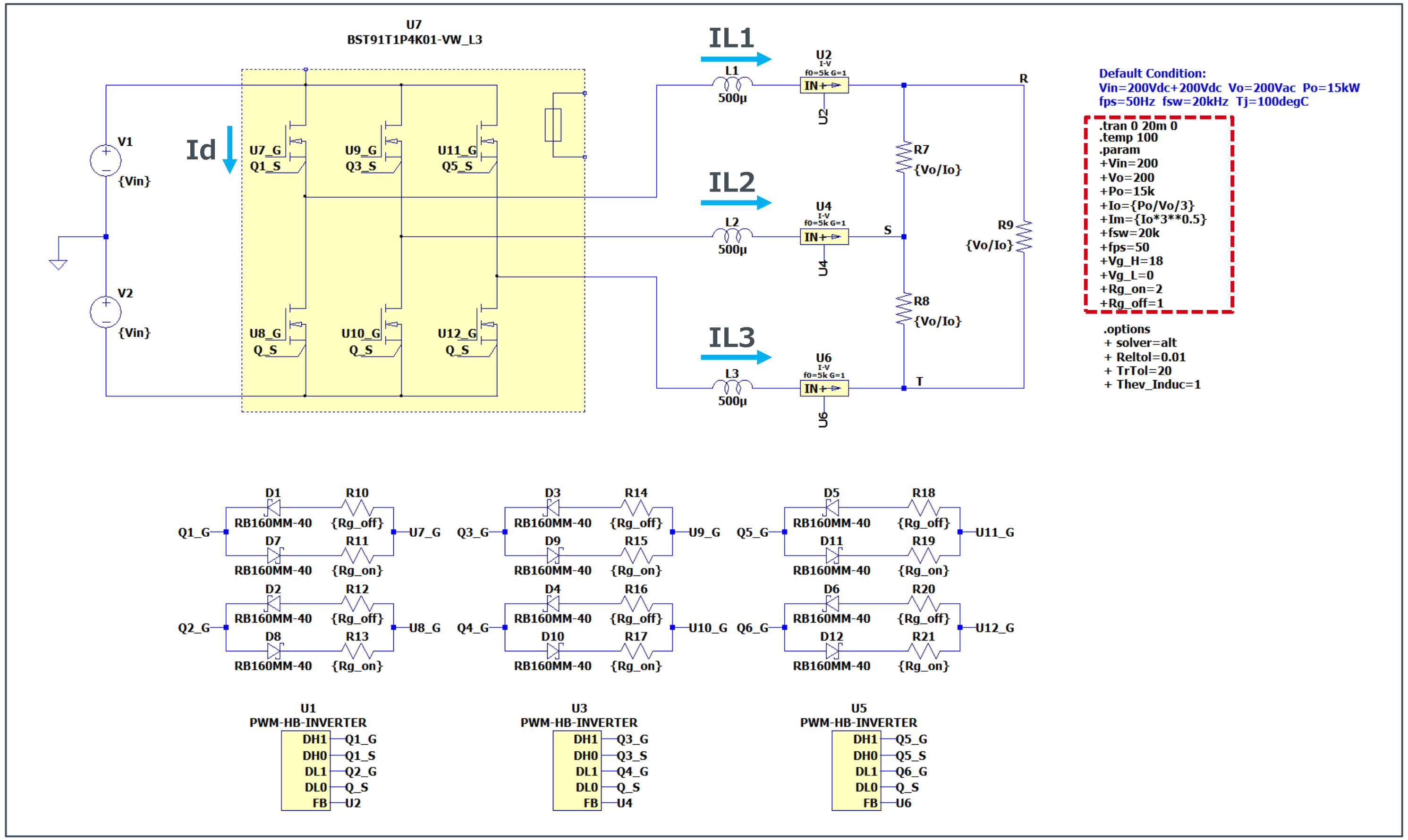
Simulation Parameters

Param name	Unit	Description
Vin	V	Input Voltage
Vo	V	Output Voltage
fps	Hz	Commercial power frequency
Iin	A	Input current
Io	A	Output current
fsw	Hz	Switching frequency
Vg_H	V	Gate Drive Voltage High
Vg_L	V	Gate Drive Voltage Low
Rg_on	Ω	Gate Resistance On
Rg_off	Ω	Gate Resistance Off

Devices

Instance name	Type	Default
U7	SiC Power Module	BST91T1P4K01-VW
D1~D12	SBD	RB160MM-40

Simulation Schematic



You can download and exchange other component models. See the link below for details.

How to Use LTspice® Models、Design Simulation Models：English version

LTspice®モデルの使い方、デザインモデル：日本語版

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Simulation Result Waveform1

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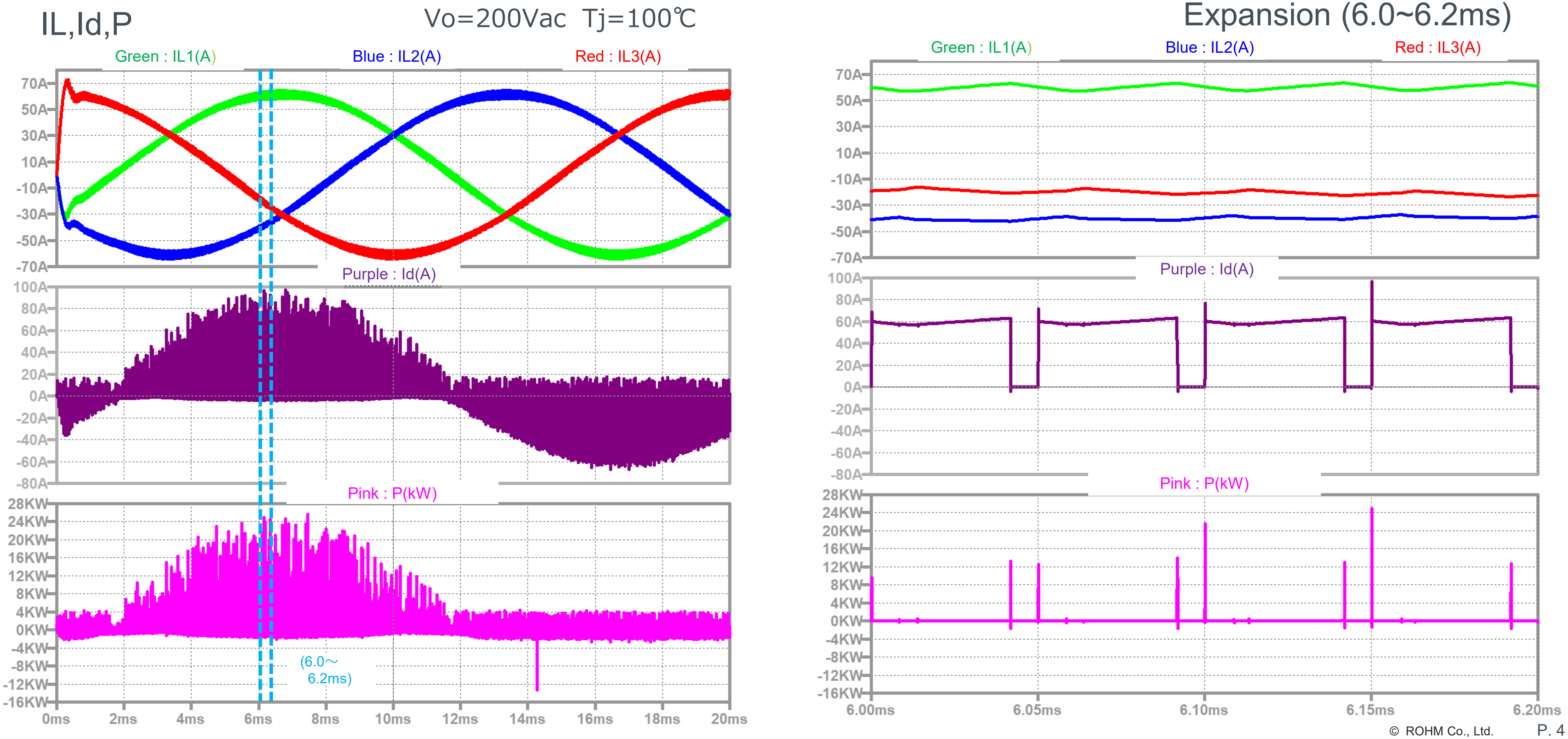
U7 : SiC Power Module

Vin=200+200Vdc Po=15kW
Vo=200Vac Tj=100℃



Default setting

ROHM SEMICONDUCTOR

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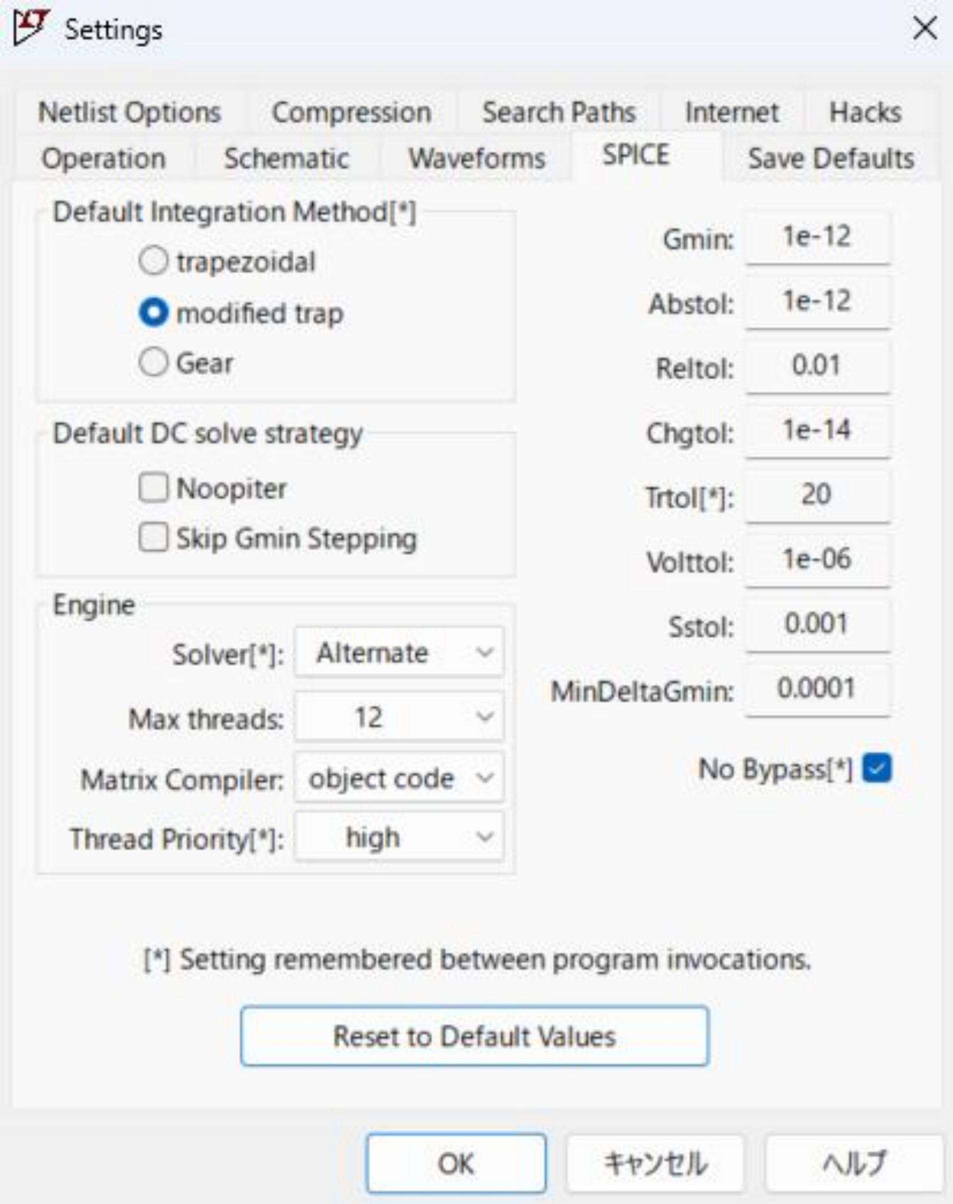

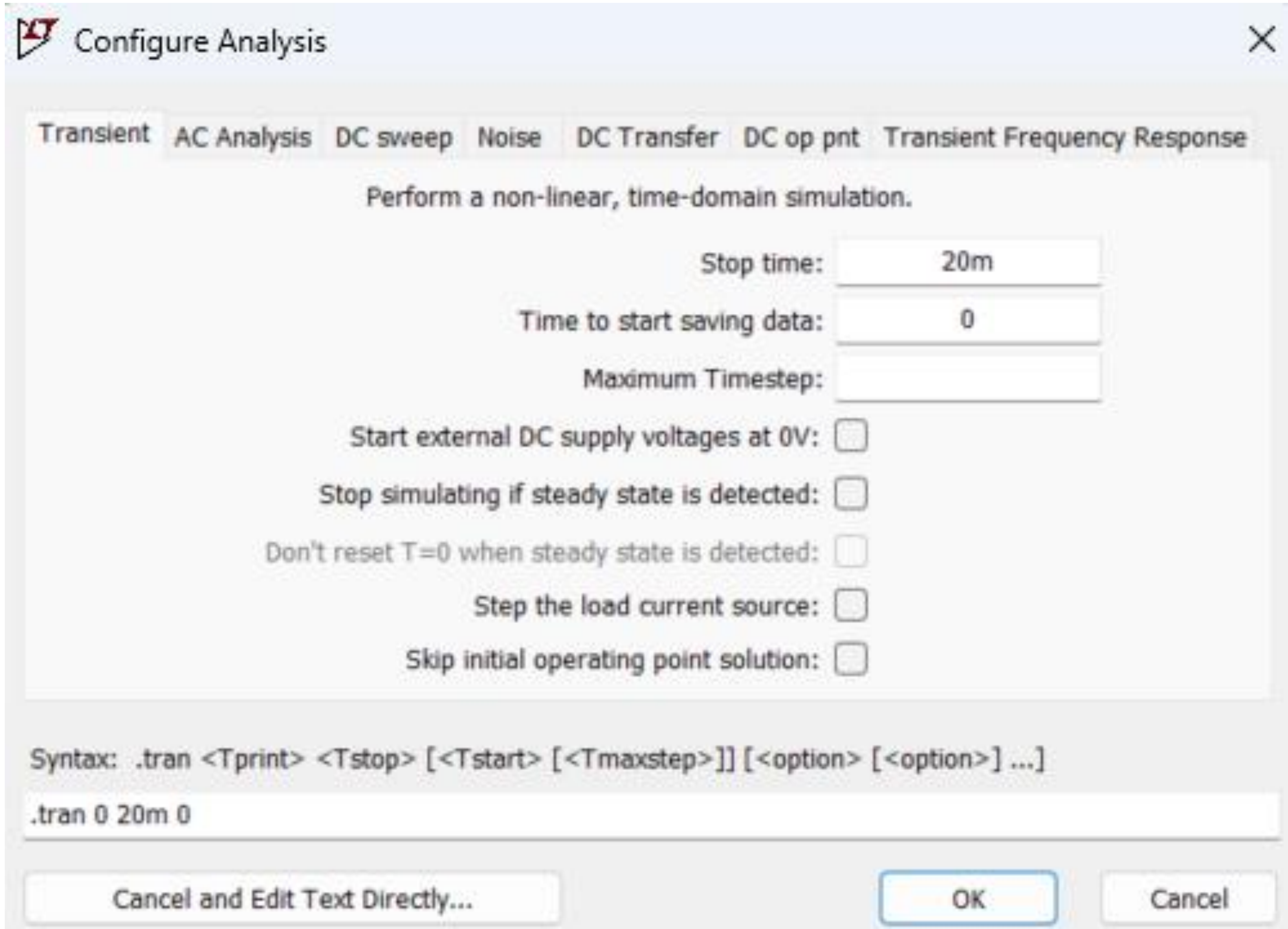

※LTspice version:24.1.3

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