

A-3. PFC BCM Diode-Bridge-Less $V_{in}=200V$ $I_{in}=50A$

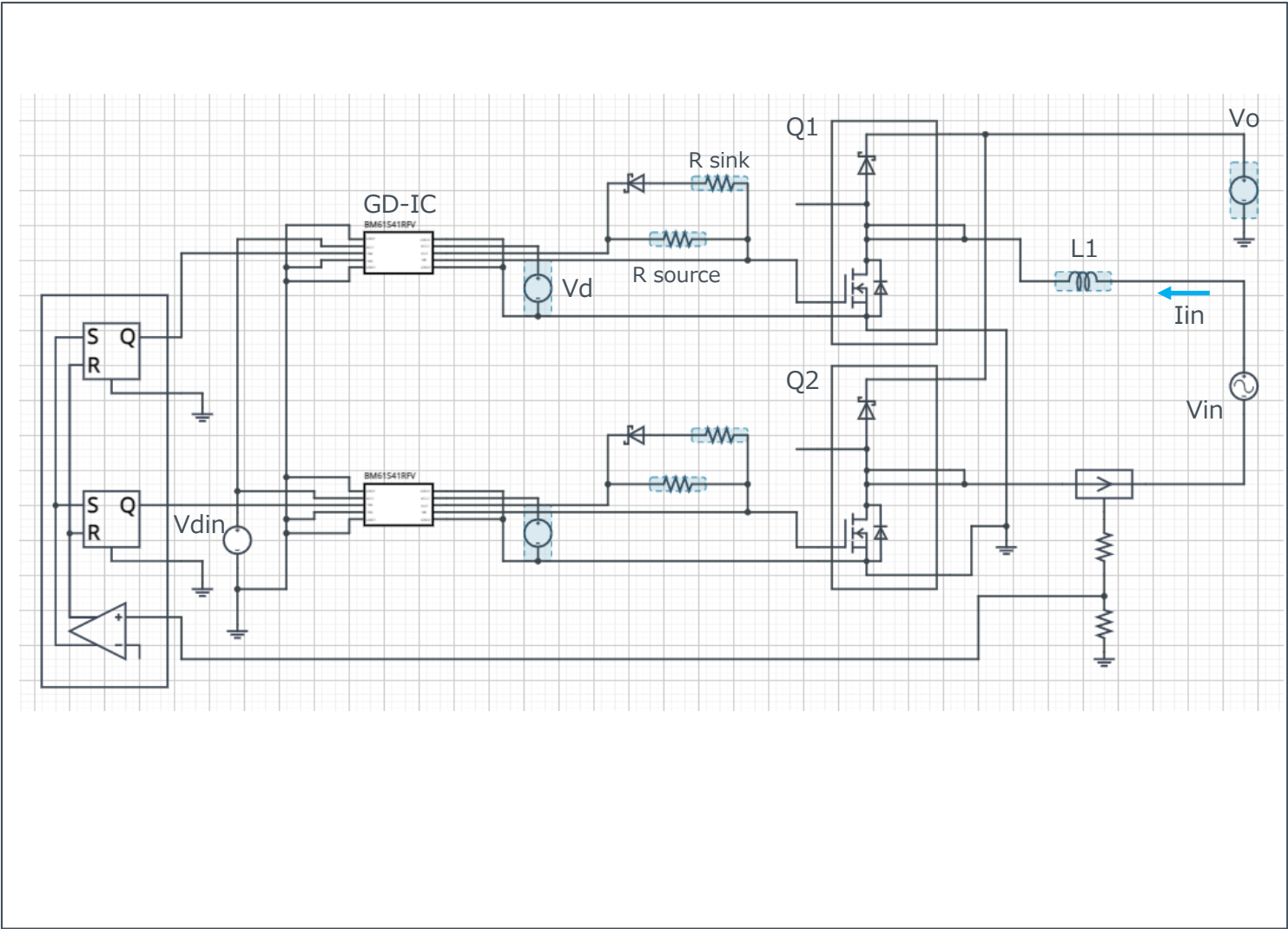
Simulation Parameters

Component name	Component	Default	Simulation Setting Range
Vin	Input voltage	200Vac 50Hz	
Iin	Input current	50Aac	
Vo	Output voltage	500Vdc	300 – 500Vdc
Tj	Temperature	100°C	
Vd	Gate Drive voltage	18V	10 – 20V
Vdin	Signal voltage level	5V	

Devices

Component name	Component	Default	Simulation Setting Range
Q1, Q2	SiC Power Module	BSM120C12P2C201	
GD-IC	Gate Driver	BM61S41RFV-C	
R sink	Resistor for sink	1Ω	0.1 -
R source	Resistor for source	2Ω	0.1 -
L1	Inductor	10μH	1μH - 1mH

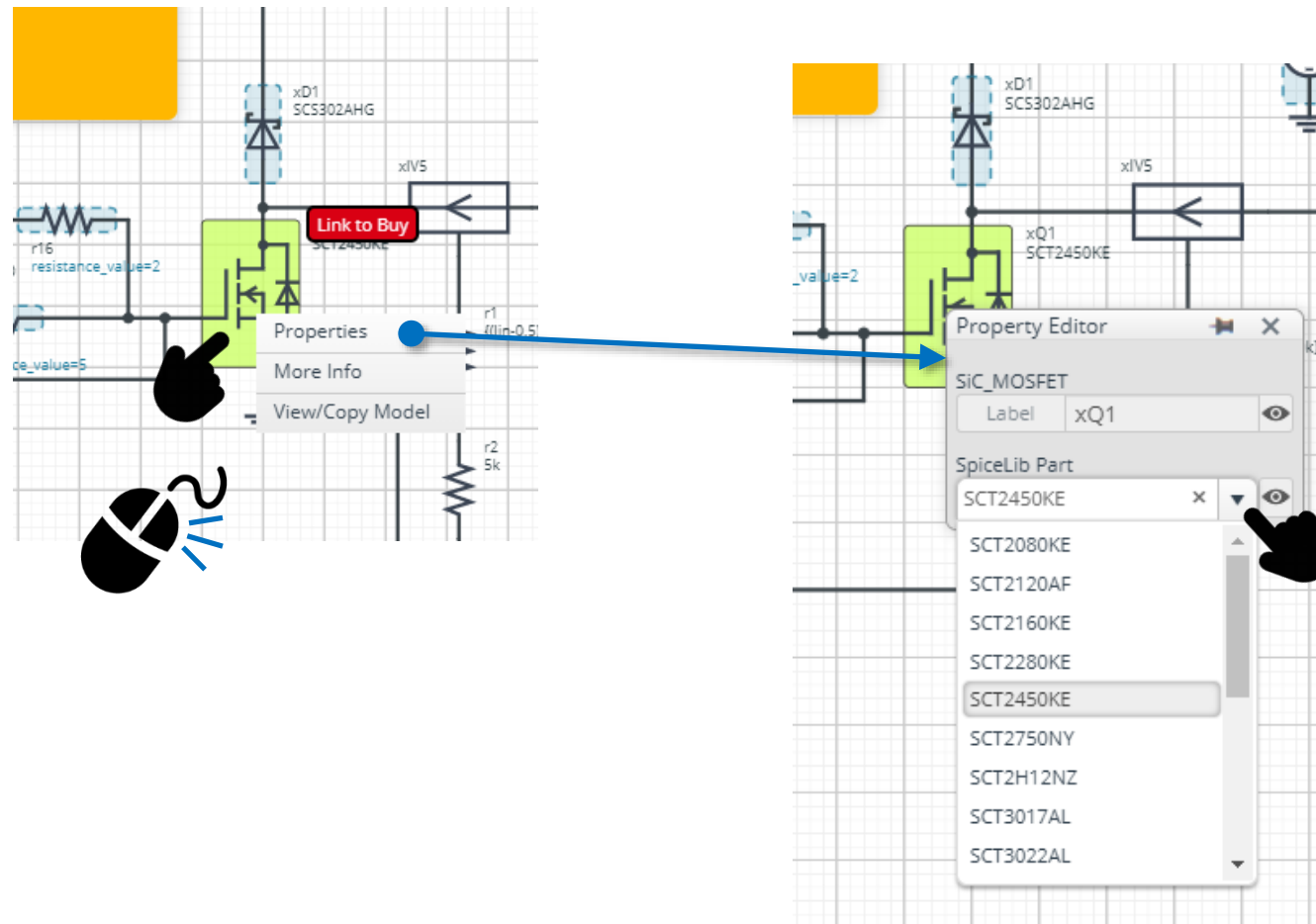
Simulation Circuit



How to choose a product to simulate

You can select a part number from the product line-ups available in the pull down.

At the simulation page,
Right-click on the device ➡ Select “Properties” ➡ Pull down “SpiceLib Part” ➡ Select the product



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