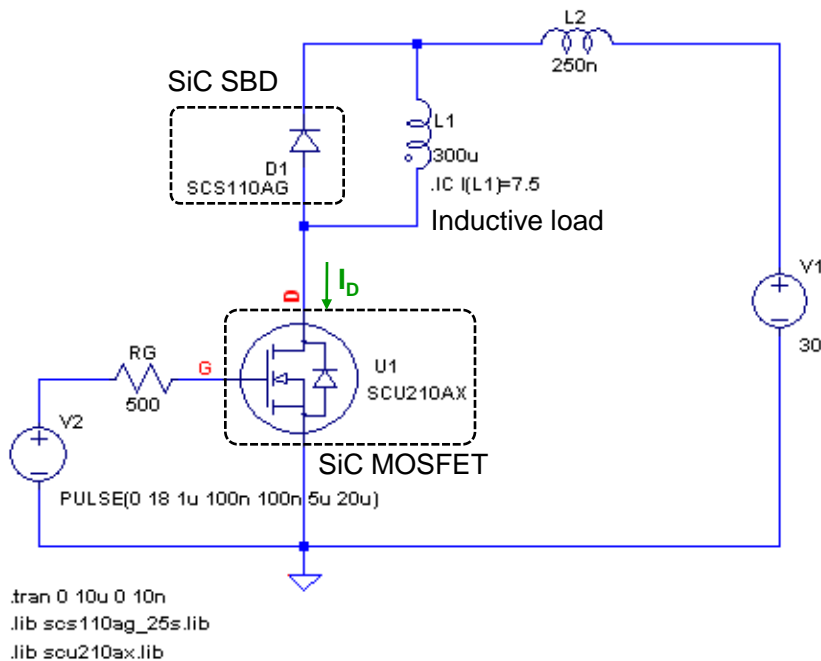


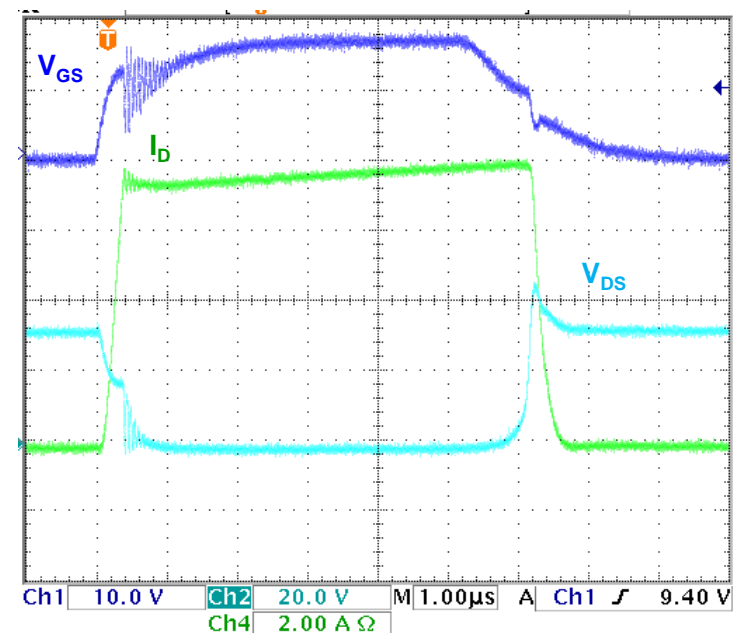
Contents

1. Measurement: SiC Device Switching Waveforms
2. Simulation: SiC Device Switching Waveforms [LTspice]
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4. Measurement: Si Device Switching Waveforms
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6. Simulation: Power Losses in Si Devices [LTspice]
7. Performance Comparison
 - A. Simulation Folder Index
 - B. Library Files and Symbol Files Location

1.Measurement: SiC Device Switching Waveforms

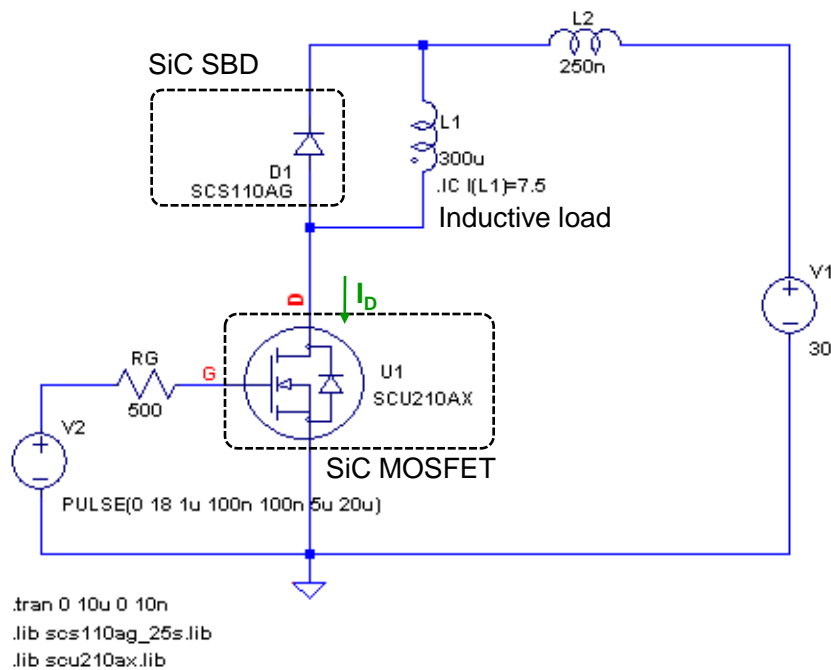


Test Circuit

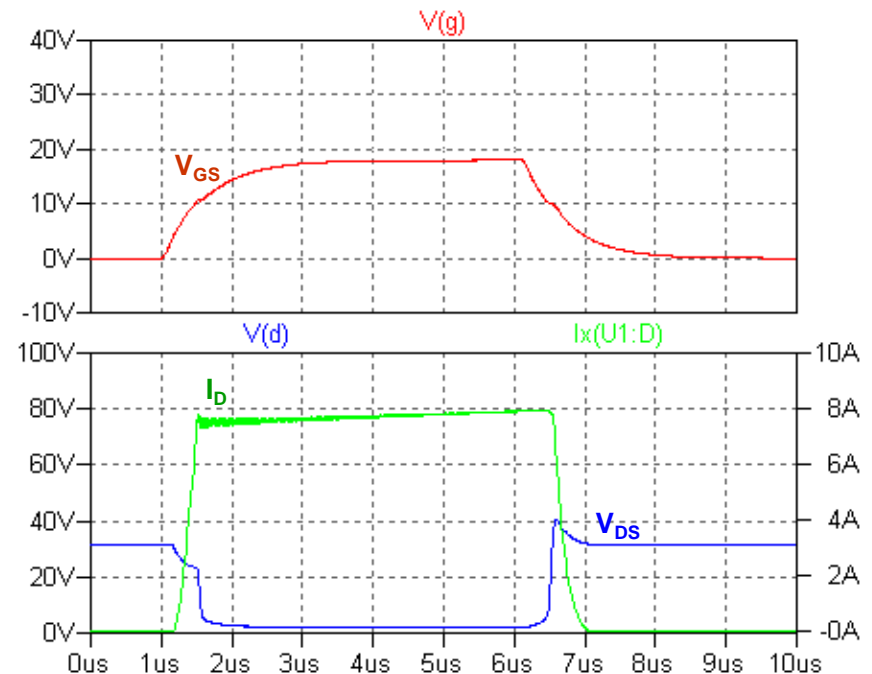


Measurement Waveform

2.Simulation: SiC Device Switching Waveforms

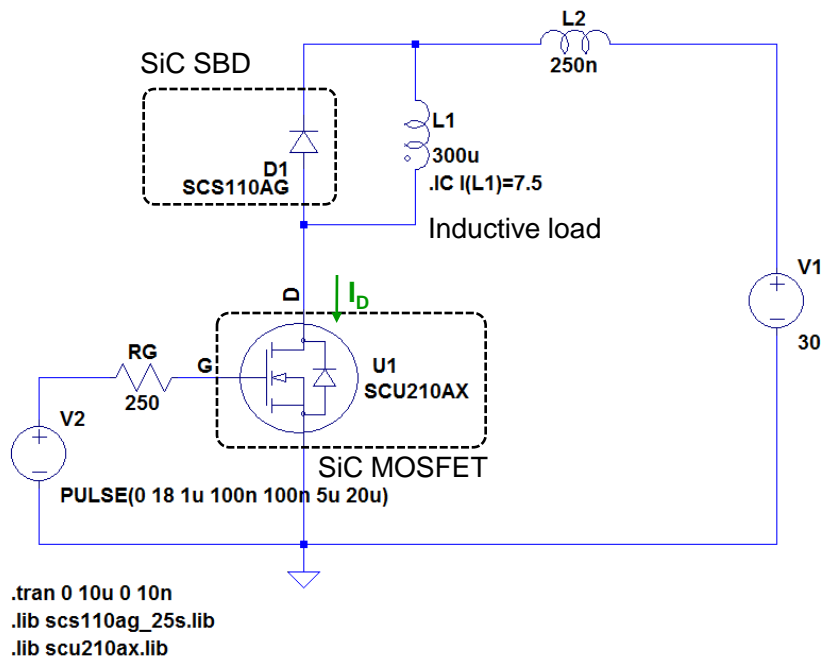


Simulation Circuit

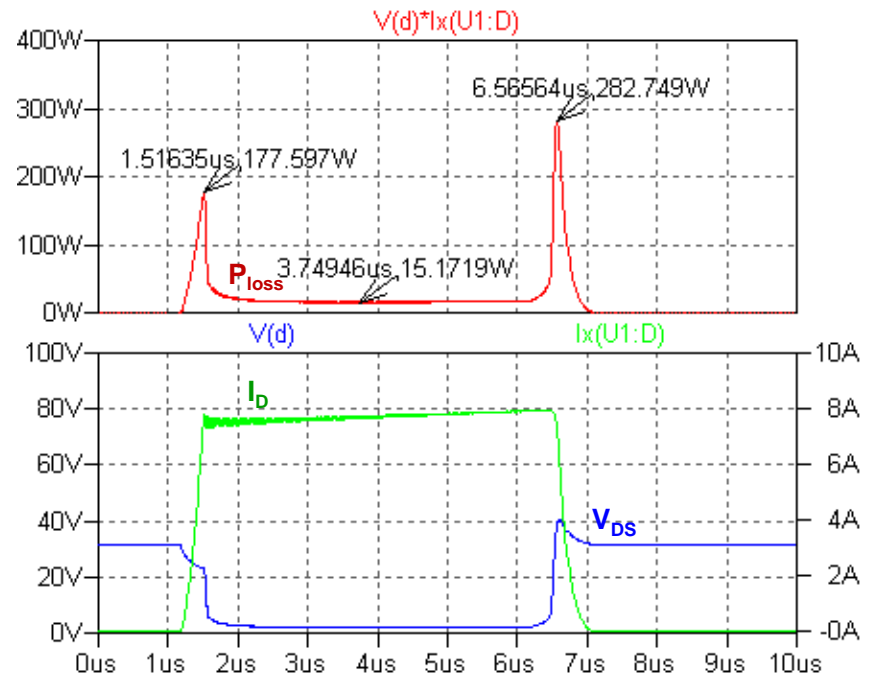


Simulation Waveform

3.Simulation: Power Losses in SiC Devices

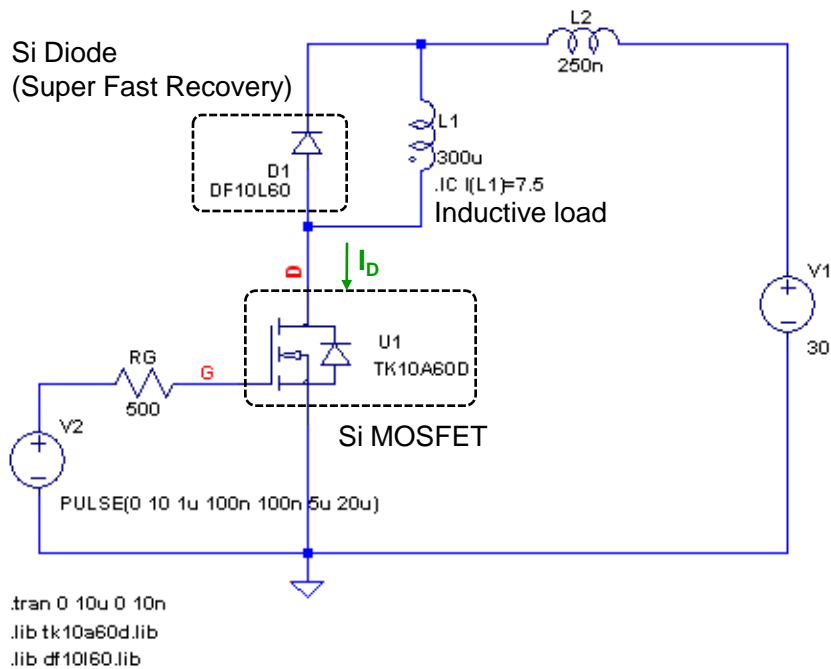


Simulation Circuit

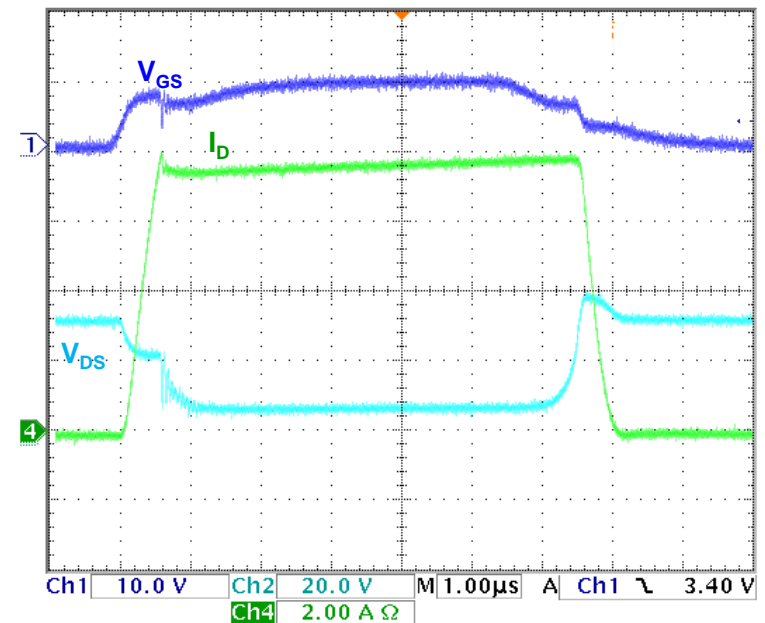


Simulation Waveform

4.Measurement: Si Device Switching Waveforms

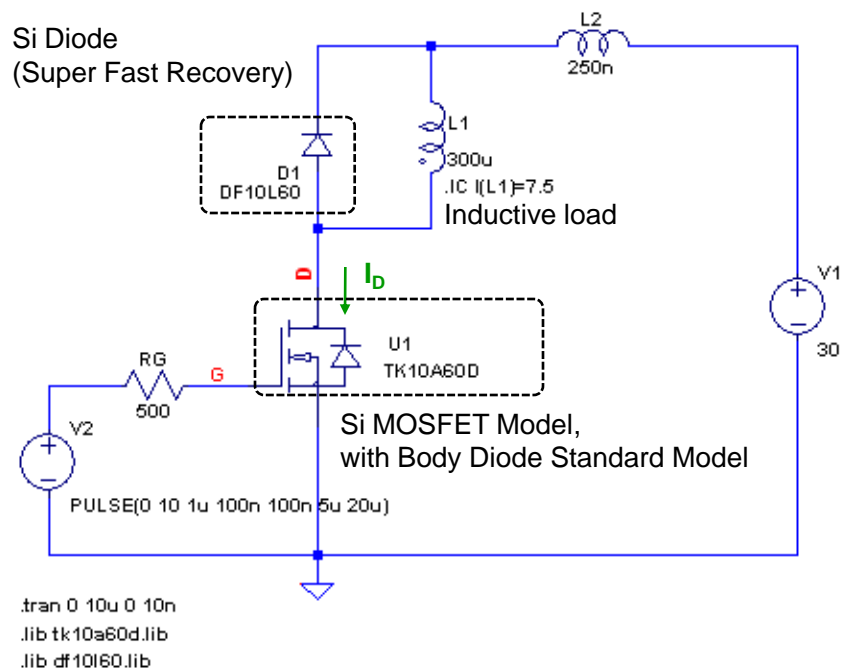


Test Circuit

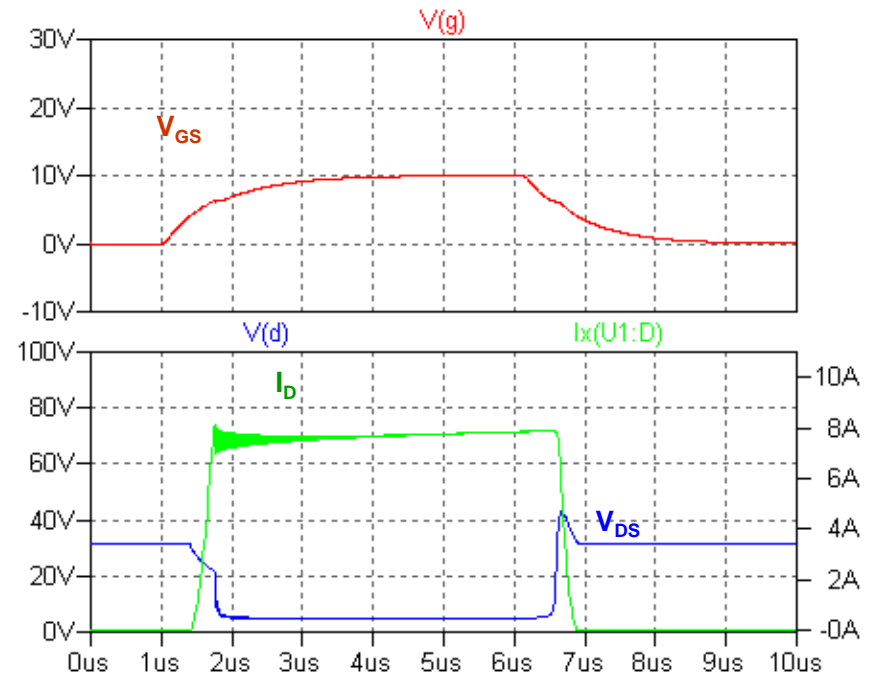


Measurement Waveform

5.Simulation: Si Device Switching Waveforms

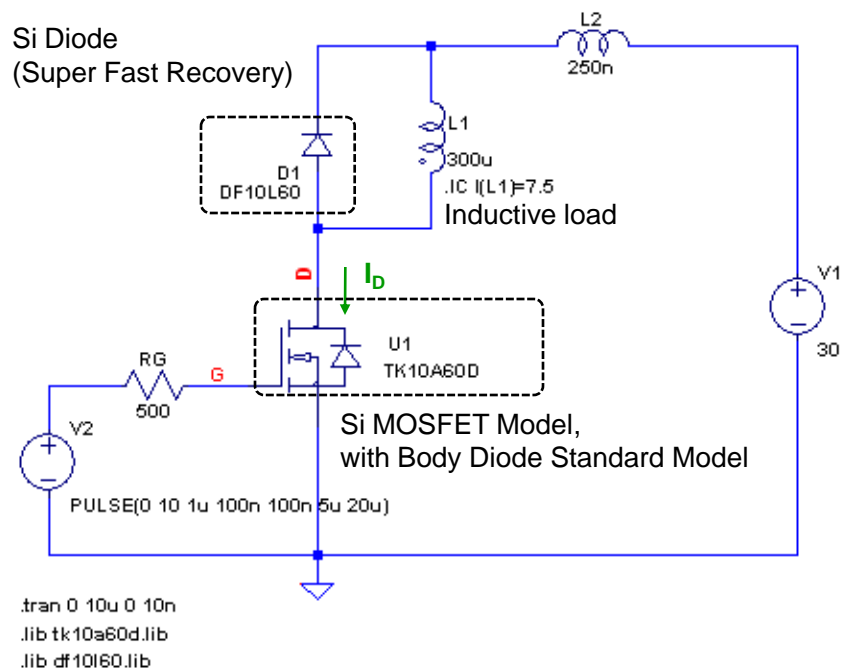


Simulation Circuit

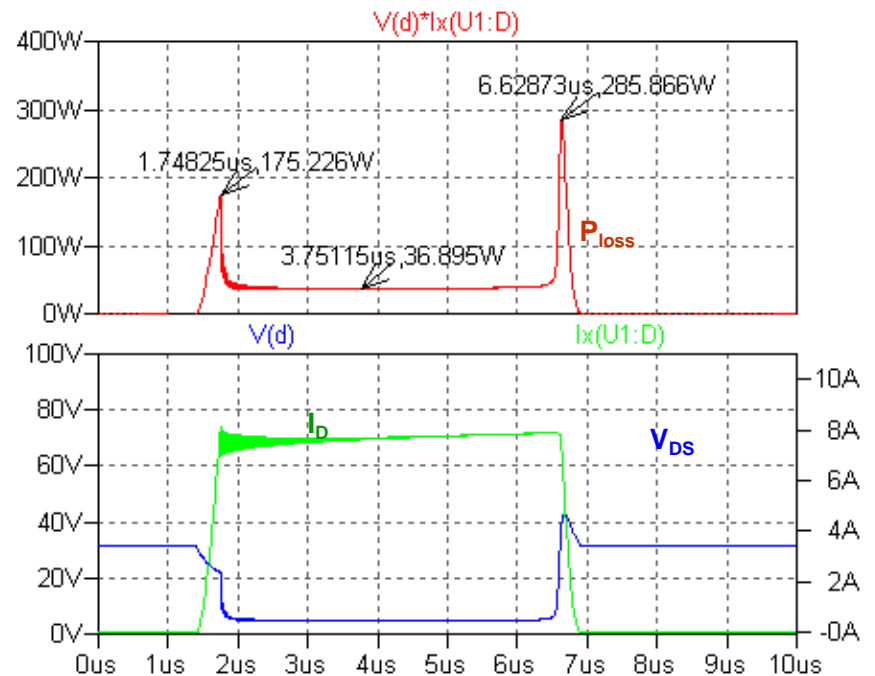


Simulation Waveform

6.Simulation: Power Losses in Si Devices



Simulation Circuit



Simulation Waveform

7. Performance Comparison

	P_{ON,PEAK} (W)	P_{CONDUCTIVE} (W)	P_{OFF,PEAK} (W)
Si Devices	175.23	36.90	285.57
SiC Devices	177.60	15.17	282.75
Loss Reduction (Addition)	(1.4%)	58.9%	1.0%

A. Simulation Folder

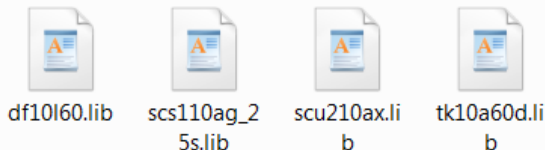
Topic	Folder
Simulation: SiC Device Switching Waveforms	SiC_Sw[LT]
Simulation: Power Losses in SiC Devices	
Simulation: Si Device Switching Waveforms	Si_Sw[LT]
Simulation: Power Losses in Si Devices	

B. Library Files and Symbol Files Location

...\Sw_Loss_Eval[LT]\Lib

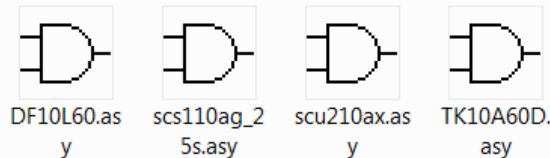
C:\Program Files\LTC\LTspiceIV\lib\

LIB File (4)



C:\Program Files\LTC\LTspiceIV\lib\sub

LTspice Symbol (4)



C:\Program Files\LTC\LTspiceIV\lib\sym

1. Copy the library files (.lib) from the folder ...\\Sw_Loss_Eval[LT]\\Lib\\, then paste into the folder C:\\Program Files\\LTC\\LTspiceIV\\lib\\sub
2. Copy the symbol files(.asy) from the folder ...\\Sw_Loss_Eval[LT]\\Lib\\, then paste into the folder C:\\Program Files\\LTC\\LTspiceIV\\lib\\sym