

# Buck Converter with AMOBEBADS®



Part number: CoreSat

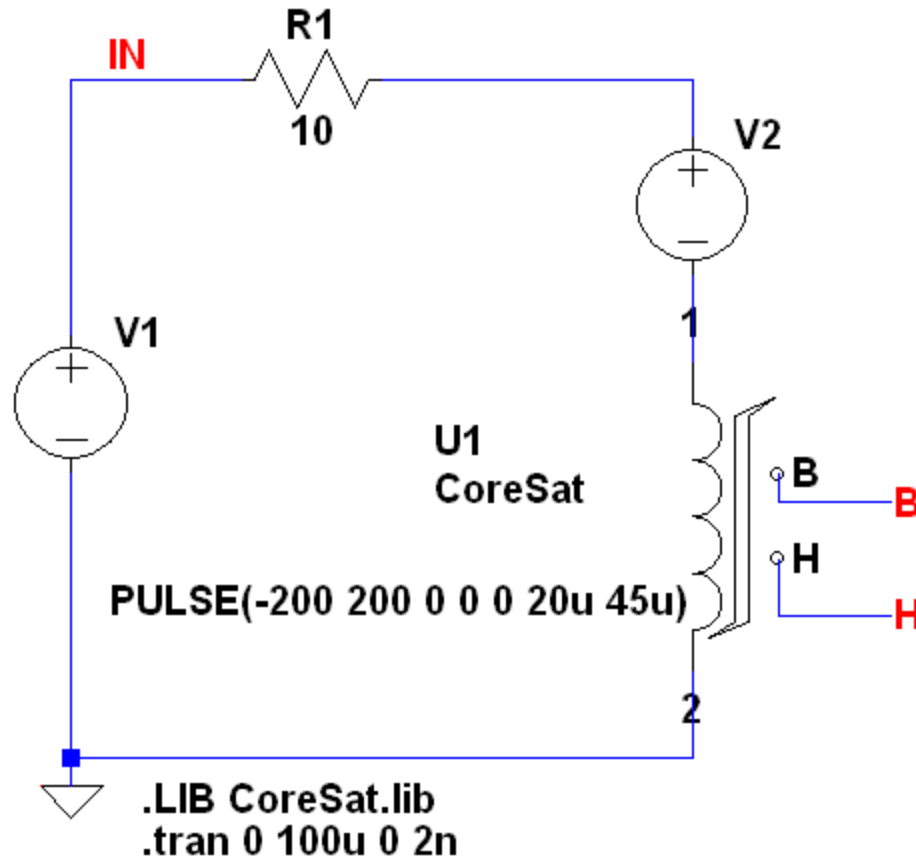
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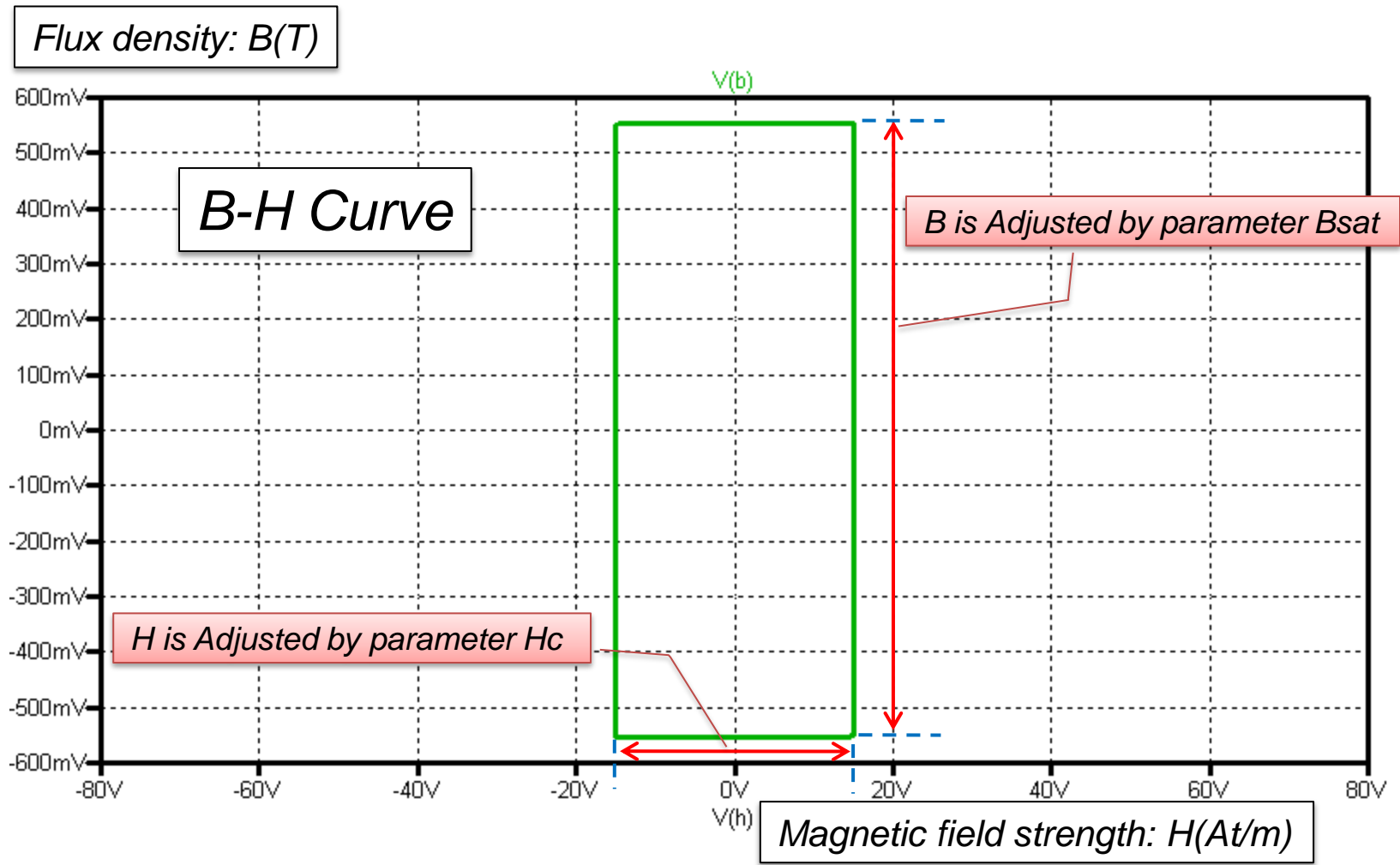
# 1. About Amorphous Core Model

- Parameter Behavior: Evaluation circuit (1/2)



# 1. About Amorphous Core Model

- Parameter Behavior: Simulation result (2/2)



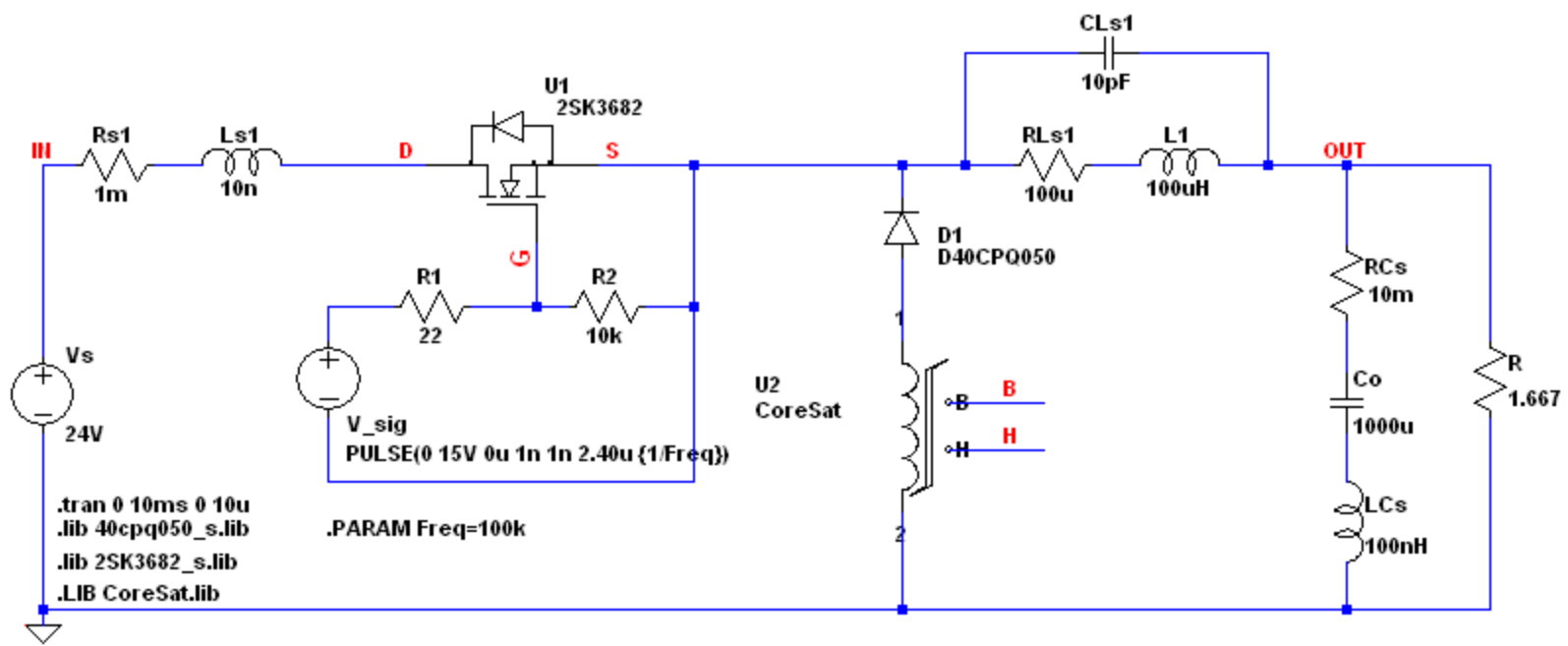
## 2. Buck Converter with AMOBEADS

- Simulation circuit

DC/DC converter

Vin=24VDC

Vout=5VDC



## 2.1 Summary

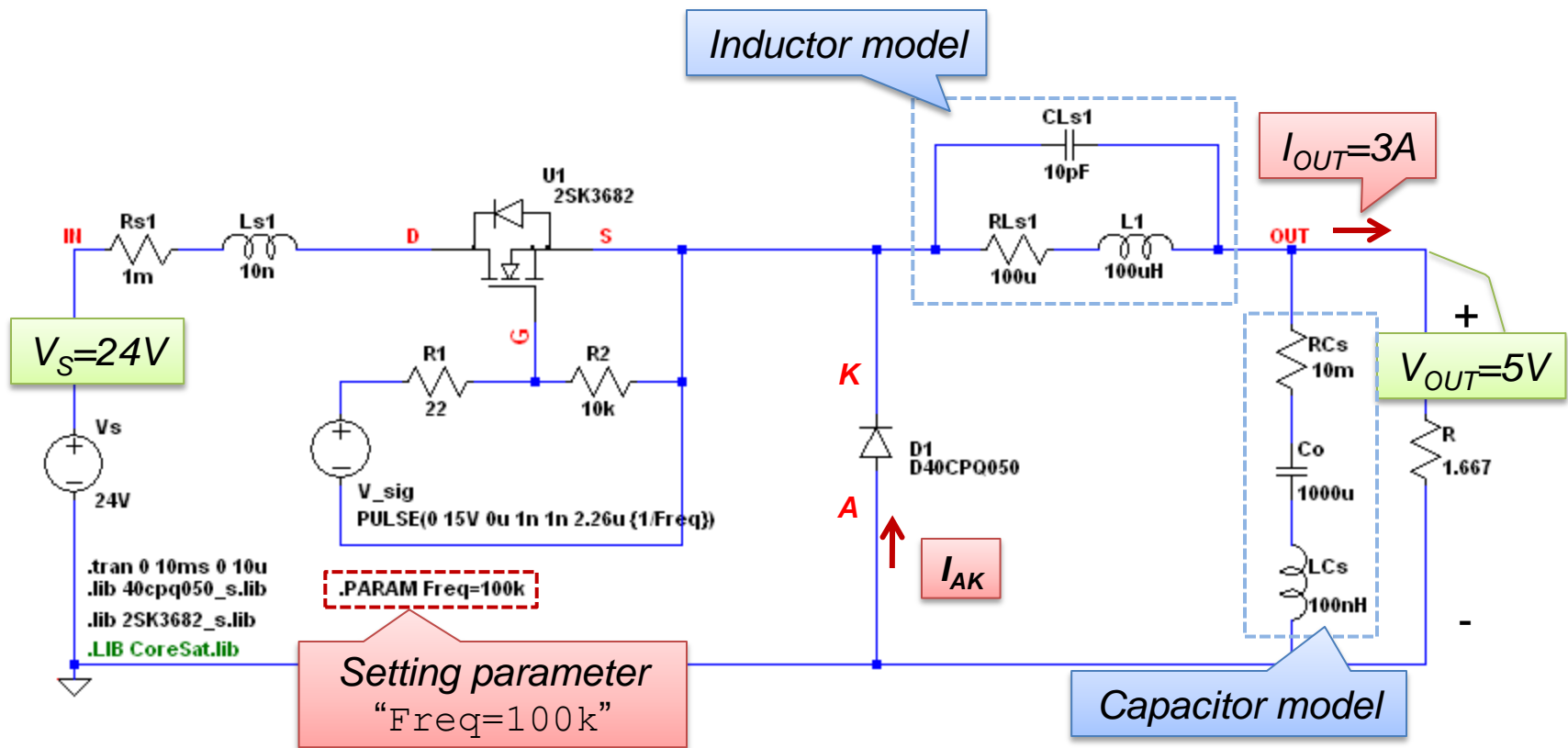
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Simulation circuit	$\Delta V_{OUT}$	
	Freq=100kHz	Freq=300kHz
Normal	343.530mV	345.000mV
Snubber	197.249mV	194.842mV
<b>AMOBEBADS</b>	<b>92.819mV</b>	<b>108.420mV</b>

## 2.2.1. Buck Converter (Frequency=100kHz)

- Simulation circuit and setting

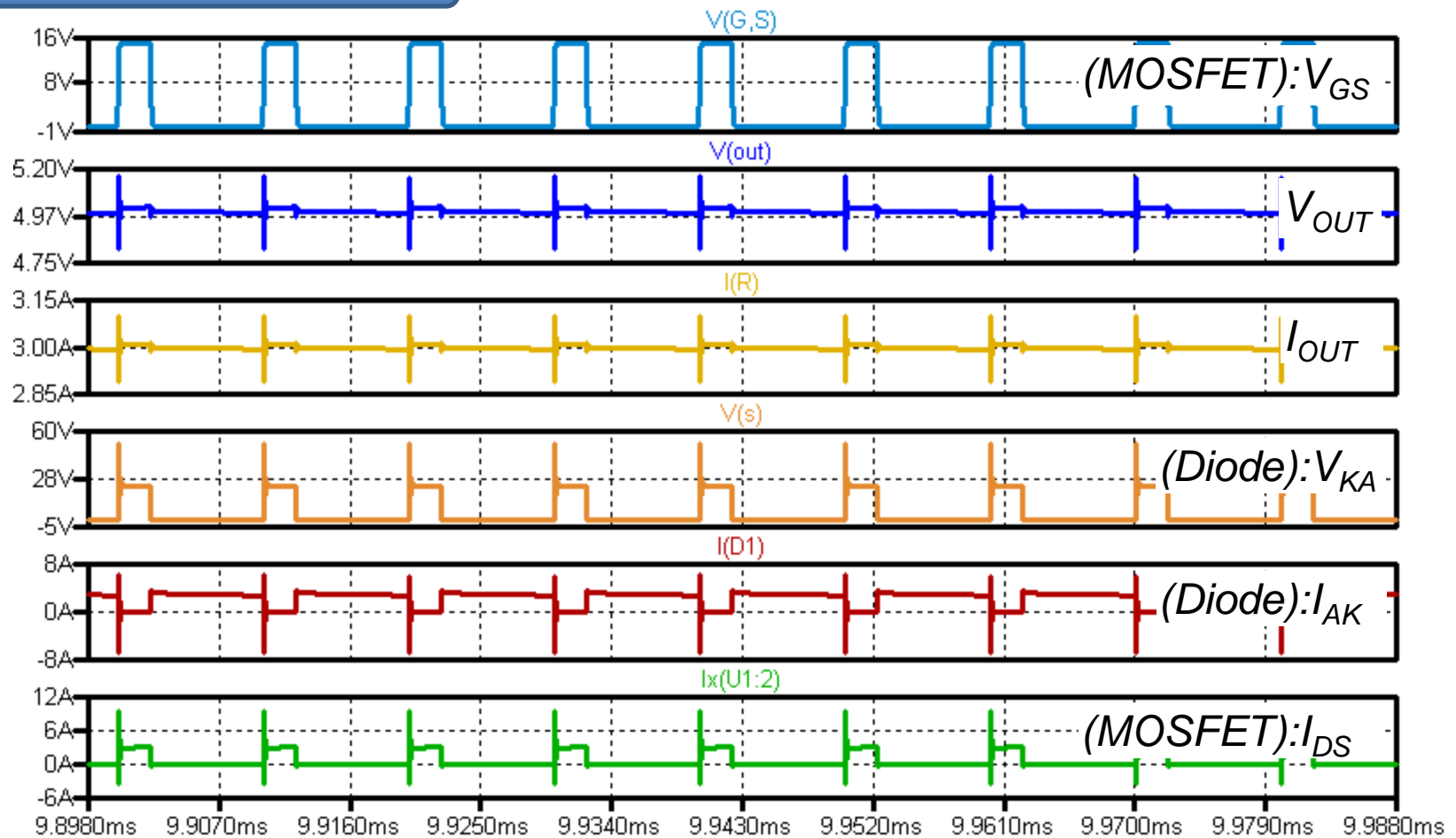
Without countermeasure



## 2.2.1. Buck Converter (Frequency=100kHz)

- Simulation result (zoom up1)

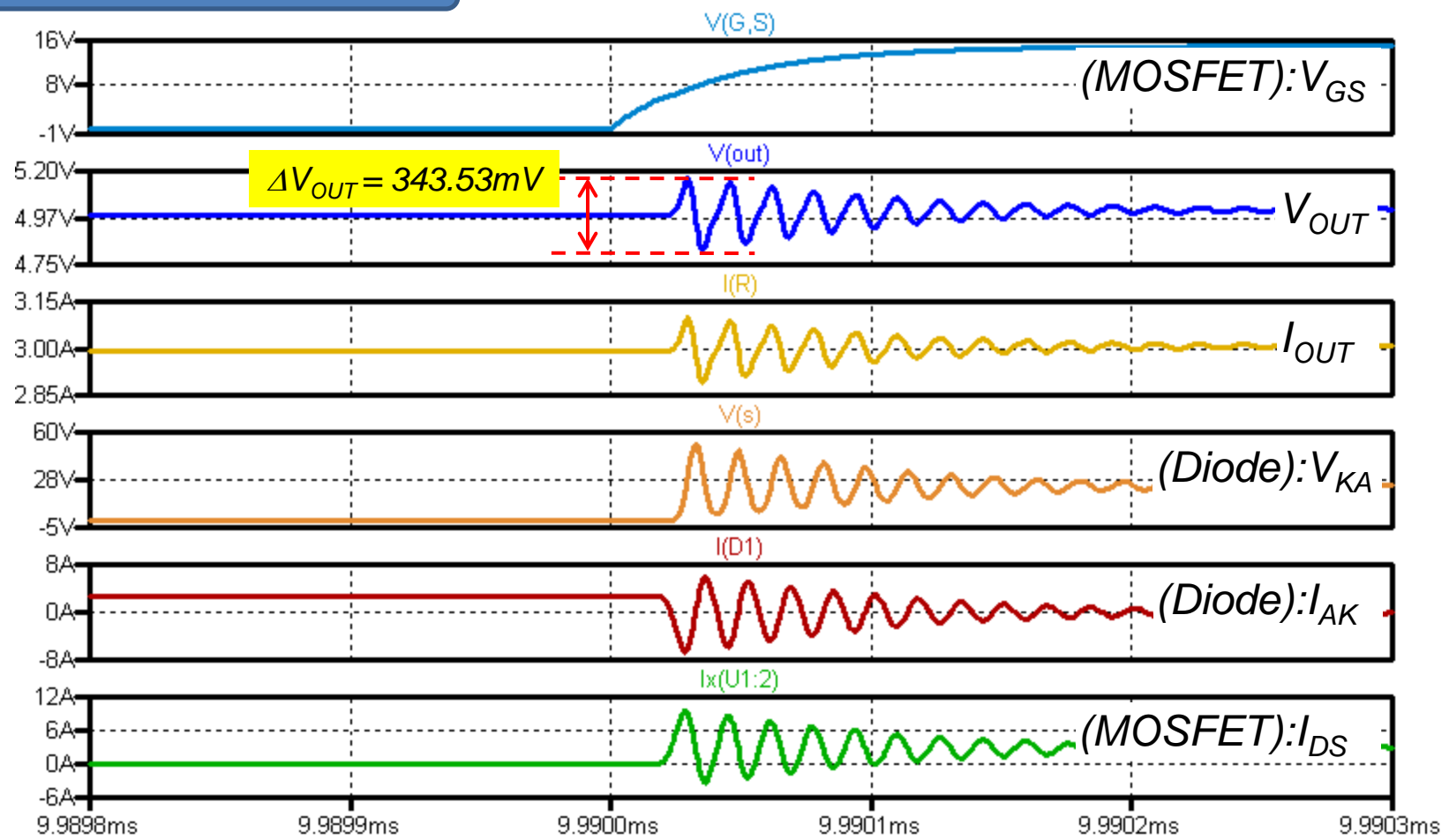
Without countermeasure





## 2.2.1. Buck Converter (Frequency=100kHz) - Simulation result (zoom up2)

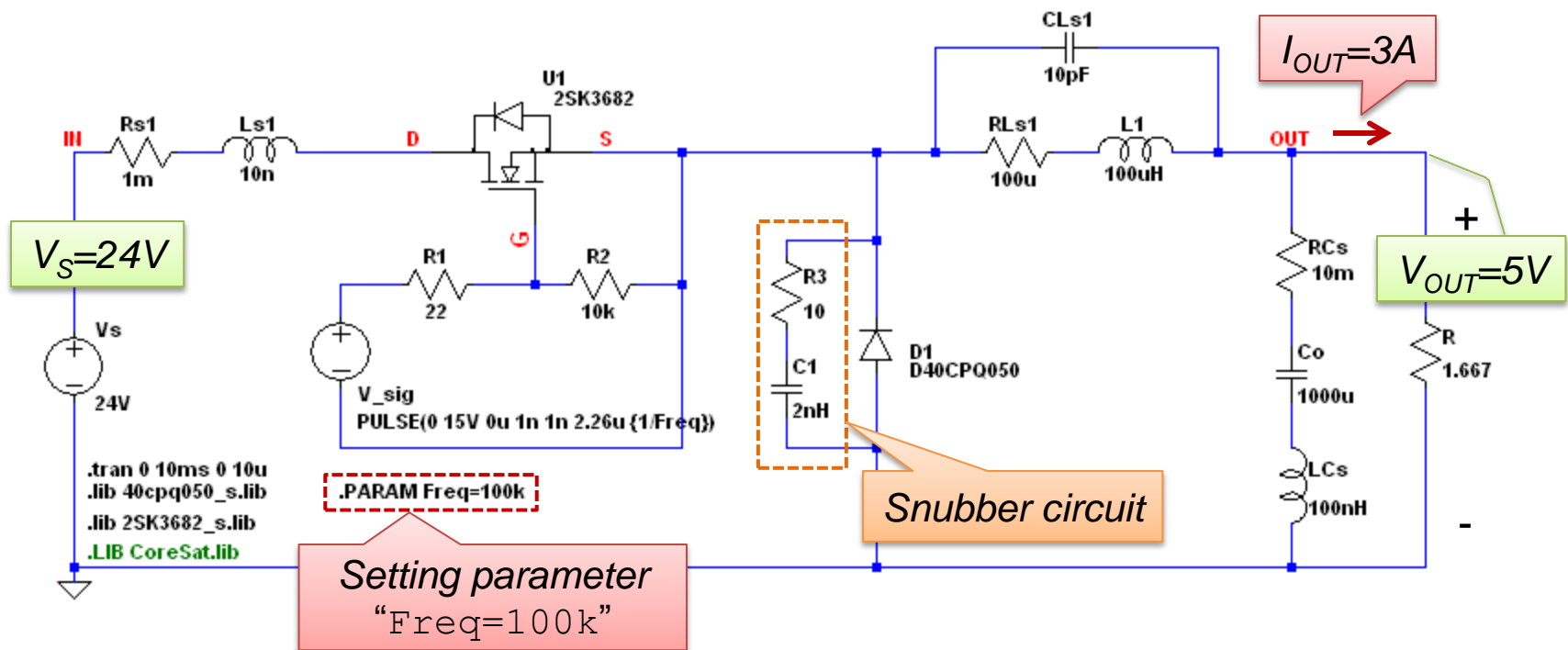
Without countermeasure



## 2.2.2. Buck Converter with Snubber circuit (Frequency=100kHz)

- Simulation circuit and setting

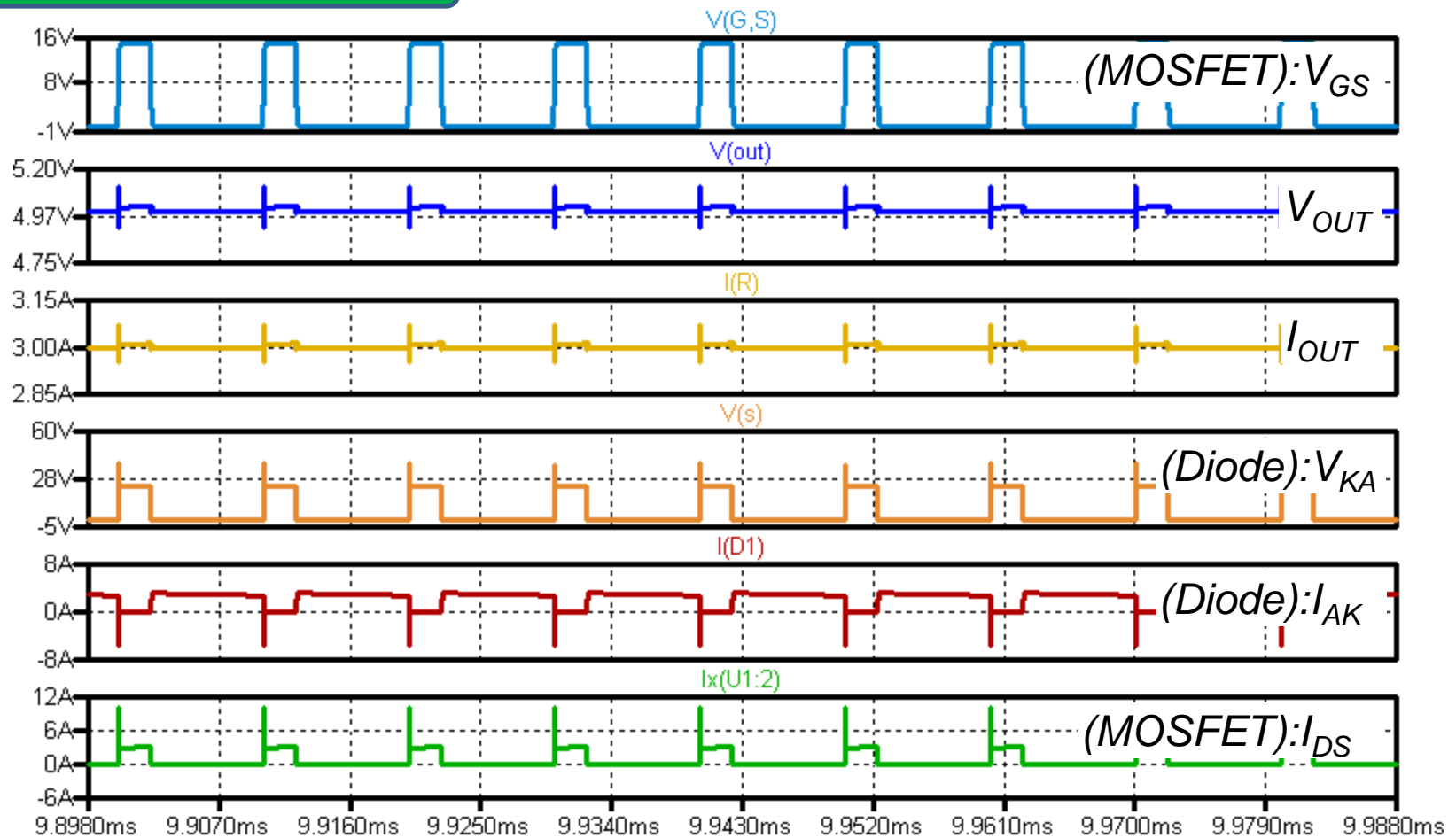
### CR Snubber



## 2.2.2. Buck Converter with Snubber circuit (Frequency=100kHz)

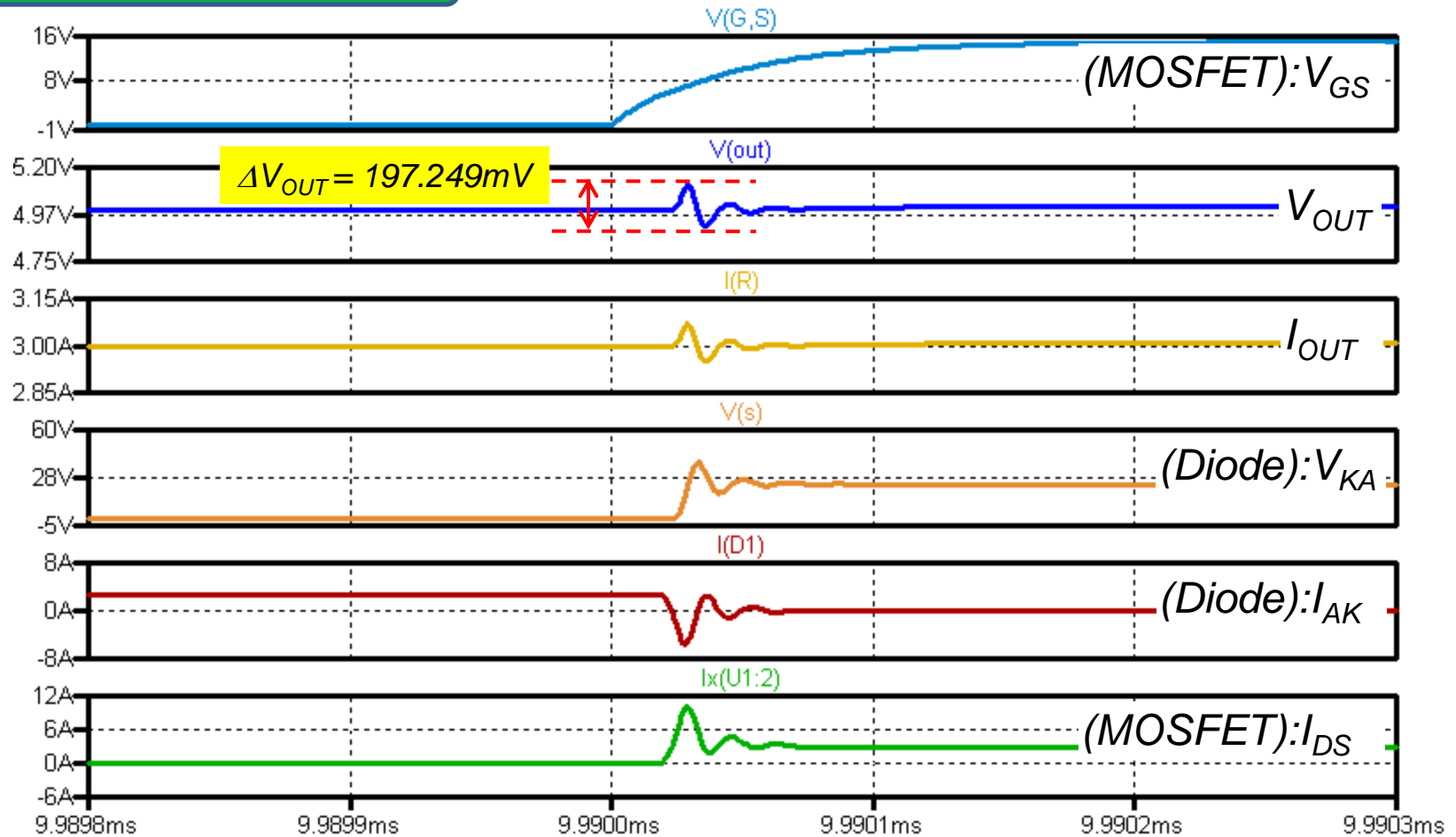
- Simulation result (zoom up1)

### CR Snubber



## 2.2.2. Buck Converter with Snubber circuit (Frequency=100kHz) - Simulation result (zoom up2)

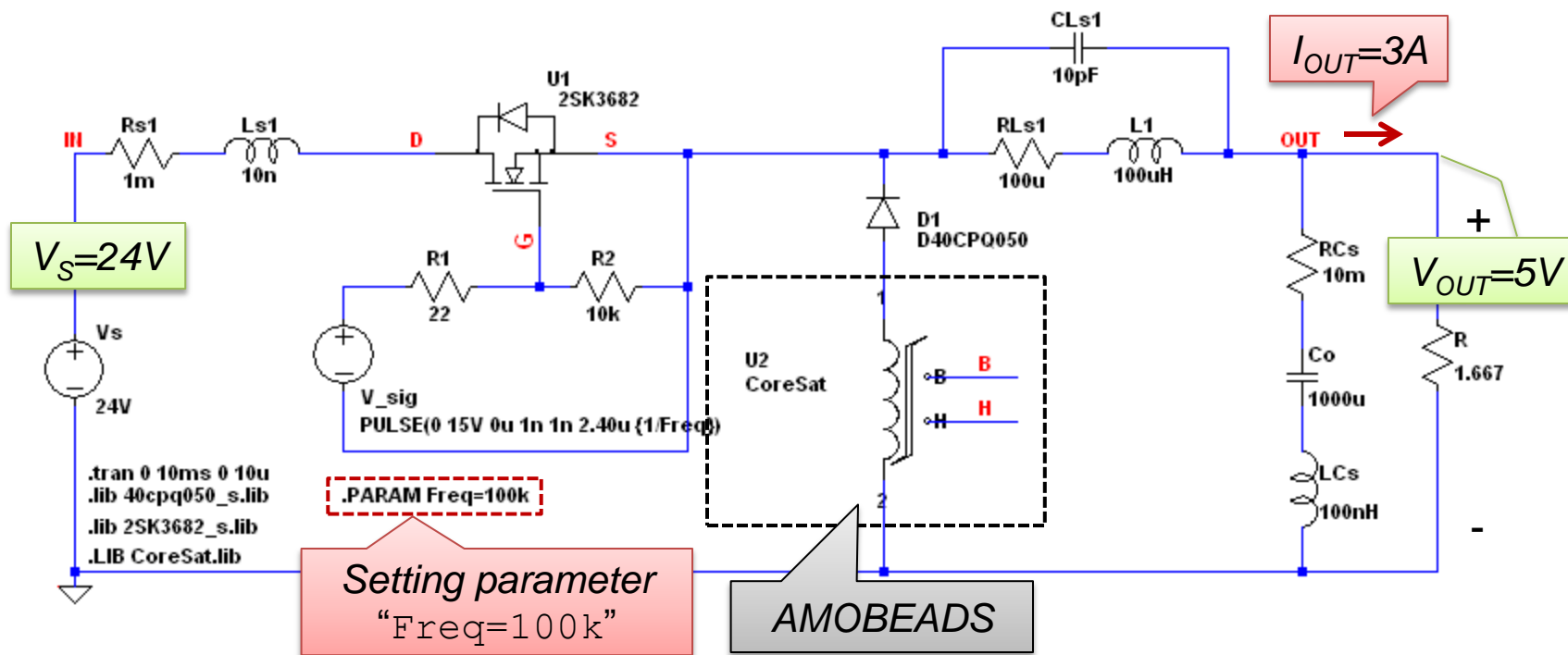
### CR Snubber



## 2.2.3. Buck Converter with AMOBEADS (Frequency=100kHz)

- Simulation circuit and setting

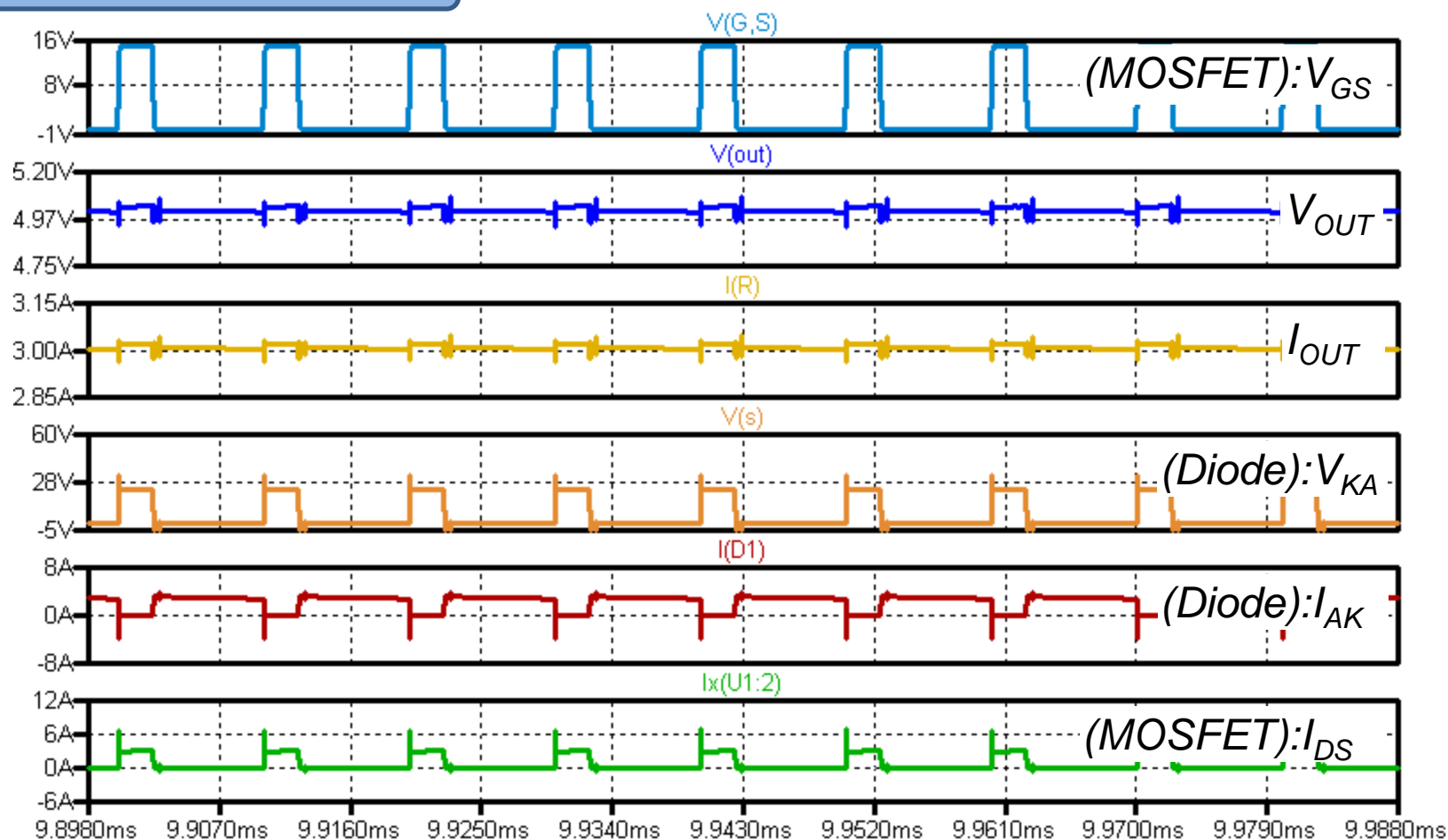
### AMOBEADS



## 2.2.3. Buck Converter with AMOBEADS (Frequency=100kHz)

- Simulation result (zoom up1)

### AMOBEADS



### 2.2.3. Buck Converter with AMOBEADS (Frequency=100kHz)

- Simulation result (zoom up2)

AMOBEADS

