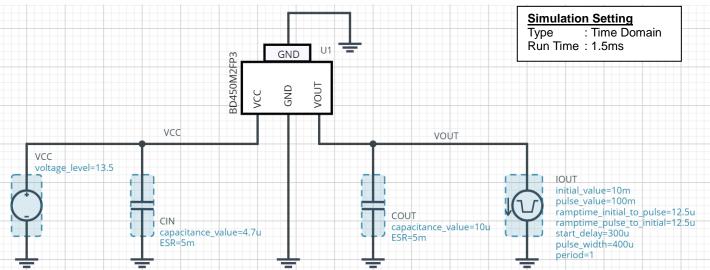


# 200mA 5.0V Output LDO Regulators BD450M2FP3 / Load Response

This Circuit simulates the Load Response.

You can check the fluctuation of the output voltage when the load current is abruptly changed.

### **Simulation Schematic**



# **Peripheral Components**

Instance Name	Туре	Parameter	Default Value	Variable Range		Unit
				Min	Max	Unit
CIN	Capacitor	capacitance_value	4.7	0.1	no constraint <sup>(Note 1)</sup>	μF
		ESR	5	1	10000	mΩ
COUT	Capacitor	capacitance_value	10	10	no constraint <sup>(Note 1)</sup>	μF
		ESR	5	1	10000	mΩ

#### **Simulation Conditions**

Instance Name	Туре	Parameter	Default Value	Variable Range		Linit
				Min	Max	Unit
VCC	Voltage Source	voltage_level	13.5	5.5	42	V
IOUT	Current Source	initial_value	10	0	200	mA
		pulse_value	100	0	200	mA
		ramptime_initial_to_pulse	12.5	no constraint <sup>(Note 1)</sup>		μs
		ramptime_pulse_to_initial	12.5	no constraint <sup>(Note 1)</sup>		μs
		start_delay	300	no constraint <sup>(Note 1)</sup>		μs
		pulse_width	400	no constraint <sup>(Note 1)</sup>		μs
		period	1	no constraint <sup>(Note 1)</sup>		S

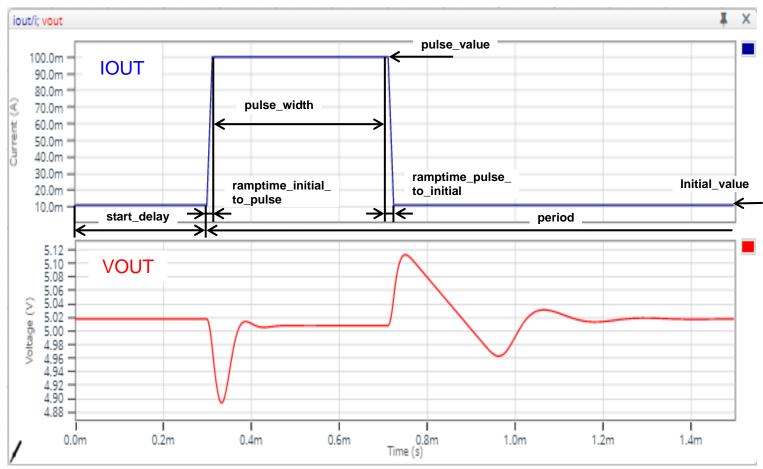
(Note 1) This is a constraint of the simulation settings and does not guarantee the operation of the IC.

Caution 1: The values from the simulation results are not guaranteed. Please use these results as a guide for your design.

*Caution 2:* These model characteristics are specifically at Ta=25°C. Thus, the simulation result with temperature variances may significantly differ from the result with the one done at actual application board (actual measurement).

Caution 3: Please refer to the datasheet for details of the technical information

# **Simulation Result**



	Notes
	Notes
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