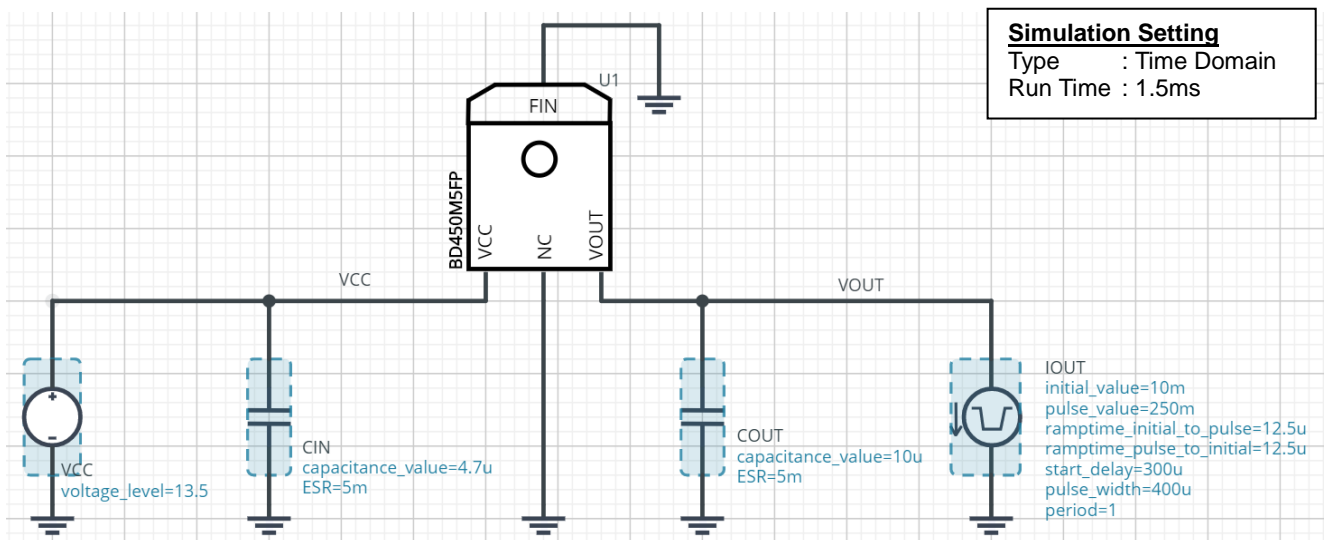


500mA 5.0V Output LDO Regulators BD450M5FP / Load Response

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	Type	Parameter	Default Value	Variable Range		Unit
				Min	Max	
CIN	Capacitor	capacitance_value	4.7	0.1	no constraint ^(Note 1)	μF
		ESR	5	1	10000	mΩ
COUT	Capacitor	capacitance_value	10	10	no constraint ^(Note 1)	μF
		ESR	5	1	10000	mΩ

Simulation Conditions

Instance Name	Type	Parameter	Default Value	Variable Range		Unit
				Min	Max	
VCC	Voltage Source	voltage_level	13.5	5.5	42	V
IOUT	Current Source	initial_value	10	0	500	mA
		pulse_value	250	0	500	mA
		ramptime_initial_to_pulse	12.5	no constraint ^(Note 1)		μs
		ramptime_pulse_to_initial	12.5	no constraint ^(Note 1)		μs
		start_delay	300	no constraint ^(Note 1)		μs
		pulse_width	400	no constraint ^(Note 1)		μs
		period	1	no constraint ^(Note 1)		s

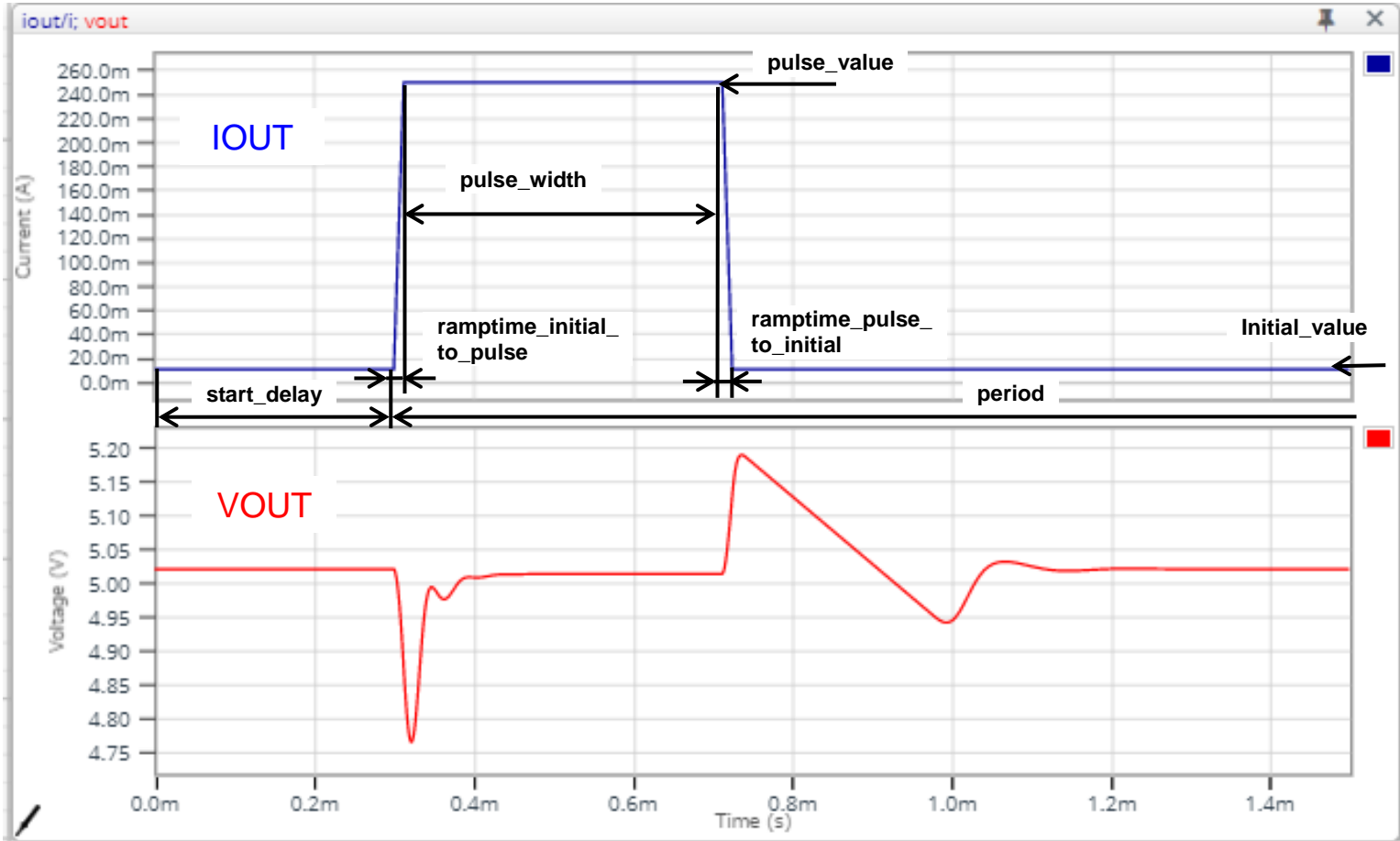
(Note 1) This is a constraint of the simulation settings and does not guarantee the operation of the IC.

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



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