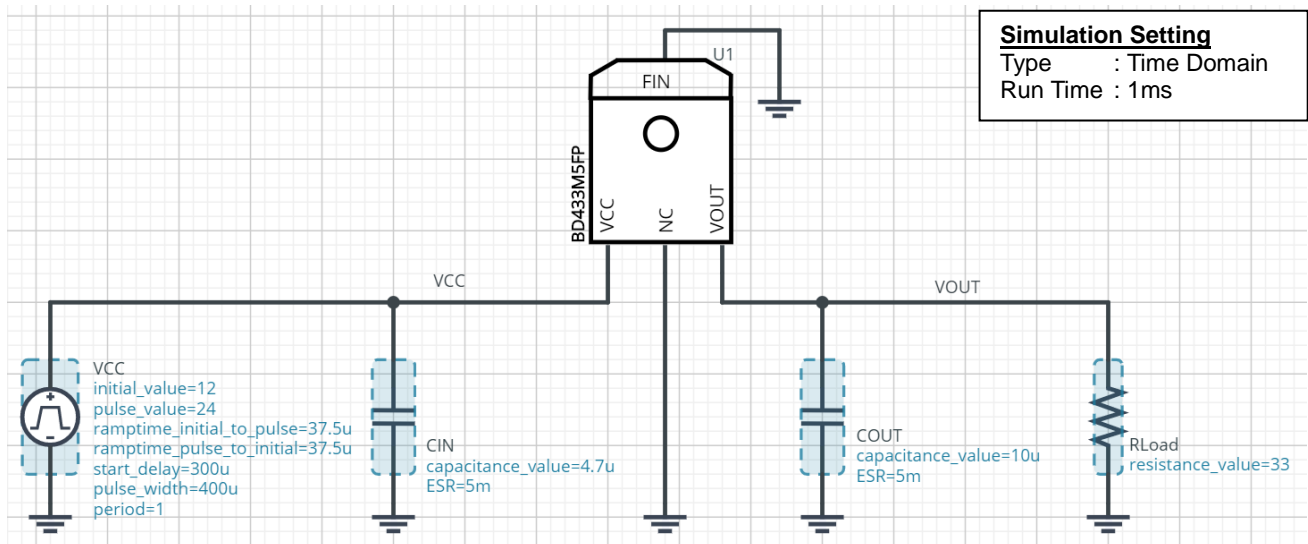


## 500mA 3.3V Output LDO Regulators BD433M5FP / Line Response

This Circuit simulates the Line Response.  
You can check the fluctuation of the output voltage when the input voltage 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 <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	Type	Parameter	Default Value	Variable Range		Unit
				Min	Max	
VCC	Voltage Source	initial_value	12	4	42	V
		pulse_value	24	4	42	V
		ramptime_initial_to_pulse	37.5	no constraint <sup>(Note 1)</sup>		μs
		ramptime_pulse_to_initial	37.5	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
Rload	Resistor	resistance_value	33	6.6	100M	Ω

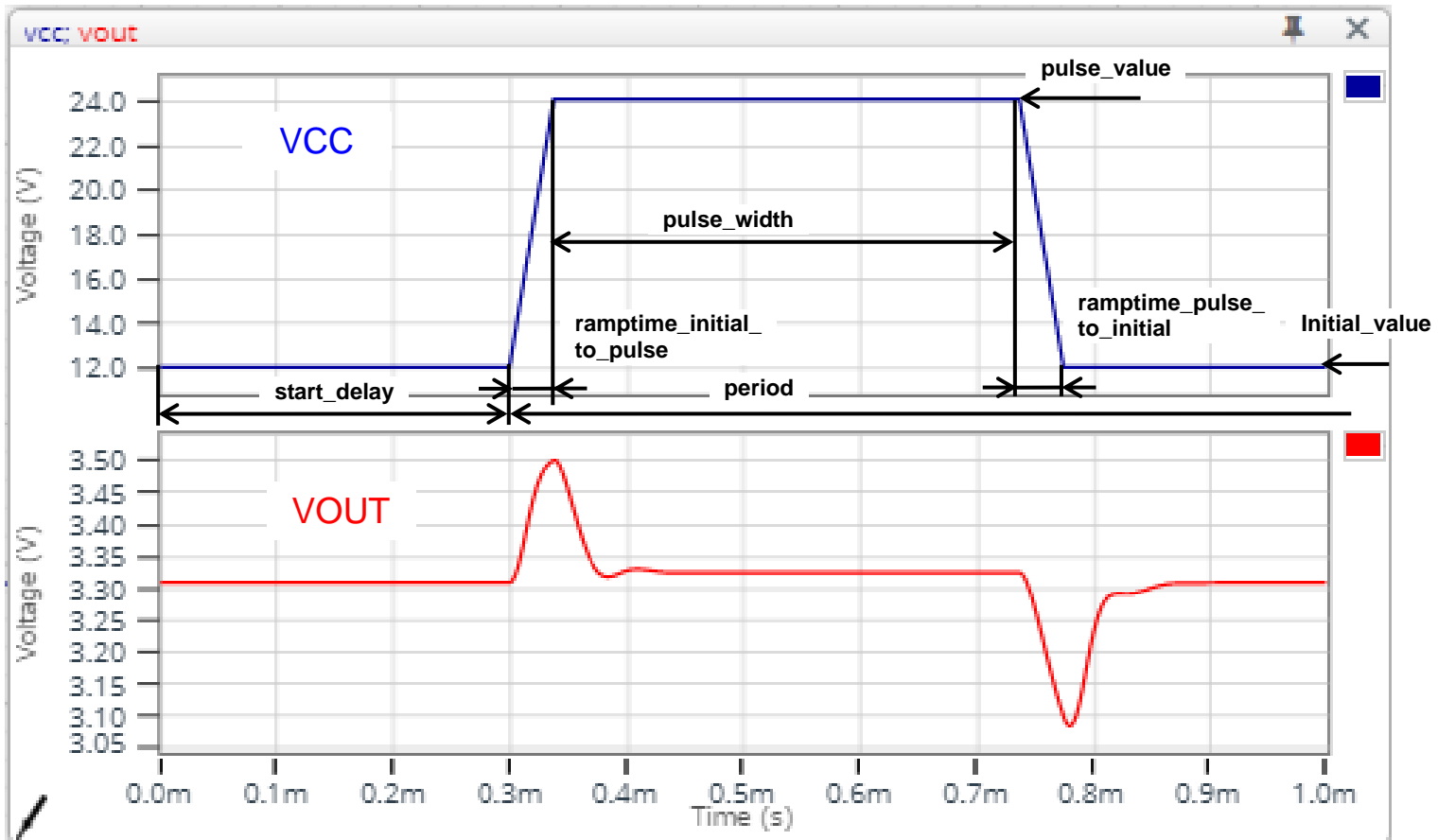
(Note 1) This is a constraint of the simulation settings and does not guarantee the operation of the IC.

**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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