

## Product Overview

### NCP308: Voltage Supervisor, Ultra Low Quiescent Current, Programmable Delay Time

For complete documentation, see the data sheet.

The NCP308 series is one of the ON Semiconductor Supervisory circuit families. It is optimized to monitor system voltages from 0.405 V up to 5.5 V., asserting an active low open-drain /RESET output, together with Manual Reset (/MR) Input. The part comes with both fixed and internally adjustable versions

#### Features

- Very low Quiescent Current 1.6  $\mu$ V
- Fixed threshold voltage version for Standard Voltage Rails
- Adjustable threshold version available with low threshold (0.405 V min.)
- High Threshold Voltage Accuracy: 0.31% typical
- Wide Supply voltage range 1.6 to 5.5 V
- Manual Reset Input (/MR) - Open Drain /RESET Output (Push Pull available upon request)
- Flexible Delay Time Programmability (1.25 ms up to 10 s)

#### Applications

- DSP or Microcontroller based applications
- PDA / Hand-Held Products
- Portable / Battery-Powered Products
- FPGA / ASIC Applications

#### Benefits

- Saves battery and power supply power
- Saves external components, simple to design
- Flexible design
  
- Robust design

#### End Products

- Notebook / Desktop Computers

## Part Electrical Specifications

Product	Compliance	Status	Voltages Monitored	V <sub>CC</sub> Max (V)	V <sub>(T0)</sub> Typ (V)	I <sub>0</sub> Typ (μA)	Reset Active State	Reset Timer	Manual Reset	Watchdog Timer	Package Type
NCP308MT090TBG	Pb-free	Active	1	5.5	0.9	1.6	Low	Yes	Yes	No	WDFN-6
	Halide free										
NCP308MT120TBG	Pb-free	Active	1	5.5	1.2	1.6	Low	Yes	Yes	No	WDFN-6
	Halide free										
NCP308MT125TBG	Pb-free	Active	1	5.5	1.25	1.6	Low	Yes	Yes	No	WDFN-6
	Halide free										
NCP308MT150TBG	Pb-free	Active	1	5.5	1.5	1.6	Low	Yes	Yes	No	WDFN-6
	Halide free										
NCP308MT180TBG	Pb-free	Active	1	5.5	1.8	1.6	Low	Yes	Yes	No	WDFN-6
	Halide free										
NCP308MT190TBG	Pb-free	Active	1	5.5	1.9	1.6	Low	Yes	Yes	No	WDFN-6
	Halide free										
NCP308MT250TBG	Pb-free	Active	1	5.5	2.5	1.6	Low	Yes	Yes	No	WDFN-6
	Halide free										
NCP308MT280TBG	Pb-free	Active	1	5.5	2.8	1.6	Low	Yes	Yes	No	WDFN-6
	Halide free										
NCP308MT300TBG	Pb-free	Active	1	5.5	3	1.6	Low	Yes	Yes	No	WDFN-6
	Halide free										
NCP308MT330TBG	Pb-free	Active	1	5.5	3.3	1.6	Low	Yes	Yes	No	WDFN-6
	Halide free										
NCP308MT500TBG	Pb-free	Active	1	5.5	5	1.6	Low	Yes	Yes	No	WDFN-6
	Halide free										
NCP308MTADJTBG	Pb-free	Active	1	5.5	0.405 min	1.6	Low	Yes	Yes	No	WDFN-6
	Halide free										
NCP308SN090T1G	Pb-free	Active	1	5.5	0.9	1.6	Low	Yes	Yes	No	TSOP-6
	Halide free										
NCP308SN120T1G	Pb-free	Active	1	5.5	1.2	1.6	Low	Yes	Yes	No	TSOP-6
	Halide free										
NCP308SN125T1G	Pb-free	Active	1	5.5	1.25	1.6	Low	Yes	Yes	No	TSOP-6
	Halide free										
NCP308SN150T1G	Pb-free	Active	1	5.5	1.5	1.6	Low	Yes	Yes	No	TSOP-6
	Halide free										
NCP308SN180T1G	Pb-free	Active	1	5.5	1.8	1.6	Low	Yes	Yes	No	TSOP-6
	Halide free										
NCP308SN190T1G	Pb-free	Active	1	5.5	1.9	1.6	Low	Yes	Yes	No	TSOP-6
	Halide free										
NCP308SN250T1G	Pb-free	Active	1	5.5	2.5	1.6	Low	Yes	Yes	No	TSOP-6
	Halide free										
NCP308SN280T1G	Pb-free	Active	1	5.5	2.8	1.6	Low	Yes	Yes	No	TSOP-6
	Halide free										
NCP308SN300T1G	Pb-free	Active	1	5.5	3	1.6	Low	Yes	Yes	No	TSOP-6
	Halide free										
NCP308SN330T1G	Pb-free	Active	1	5.5	3.3	1.6	Low	Yes	Yes	No	TSOP-6
	Halide free										
NCP308SN500T1G	Pb-free	Active	1	5.5	5	1.6	Low	Yes	Yes	No	TSOP-6
	Halide free										
NCP308SNADJT1G	Pb-free	Active	1	5.5	0.405 min	1.6	Low	Yes	Yes	No	TSOP-6
	Halide free										
NCV308SN330T1G	AEC Qualified	Active	1	5.5	3.3	1.6	Low	Yes	Yes	No	TSOP-6
	PPAP Capable										
	Pb-free Halide free										

NCV308SNADJT1G	AEC Qualified	Active	1	5.5	0.405 min	1.6	Low	Yes	Yes	No	TSOP-6
	PPAP Capable										
	Pb-free										
	Halide free										

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