

Product Overview

NCP451: Controlled Load Switch, Ultra-Small, Low Ron, 3.0 A, with Auto-Discharge Path

For complete documentation, see the data sheet.

The NCP451 is a very low Ron MOSFET controlled by external logic pin, allowing optimization of battery life, and portable device autonomy. Indeed, thanks to a current consumption optimization with NMOS structure, leakage currents are eliminated by isolating connected IC on the battery when not used. A wide voltage range is proposed from 0.7V to 5.5V.

Features

- 0.75 V - 5.5 V operating range
- 12 m $R_{DS(ON)}$ at 3.6 V
- DC current up to 3 A
- Output Auto-discharge

Benefits

- Compatible with the latest generation of SoCs and CPUs
- Minimizes voltage drop and power loss
- Support for portable processors
- Eliminates residual voltage on the output rail

Applications

- Load Management

End Products

- Smart Phones
- Tablets
- Ultrabooks

Part Electrical Specifications

Product	Compliance	Status	Channels	r_{on} (m Ω)	I Max (A)	V_i Min (V)	V_i Max (V)	Package Type
NCP451AFCCT2G	Pb-free	Active	1	13	3	0.5	5.5	WLCSP-6
	Halide free							
NCP451AFCT2G	Pb-free	Active	1	13	3	0.5	5.5	WLCSP-6
	Halide free							
NCP451FCT2G	Pb-free	Active	1	13	3	0.5	5.5	WLCSP-6
	Halide free							

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Created on: 11/6/2017