

Product Overview

NCP383: Power Distribution Switch, Current-Limiting, Adjustable

For complete documentation, see the data sheet.

The NCP383 is a single input dual outputs high side power distribution switch designed for applications where heavy capacitive loads and short circuits are likely to be encountered, incorporating two very low RDSON, Nchannel MOSFETs in a single package. Each channel of the device limits the output current to a desired level by switching into a constant current mode when the output load exceeds the current limit threshold or a short is present. The current limit threshold is externally fixed with pull down resistor placed between ILIM and GND. The power switches rise and fall times are controlled to minimize current ringing during turn on off. An internal reverse voltage detection comparator disables the power switch if the output voltage is higher than the input voltage to protect devices on the input side of the switches. The /FLAGx logic output asserts low during overcurrent, reverse voltage or over temperature conditions. The switch is controlled by a logic enable input active high or low.

Features

- Operating Range
- Current Limit
- Current Limit Accuracy
- Very Fast Over Current Detection Response
- Very Low Standby Current
- Soft Start
- UL Listed
- IEC60950-ED2-AMD1 Certified

Benefits

- 2.7 V to 5.5 V
- Adjustable up to 2.8 A
- $\pm 7.5\%$ at 2.8 A
- 2 μ s
- Maximum 1 μ s
- Prevents Inrush Current
- File E343275

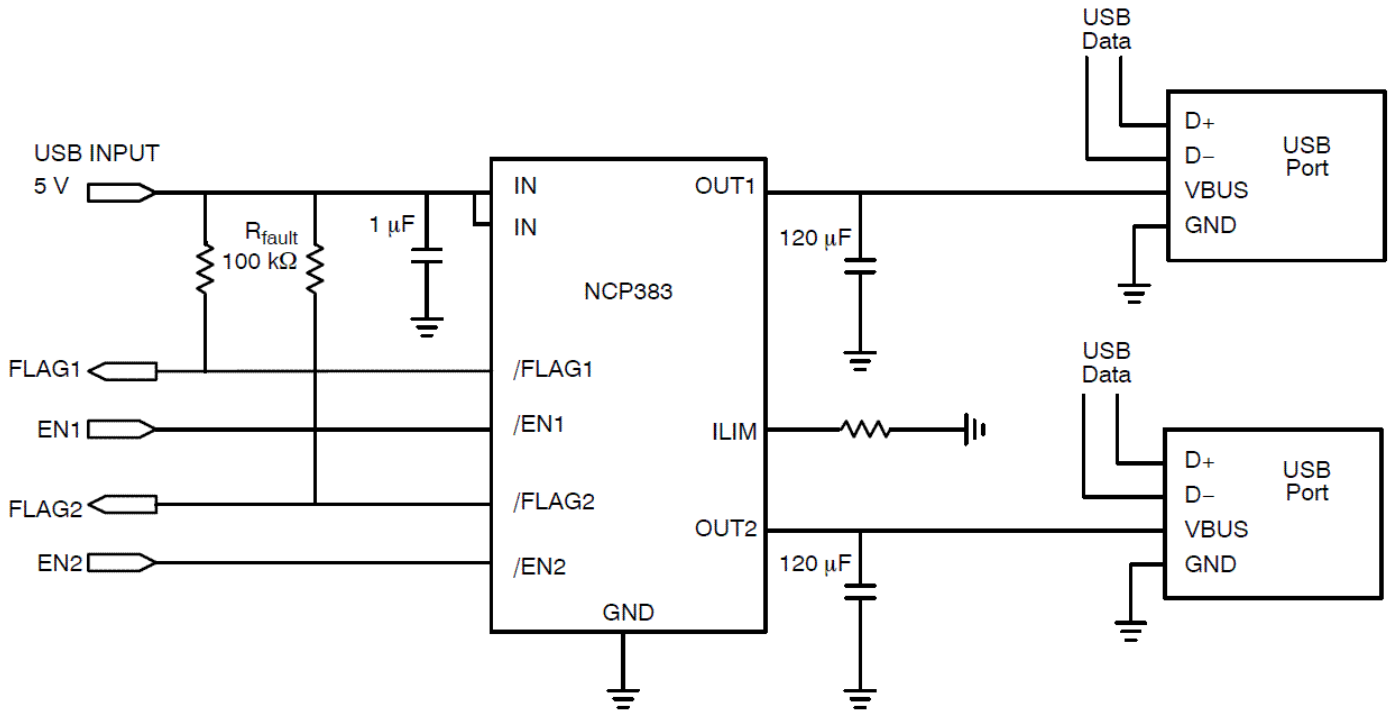
Applications

- Laptops
- USB Ports/Hubs
- TVs

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Type	V _I Max (V)	r _{DS(on)} Max (m Ω)	T _{SD} Typ (°C)	T _{hyst} Typ (°C)	Package Type
NCP383LMUAJAATXG	0.363	Pb-free Halide free non AEC-Q and PPAP	Active	Adjustable	5.5	70	140	10	UDFN-10

Application Diagram



For more information please contact your local sales support at www.onsemi.com.

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