



Preliminary

# OCP9162/OCP9172

## 1A Dual Channel Current-limited Power Switch

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### General Description

The OCP9162/OCP9172 provides Universal Serial Bus standard power switch and over-current protection for all hot-swap applications.

The OCP9162/OCP9172 accepts an input voltage between 2.7V and 5.5V allowing use as a device-based in-rush current limiter for 3.3V USB peripherals, as well as Root and Self-Powered Hubs at 5.5V.

The OCP9162/OCP9172 offer current and thermal limiting and short circuit protection as well as controlled rise time and under-voltage lockout functionality.

A 7ms deglitch capability on the open-drain Flag output prevents false over-current reporting and does not require any external components.

All devices are available in SOP-8L and MSOP-8L-EP packages.

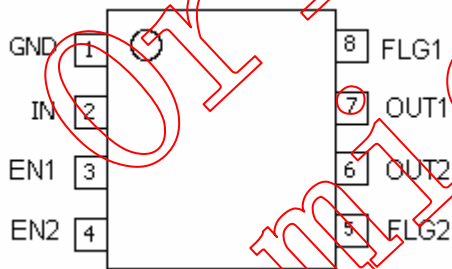
### Features

- 115mΩ on-resistance
- 1.0A Continuous Current
- Dual USB port power switches
- Over-current and thermal protection
- 1.5A accurate current limiting
- Reverse Current Blocking
- Operating Range: 2.7V to 5.5V
- 0.6ms typical rise time
- Undervoltage lockout(UVLO)
- 1uA maximum shutdown current:
- Fault report (FLG) with 7ms blanking time
- Active low (OCP9162) or active high (OCP9172) enable
- MSOP-8L-EP packages ambient temperature range: -40°C to 85°C
- SOP-8L packages ambient temperature range: 0°C to 70°C

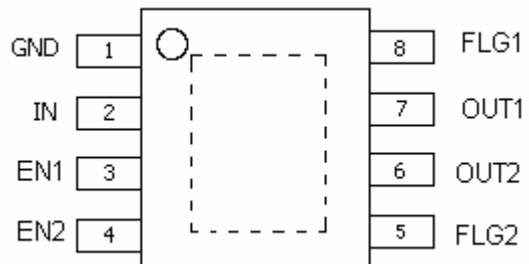
### Applications

- USB ports and peripherals
- Heavy Capacitive Loads
- Notebook computers
- Hot swap supplies
- General purpose power switching

### Pin Configuration



SOP-8L



MSOP-8L-EP

Pin No.	Pin Name	Pin Function
1	GND	Ground
2	IN	Voltage input pin
3	EN1	Channel 1 enable input, EN1=low OCP9162 normal operation or EN1=high OCP9172 normal operation.
4	EN2	Channel 2 enable input, EN2=low OCP9162 normal operation or EN2=high OCP9172 normal operation.
5	FLG2	Channel 2 over-current and over-temperature fault report; open-drain flag is active low when triggered
6	OUT2	Channel 2 voltage output pin
7	OUT1	Channel 1 voltage output pin
8	FLG1	Channel 1 over-current and over-temperature fault report; open-drain flag is active low when triggered

#### Contact Information:

For more detail information , please direct any inquiries and/or comments to [info@orient-chip.com](mailto:info@orient-chip.com).



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### Typical Application Circuit

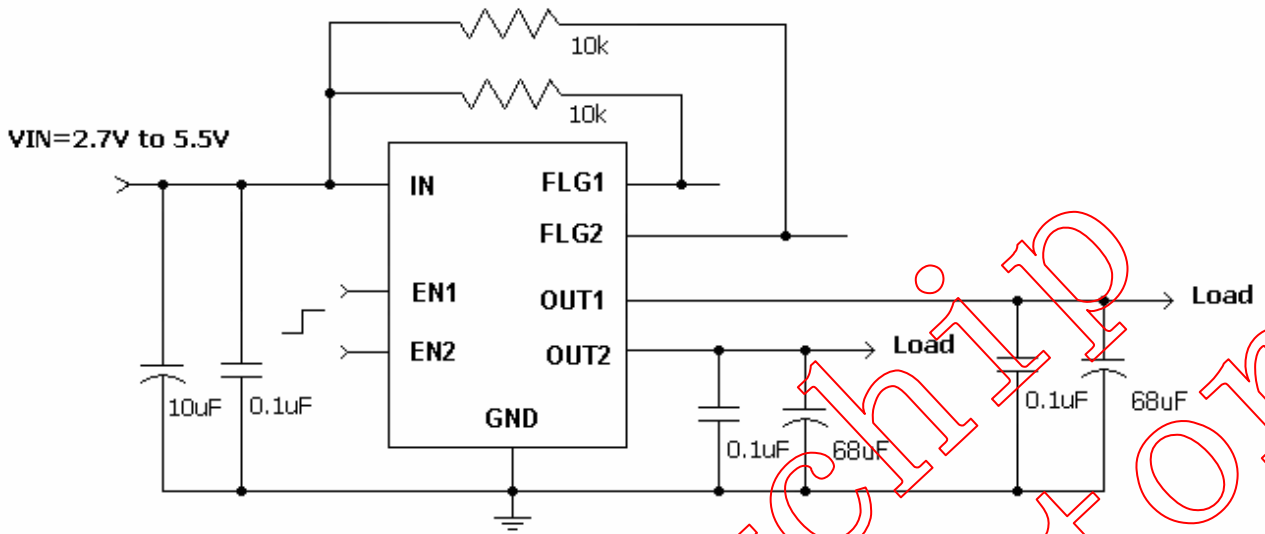


Figure 1

### Block Diagram

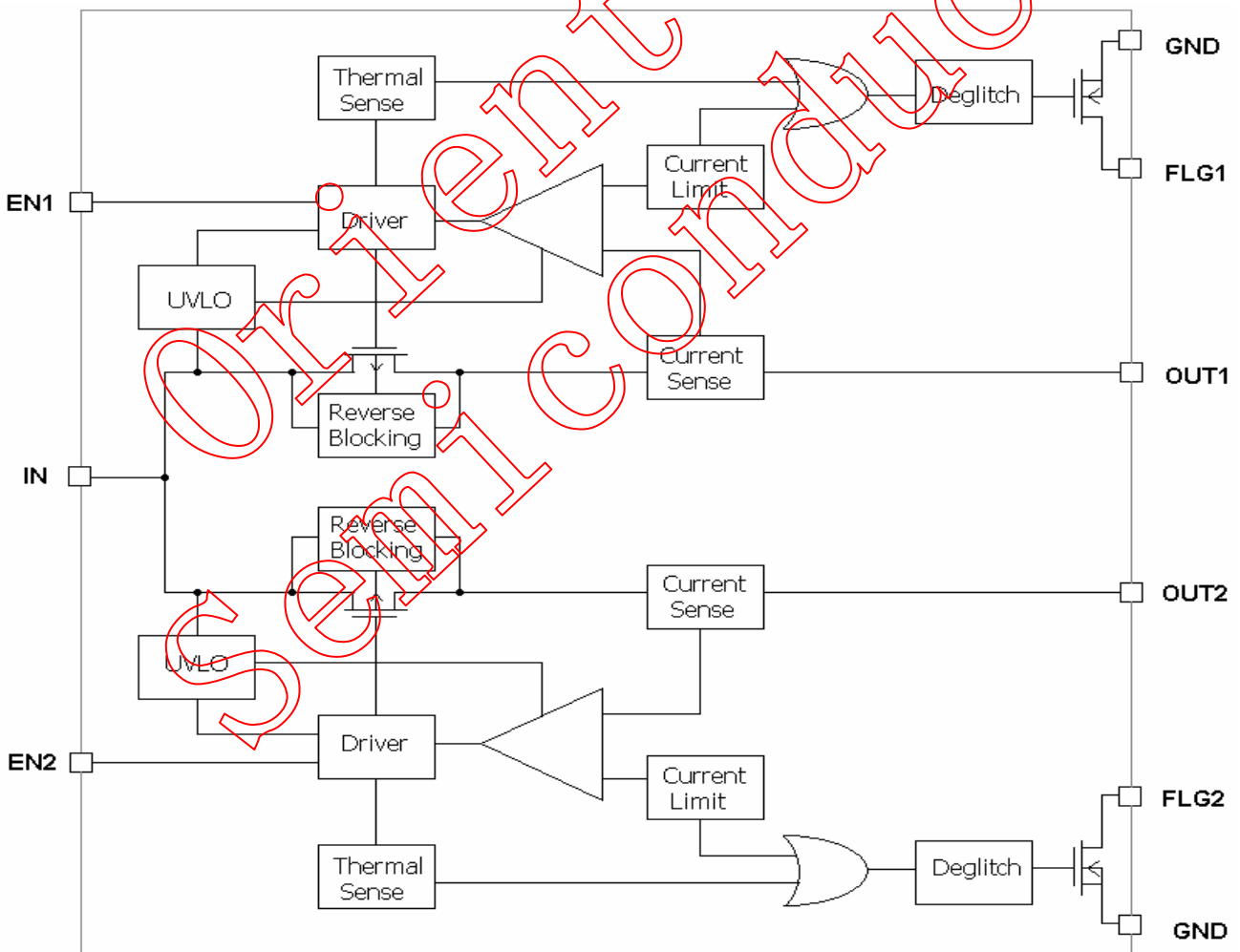


Figure 2