

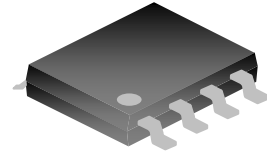
# SYNCHRONOUS RECTIFIER CONTROLLER IC WITH BUILT-IN TYPE-N POWER MOSFET

## 1. DESCRIPTION

The SD8512A is a synchronous rectifier (SR) controller IC with built-in type-N power MOSFET. It can operate cooperating with the primary side control circuit for high system efficiency.

The SD8512A is highly integrated IC for saving peripheral components, and simplifying system design. It is suitable for discontinuous conduction mode and boundary conduction mode. With its versatility, the SD8512A can be used in various topologies.

The SD8512A is optimized for 5V or higher output voltage, the output can be used as power supply directly.



SOP-8-225-1.27

## 2. FEATURES

- ◆ Built-in type-N power MOSFET
- ◆ Up to 40V drain-source breakdown voltage
- ◆ Minimum off time protection
- ◆ Up to 100KHz operation frequency

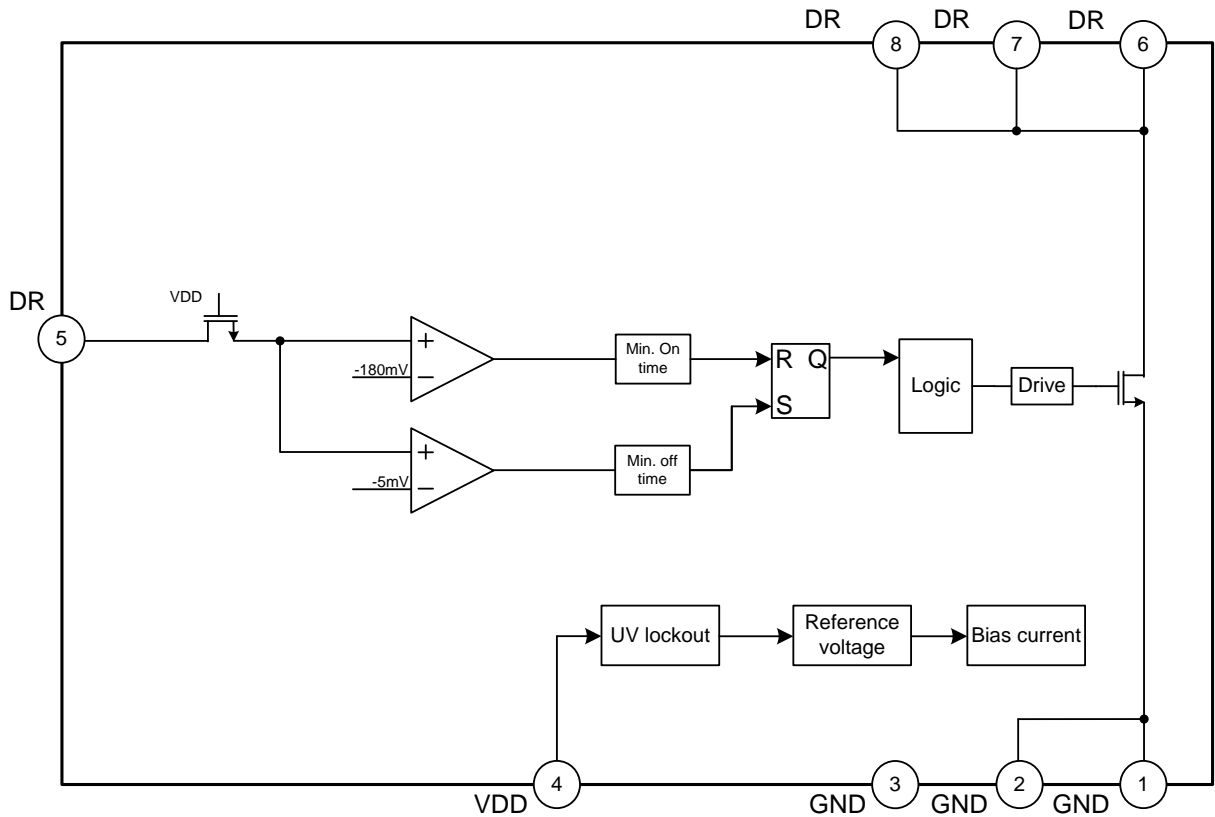
## 3. APPLICATIONS

- ◆ Adapters
- ◆ Chargers
- ◆ Standby Power Supply

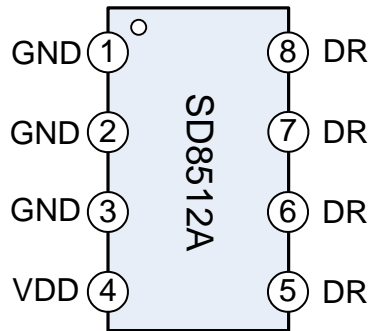
## 4. ORDERING INFORMATION

Part No.	Package	Marking	Hazardous Substance Control	Packing Type
SD8512A	SOP-8-225-1.27	SD8512A	Halogen free	Tube
SD8512ATR	SOP-8-225-1.27	SD8512A	Halogen free	Tape & Reel

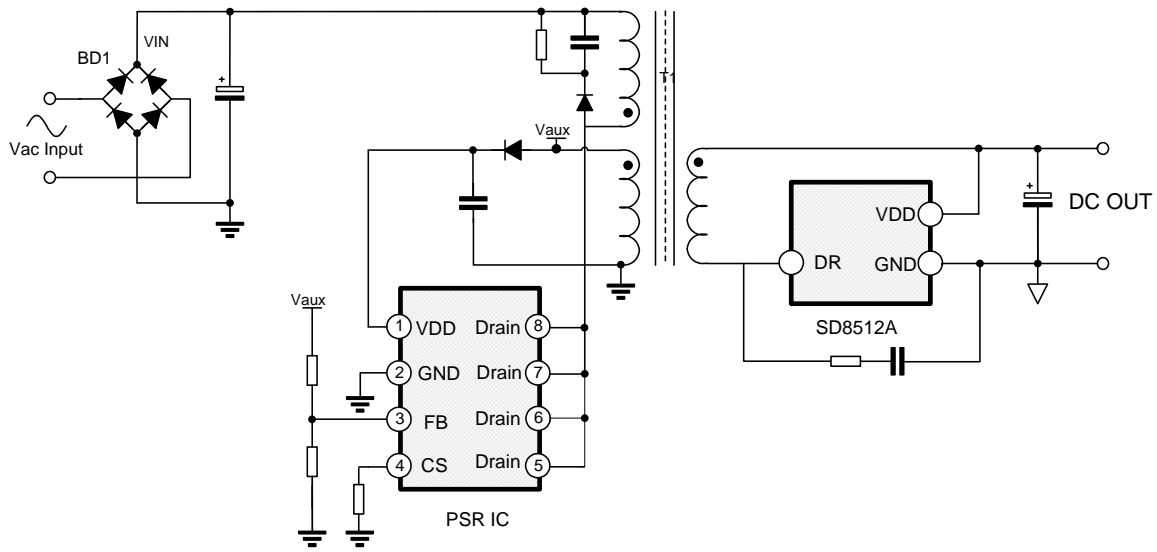
5. BLOCK DIAGRAM



6. PIN CONFIGURATION



7.TYPICAL APPLICATION CIRCUIT



8.PACKAGE OUTLINE

SOP-8-225-1.27 UNIT: mm

SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	1.35	1.55	1.75
A1	0.05	0.15	0.25
A2	1.25	—	1.65
b	0.32	0.42	0.52
c	0.15	0.20	0.26
D	4.70	4.90	5.30
E	5.60	6.00	6.40
E1	3.60	3.90	4.20
e	1.27BSC		
L	0.30	—	1.27

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