

## DESCRIPTION

The SS6200 is a single Phase MOSFET gate driver optimized to drive the gates of both high-side and low-side power MOSFETs.

The integrated bootstrap diode reduces external component count. With a wide operating voltage range, high or low side MOSFET gate drive voltage can be optimized for the best efficiency. Internal adaptive non-overlap circuit further reduces switching losses by preventing simultaneous conduction of both MOSFETs.

The UVLO circuits prevent malfunction when VCC is lower than the specified threshold voltage.

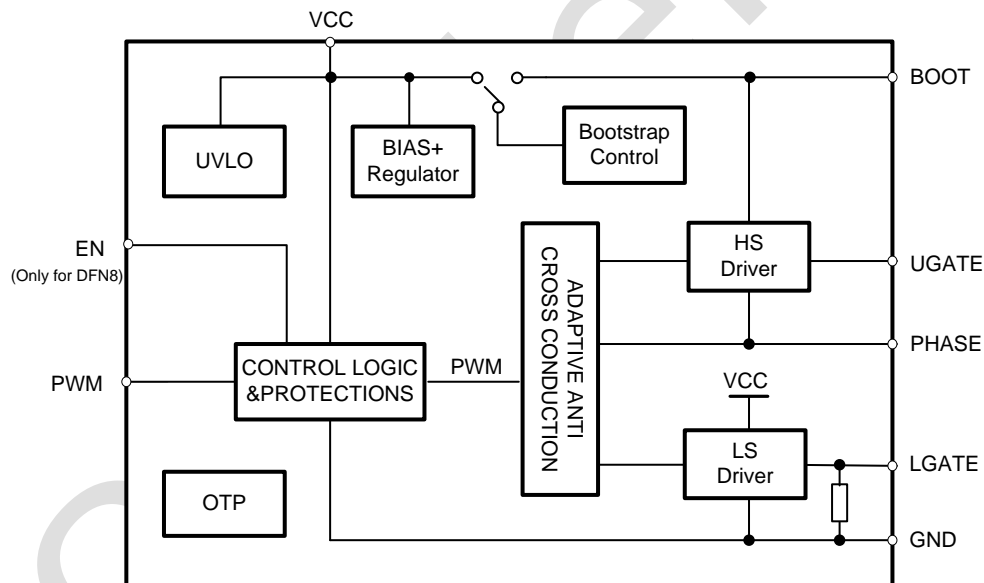
## FEATURES

- Drive two N-MOSFETs
- High-Frequency operation (Up to 1MHz)
- PWM input capable of 3.3V and 5V
- Fast output rise time
- Internal bootstrap diode
- Adaptive shoot through protection
- Under-voltage lockout
- Internal thermal shutdown
- Small size package: SOP-8, DFN8(2x2)
- These are Pb-Free Devices

## APPLICATIONS

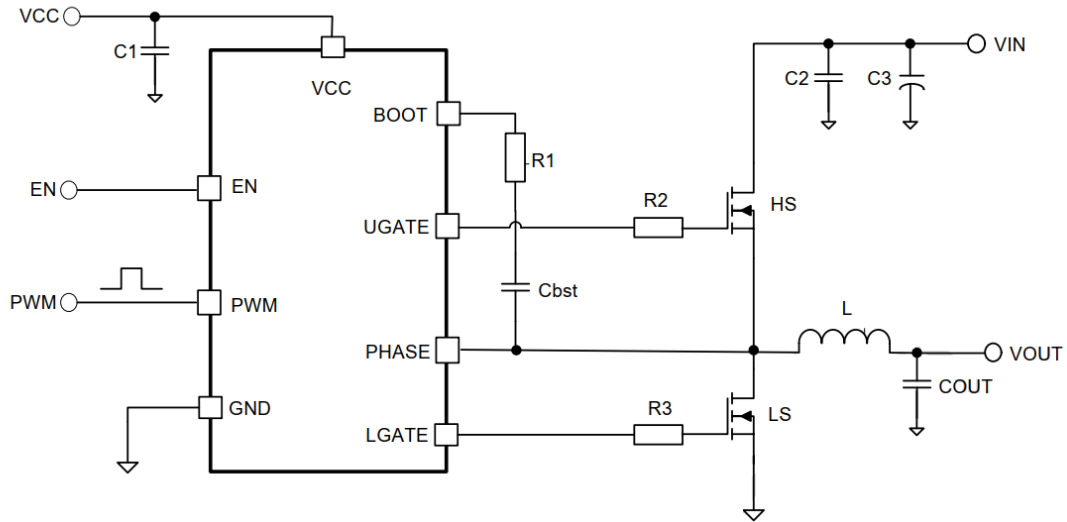
- Wireless Charger for 5W to 20W Systems
- Half or full bridge driver for N+N MOSFET

## BLOCK DIAGRAM



# APPLICATION CIRCUIT

SOP8/DFN8:



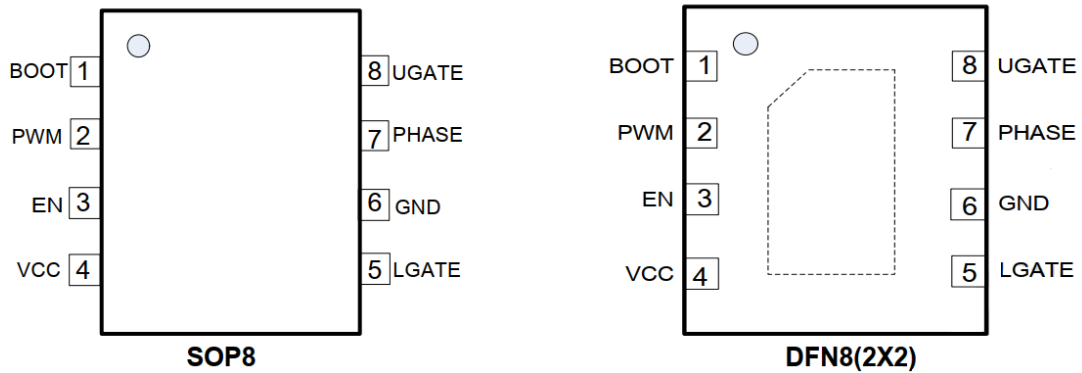
Reference Design of BOM:

Name	Value	Name	Value
C1	10uF	R1	0
C2	0.1uF	R2	5ohm
C3	22uF	R3	0
Cbst	680nF		

# TRUTH TABLE

EN	PWM	SW
L	-	L
H	L	L
H	H	H

## PIN CONFIGURATION



## PIN DESCRIPTION

Pin Name	Description	Pin No.
BOOT	Floating bootstrap supply pin for upper gate drive	1
PWM	Input PWM signal for controlling the Driver	2
EN	Logic input for standby mode control	3
VCC	Logic and low-side gate drivers power supply voltage	4
LGATE	Lower gate drive output	5
GND	Ground	6
PHASE	Connect this pin to the source of the high side MOSFET and the drain of the low side MOSFET	7
UGATE	Upper gate drive output	8

## ORDER INFORMATION

Valid Part Number	Package Type	Top Code
SS6200-DF-TP	8 Pins, DFN, 2*2mil	SS6200
SS6200-SO-TP	8 Pins, SOP8	SS6200