

1MHz, Step-up Current Mode PWM

Controller

❖ GENERAL DESCRIPTION

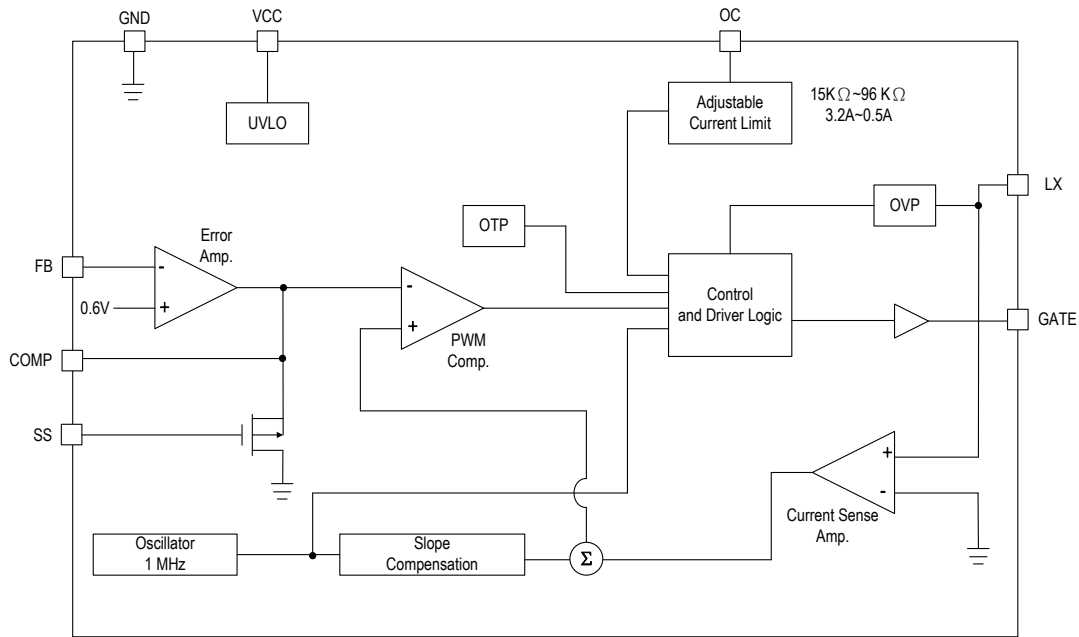
The AX5314 is a current mode boost DC-DC controller. The non-inverting input of error amplifier connects to a 0.6V precision reference voltage and internal soft-start function can reduce the inrush current.

The AX5314 is available in the SOP-8L-EP package and provides space-saving PCB for the application fields.

❖ FEATURES

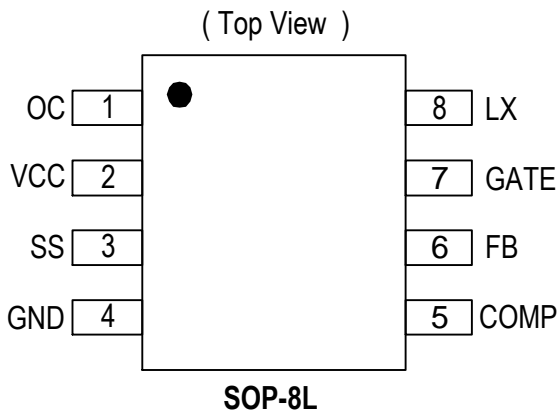
- Internal Fixed PWM frequency: 1.0MHz
- Precision Feedback Reference Voltage: 0.6V ($\pm 2\%$)
- External N-MOSFET.
- Shutdown Current: 0.1 μ A
- Over Temperature Protection
- Over Voltage Protection
- Adjustable Over Current Protection: 0.5A ~ 3.5A
- Package: SOP-8L

❖ **BLOCK DIAGRAM**



❖ **PIN ASSIGNMENT**

The packages type: SOP-8L; the pin assignment is given by:



Name	Description
OC	Adjustable Current Limit (Floating Available)
VCC	IC Power Supply
SS	Soft-Start Control Input.
GND	IC Ground
COMP	Compensation Node. COMP is used to compensate regulation control loop.
FB	Error Amplifier Inverting Input
GATE	Gate Drive for the External N-Channel MOSFET. This pin swings from 0V to VIN.
LX	Power Switch Output

❖ **ORDER/MARKING INFORMATION**

Order Information	Top Marking
<p>AX5314 XX X</p> <p>Package Type: S: SOP-8L</p> <p>Packing: Blank : Tube, A : Taping</p>	<p>Logo ← AX 5 3 1 4 → Part number</p> <p>YYWWX → ID code: internal</p> <p>WW: 01~52</p> <p>Year: 10=2010, 11=2011, ..., 19=2019</p>