

DESCRIPTION

The GLF81311 is an ultra-efficiency, 3 A rated, Load Switch with integrated slew rate control. The best-in-class efficiency makes it an ideal choice for use in IoT, mobile, and wearable electronics.

The GLF81311 features ultra-efficient I_QSmart™ technology that supports the lowest quiescent current (I_Q) and shutdown current (I_{SD}) in the industry. Low I_Q and I_{SD} solutions help designers to reduce parasitic leakage current, improve system efficiency, and increase battery lifetime.

The GLF81311 integrated slew rate control can also enhance system reliability by mitigating bus voltage swings during switching events. Where uncontrolled switches can generate high inrush currents that result in voltage droop and/or bus reset events, the GLF slew rate control specifically limits inrush currents during turn-on to minimize voltage droop.

GLF81311 Load Switch devices support an industry leading wide input voltage range and helps to improve operating life and system robustness. Furthermore, one device can be used in multiple voltage rail applications which helps to simplify inventory management and reduce operating cost.

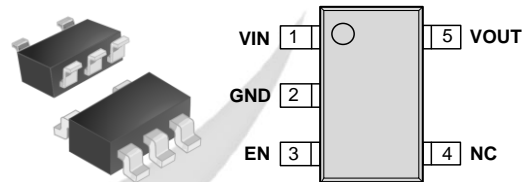
FEATURES

- Supply Voltage Range: 2.0 V to 6.5 V
7 Vabs max
- I_{OUT} Max: 3 A
- Low R_{ON}: 38 mΩ Typ @ 6.5 V_{IN}
- Ultra-Low I_Q: 7 nA Typ @ 6.5 V_{IN}
- Ultra-Low I_{SD}: 8 nA Typ @ 6.5 V_{IN}
- Controlled Rise Time: 2.3 ms at 6 V_{IN}
- Smart Enable Pin
I_{EN}: 3 nA Typ at V_{EN} > V_{IH}
R_{EN}: 500 kΩ Typ at V_{EN} < V_{IL}
- Integrated Output Discharge Switch
- Wide Operating Temperature Range:
-40 °C ~ 85 °C
- HBM: 6 kV, CDM: 2 kV

APPLICATIONS

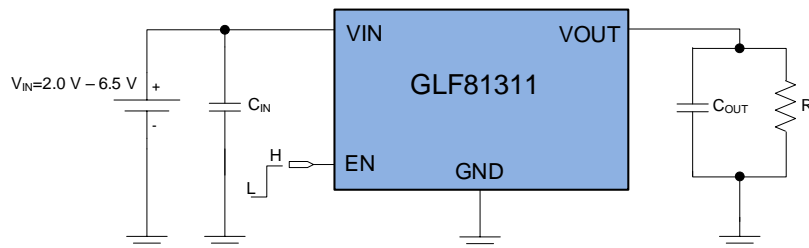
- Smart IoT Devices
- Low Power Subsystems

PACKAGE



SOT23-5L

APPLICATION DIAGRAM



ALTERNATE DEVICE OPTIONS

Part Number	Top Mark	R _{ON} (Typ.) at 6.5V	EN Activity	Tape and Reel Packaging
GLF81311	DE	38 mΩ	High	3000 Pieces on 7 inch reel

FUNCTIONAL BLOCK DIAGRAM

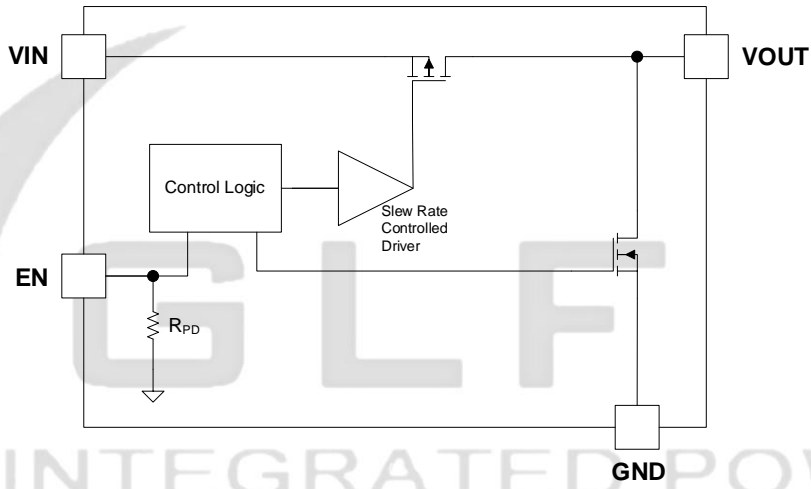
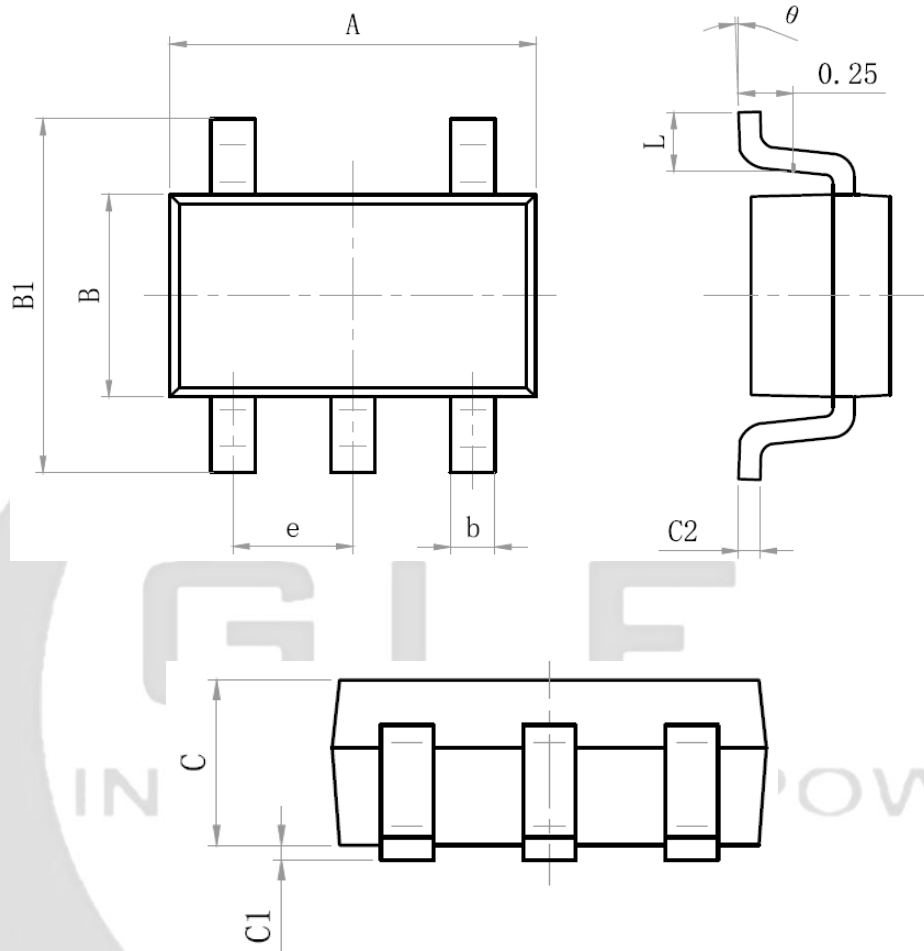


Figure 1. Functional Block Diagram

PACKAGE OUTLINE



Size Mark	Min (mm)	Max (mm)	Size Mark	Min (mm)	Max (mm)
A	2.82	3.02	C	1.05	1.15
e	0.95 (BSC)		C1	0.03	0.15
b	0.28	0.45	C2	0.12	0.23
B	1.50	1.70	L	0.35	0.55
B1	2.60	3.00	θ	0°	8°