

GLF7132X

4 A, Low RON I_QSmart™ Power Load Switch with Slew Rate Control

DESCRIPTION

The GLF7132x is an ultra-efficiency, 4 A rated, integrated load switch with integrated slew rate control.

The GLF7132x features an ultra-efficient I_QSmart™ technology that supports the lowest R_{ON}, quiescent current (I_Q) and shutdown current (I_{SD}) in the industry. Low R_{ON} reduces conduction losses, while low I_Q and I_{SD} solutions help designers to reduce parasitic leakage current, improve system efficiency, and increase battery lifetime.

The GLF7132x integrated slew rate control greatly enhances 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 GLF7132x slew rate control specifically limits inrush current during turn-on to minimize voltage droop.

GLF7132x Load Switch device supports 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 reduces operating cost.

FEATURES

- Low R_{ON} : 15 mΩ Typ 5.5 V_{IN}
- Ultra-Low I_Q:
3 nA Typ at 5.5 V_{IN} GLFL71320, GLF71321
570 nA Typ at 5.5 V_{IN} GLFL71322, GLF71323
- Ultra-Low I_{SD}: 50 nA Typ at 5.5 V_{IN}
- I_{OUT} Max: 4 A
- Wide Input Range: 1.1 V to 5.5 V
6 Vabs max
- Controlled Rise Time: 400 μs at 3.3 V_{IN}
- Internal EN Pull-Down or Pull-Up Resistor
- Integrated Output Discharge Switch
GLF71321 and GLF71323
- Wide Operating Temperature Range:
-40 °C ~ 85 °C
- HBM: 6 kV, CDM: 2 kV
- Ultra-Small: 0.97 mm x 1.47 mm WLCSP

PRODUCT TABLE

Eval Board Ordering Info	Part Number	Top Mark	R _{ON} (Typ.) at 5.5 V _{IN}	Output Discharge
EV001-GLF71320	GLF71320	AA	15 mΩ	NA
EV001-GLF71321	GLF71321	BB	15 mΩ	80 Ω
EV001-GLF71322	GLF71322	CC	15 mΩ	NA
EV001-GLF71323	GLF71323	DD	15 mΩ	80 Ω