

GLF78131/GLF78131T 3-Channel IQSmart™ LoadSwitch

DESCRIPTION

The GLF78131 / GLF78131T is an ultra-efficient, IQSmart™ Load Switch with three independent and identical load switches integrated. Each load switch features an ultra-efficient IQSmart™ technology that supports some of the lowest quiescent current (IQ) and shutdown current (ISD) in the industry. Low IQ and ISD solutions help designers to reduce parasitic leakage current, improve system efficiency, and increase battery lifetime.

The GLF78131 / GLF78131T integrated slew rate control can also enhance system reliability by mitigating bus voltage swings during switching events. Where uncontrolled switches can generate high inrush current that result in voltage droop and/or bus reset events, the slew rate control specifically limits inrush current during turn-on to minimize voltage droop.

The GLF78131 / GLF78131T Load Switch device supports 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

- Each Channel is identical
- Ultra-Low I_Q : 6 nA Typ @ 5.5 V_{IN}
- Ultra-Low I_{SD} : 23 nA Typ @ 5.5 V_{IN}
- Low R_{ON} = 60 mΩ Typ @ 5.5 V_{IN}
- I_{OUT} Max = 1.5 A
- Supply Voltage Range: 1.1 V to 5.5 V
6 V abs max
- Controlled Rise Time: 500 μs at 3.3 V_{IN}
- Internal EN Pull-Down Resistor
- Integrated Output Discharge Switch
- Temperature Range: -40 to 85 ° C
- HBM: 6 kV, CDM: 2 kV
- GLF78131: 1.27 mm x 1.67 mm x0.55 mm, 12 bumps, 0.4 mm bump pitch, Wafer Level Chip Scale Package
- GLF78131T: 1.27 mm x 1.67 mm x0.35 mm, 12 bumps, 0.4 mm bump pitch, Wafer Level Chip Scale Package

PRODUCT TABLE

Eval Board Ordering Info	Part Name	Package Thickness	Product Availability
EV016-GLF78131	GLF78131	T=0.55 mm	Released
EV016-GLF78131T	GLF78131T	T=0.35 mm	On Request