GLF1110Q / GLF1111Q
Nano-Current Power I_QSmart™ Load Switch

DESCRIPTION

The GLF1110Q / GLF1111Q is an ultra-efficiency, 2 A rated, Load Switch with integrated slew rate control. The best in class efficiency makes it an ideal choice for electronics requiring operation under the high temperature up to 125 °C.

The GLF1110Q / GLF1111Q 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 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.

The GLF1110Q / GLF1111Q 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 reduce operating cost.

FEATURES

- AEC-Q100 Qualified
- Qualified for Automotive Applications:
  Temperature Grade 1: Ambient Operating Temperature Range: -40 °C ~ +125 °C
- Wide Input Range: 1.5 V to 5.5 V
  6 V_{abs} max
- R_{ON}: 60 mΩ Typ @ 5.5 V_{IN}
- I_{OUT} Max: 2 A
- Ultra-Low I_Q: 2 nA Typ @ 5.5 V_{IN}
- Ultra-Low I_{SD}: 13 nA Typ @ 5.5 V_{IN}
- Controlled Rise Time: 600 µs at 3.3 V_{IN}
- Internal EN Pull-Down Resistor
- Integrated Output Discharge Switch: GLF1111Q
- ESD Performance Tested per AEC Q100
  HBM: 4 kV, CDM: 2 kV
- Moisture Sensitivity Level: MSL-3
- Lead-free, Halogen-free, and adhere to RoHS Directive

PRODUCT TABLE

Eval Board Ordering Infor	Part Number	Top Mark	R_{ON} (Typ) at 5.5 V	Output Discharge	EN Activity	Availability
EV021 – GLF1111Q	GLF1111Q	DLQ	60 mΩ	85 Ω	High	Released
EV021 – GLF1110Q	GLF1110Q	DLQ	60 mΩ	NA	High	In Dev