

GLF112x

Ultra-Small, I_QSmart™ Load Switch with Slew Rate Control

DESCRIPTION

The evaluation board EV028 features the GLF112x is an ultra-efficiency, 1.0 A rated, integrated load switch with the slew rate control. The best-in-class efficiency makes it an ideal choice for use in IoT, mobile, and wearable electronics.

The GLF112x features an 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 GLF112x slew rate control specifically limits inrush current during turn-on to minimize voltage droop.

FEATURES

- Wide Input Range, V_{IN} = 1.1 V to 5.5 V
6 V_{ABS} Max
- I_{OUT} Max = 1.0 A
- Low R_{ON} = 52 mΩ Typ. at 5.5 V_{IN}
- Ultra-Low I_Q:
5.0 nA Typ at 5.5 V_{IN}: GLF112xH / HN
550 nA Typ at 5.5 V_{IN}: GLF1121L
- Ultra-Low I_{SD}: 10 nA Typ at 5.5 V_{IN}
- Integrated Output Discharge Switch (Optional)
- Internal Pull-down Resistor on EN Pin: GLF112xH
- Internal Pull-up Resistor on EN Pin: GLF112xL
- 0.67 mm x 0.67 mm Wafer Level Chip Scale Package

PRODUCT TABLE

Eval Board Ordering Info	Part Number	Top Mark	R _{ON} (Typ) at V _{IN} (MAX)	V _{OUT} Rise Time at 3.3 V _{IN}	Output Discharge	EN Activity	Internal Pull up/down
EV028-GLF1120H	GLF1120H	T	52 mΩ	380 μs	NA	High	Yes
EV028-GLF1121H	GLF1121H	U			85 Ω		Yes
EV028-GLF1121HN	GLF1121HN	V				NA	
EV028-GLF1121L	GLF1121L	X		4 μs	Low	Yes	
EV028-GLF1123H	GLF1123H	W			High	Yes	