

GLF72110 / GLF72111 / GLF72112

3 A, Ultra-low Power I_QSmart™ Load Switch with True Reverse Current Blocking

DESCRIPTION

The GLF72110 / GLF72111 / GLF72112 is an advanced technology fully integrated I_QSmart™ load switch device with True Reverse Current Blocking (TRCB) technology and slew rate control of the output voltage.

The GLF72110 / GLF72111 / GLF72112 offers industry leading True Reverse Current Blocking (TRCB) performance, featuring an ultra-low threshold voltage. It minimizes reverse current flow in the event that the V_{OUT} pin voltage exceeds the V_{IN} voltage.

The GLF72110 / GLF72111 / GLF72112 has industry leading efficiency. It features a R_{ON} as low as 29 mΩ typical at 5.5 V, reducing power loss during conduction. The device also features ultra-low shutdown current (I_{SD}) to reduce power loss and battery drain in the off state. When EN is pulled low, and the output is grounded, the GLF72110 / GLF72111 / GLF72112 can achieve an I_{SD} as low as 24 nA typical at 5.5 V.

The GLF72110 / GLF72111 / GLF72112 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.

The GLF72110 / GLF72111 / GLF72112 load switch device is small, utilizing a chip scale package with 4 bumps in a 0.97 mm x 0.97 mm x 0.55 mm die size and a 0.5 mm pitch.

FEATURES

- True Reverse Current Blocking
- Ultra-Low I_Q: 1.4 uA Typ @ 5.5 V_{IN}
- Ultra-Low I_{SD}: 24 nA Typ @ 5.5 V_{IN}
- Low R_{ON}: 29 mΩ Typ @ 5.5V_{IN}
- I_{OUT} Max: 3 A
- Wide Input Range: 1.5 V to 5.5 V
6 V_{ABS} max
- Controlled Rise Time
- Internal EN Pull-Down Resistor
- Integrated Output Discharge Switch:
GLF72111
- 0.97 mm x 0.97 mm x 0.55 mm Wafer
Level Chip Scale Package

PRODUCT TABLE

Eval Board Ordering Info	Part Number	Top Mark	R _{ON} (Typ.) @ 5.5V _{in}	Output Discharge	EN Activity	Rise Time t _r (μs) at 3.3 V
EV002-GLF72110	GLF72110	DC	29 mΩ	NA	High	1200
EV002-GLF72111	GLF72111	BJ	29 mΩ	85 Ω	High	1200
EV002-GLF72112	GLF72112	KC	29 mΩ	NA	High	18