



GLF7210X Nano Current Consumed I_QSmart™ Switch with True Reverse Current Blocking

DESCRIPTION

The GLF7210X is an advanced technology fully integrated I_QSmart™ load switch device with True Reverse Current Blocking (TRCB) technology and the slew rate control of the output voltage.

The GLF7210X 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 GLF7210X has industry leading efficiency. It features a R_{ON} as low as 37 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 GLF7210X can achieve an I_{SD} as low as 20 nA typical at 5.5 V.

The GLF7210X 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 GLF7210X load switch device is small utilizing a chip scale package with 6 bumps in a 0.77 mm x 0.77 mm x 0.46 mm die size and a 0.4 mm pitch.

FEATURES

- True Reverse Current Blocking
- Ultra-Low I_Q: 0.45 uA Typ @ 5.5 V_{IN}
- Ultra-Low I_{SD}: 20 nA Typ @ 5.5 V_{IN}
- Low R_{ON}: 37 mΩ Typ @ 5.5 V_{IN}
- I_{OUT} Max: 2 A
- Wide Input Range: 1.5 V to 5.5 V
6 V_{abs} max
- Controlled Rise Time: 570 μs at 3.3 V_{IN}
- Internal EN Pull-Down Resistor on GLF72100, GLF72101, GLF72103
- Internal EN Pull-Up Resistor on GLF72105
- Integrated Output Discharge Switch: GLF72101, GLF72105
- Ultra-Small: 0.77 mm x 0.77 mm



PRODUCT TABLE

Eval Board Ordering Info	Part Number	Top Mark	R _{ON} (Typ.) @ 5.5 V _{in}	TRCB	Output Discharge	EN Activity
EV010-GLF72100	GLF72100	J	37 mΩ	Yes	NA	High
EV010-GLF72101	GLF72101	F	37 mΩ	Yes	85 Ω	High
EV010-GLF72103	GLF72103	M	37 mΩ	Yes	85 Ω	High
EV010-GLF72105	GLF72105	N	37 mΩ	Yes	85 Ω	Low