

DESCRIPTION

The GLF72501 Load Switch is a fully integrated 2 A NMOS load switch with I_QSmart™ advanced technology. The device is targeted for the mobile computing and data storage markets as a high performance, low cost solution for load switch applications.

The GLF72501 has a constant low on-resistance of 32 mΩ at room temperature. The fixed rise time helps prevent undesirable inrush current when turned on and the internal EN pin pull-down resistor ensures the device remains in the shutdown mode when disabled.

The GLF72501 is available in a wafer level chip scale package (WLCSP) measuring 0.77 mm x 0.77 mm x 0.46 mm with a 0.5 mm pitch. This allows the user to save board space and increase cost savings.

The GLF72501 features a reverse current blocking protection. When the GLF72501 is disabled, it prevents reverse current flowing from the output to the input source.

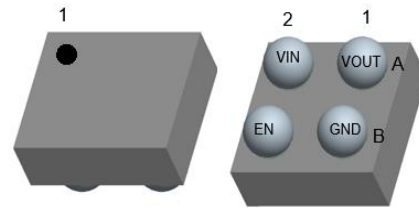
FEATURES

- Supply Voltage Range : 0.8 V to 3.6 V
- Low R_{ON} : 32 mΩ Typ at Supply Voltage Range
- I_{OUT} Max : 2 A
- Ultra-Low I_Q :
 - 200 nA Typ at 0.8 V_{IN}
 - 180 nA Typ at 1.0 V_{IN}
 - 170 nA Typ at 1.2 V_{IN}
- Integrated Slew Rate Control Driver
- Reverse Current Blocking Protection When Disabled
- Internal EN Pull-Down Resistor
- Integrated Output Discharge Switch
- HBM : 6 kV, CDM : 2 kV

APPLICATIONS

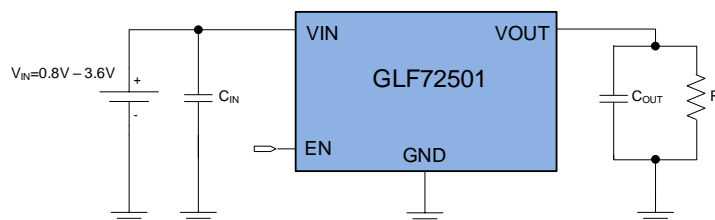
- Wearables
- Data Storage, SSD
- Low Power Subsystems

PACKAGE



0.77 mm x 0.77 mm x 0.46 mm WLCSP

APPLICATION DIAGRAM



FUNCTIONAL BLOCK DIAGRAM

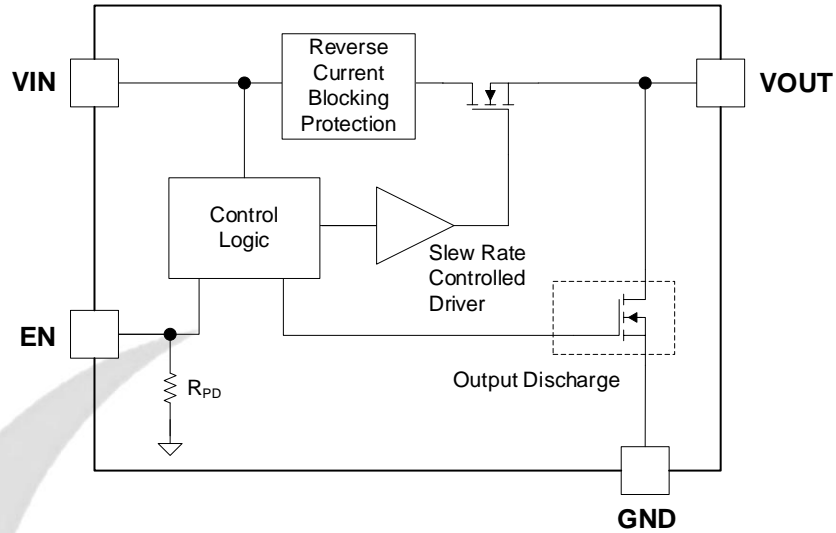


Figure 1. Functional Block Diagram

GLF
INTEGRATED POWER

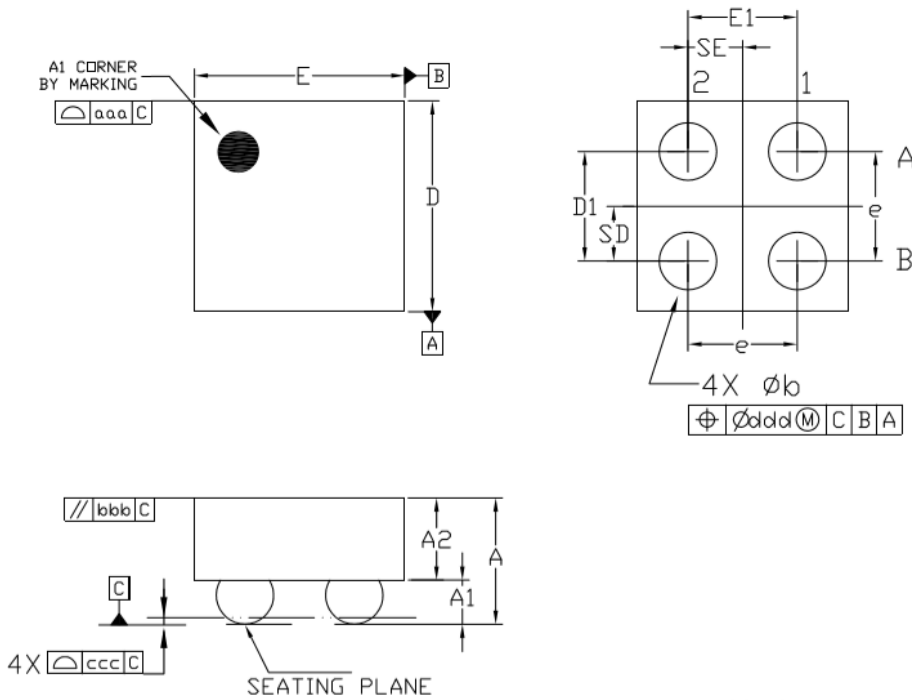
GLF72501



INTEGRATED POWER

2 A Ultra Low Current Consumption N-channel Load Switch with Lower Input Voltage Range and Reverse Current Blocking

PACKAGE OUTLINE



Dimensional Ref.			
REF.	Min.	Nom.	Max.
A	0.410	0.460	0.510
A1	0.135	0.160	0.185
A2	0.275	0.300	0.325
D	0.755	0.770	0.785
E	0.755	0.770	0.785
D1	0.350	0.400	0.450
E1	0.350	0.400	0.450
b	0.170	0.210	0.250
e	0.400 BSC		
SD	0.200 BSC		
SE	0.200 BSC		
Tol. of Form&Position			
aaa	0.10		
bbb	0.10		
ccc	0.05		
ddd	0.05		

Notes

1. ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.