

DESCRIPTION

The GLF72524 Load Switch is a fully integrated 4 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 GLF72524 has a constant low on-resistance of 10 mΩ at room temperature and a supply current consumption of less than 100 nA at lower input voltages. The fixed rise time helps prevent undesirable inrush current when turned on and the internal EN pin pulldown resistor ensures the device remains in the shutdown mode when disabled. In shutdown mode the GLF72524 draws only 7 nA typical at 3.6 V input supply voltage.

The GLF72524 is available in a wafer level chip scale package (WLCSP) measuring 0.97 mm x 1.47 mm x 0.55 mm with a 0.5 mm pitch. This allows the user to save board space and increase cost savings.

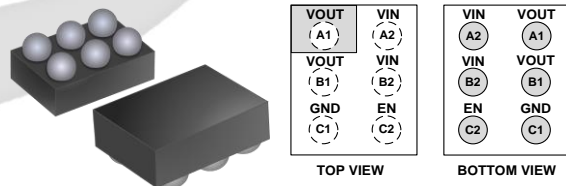
FEATURES

- Supply Voltage Range: 0.8 V to 3.6 V
- Low R_{ON}: 10 mΩ Typ
- I_{OUT} Max: 4 A
- Ultra-Low I_Q:
 - 60 nA Typ at 0.8 V_{IN}
 - 65 nA Typ at 1.0 V_{IN}
 - 70 nA Typ at 1.2 V_{IN}
- GLF72524 V_{OUT} Rise Time
 - 460 us at 0.8 V_{IN}
 - 280 us at 3.3 V_{IN}
 - 280 us at 3.6 V_{IN}
- Internal EN Pull-Down Resistor
- Integrated Output Discharge Switch,
- Operating Temperature Range: - 40 to 85 °C
- HBM: 6 kV, CDM: 2 kV
- 0.97 mm x 1.47 mm x 0.55 mm, 6 Bumps Wafer Level Chip Scale Package

APPLICATIONS

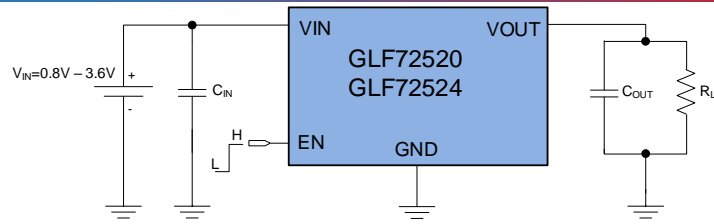
- Data Storage, SSD
- Wearables
- Low Power Subsystems

PACKAGE



0.97 mm x 1.47 mm x 0.55 mm, 0.5 mm Pitch

APPLICATION DIAGRAM



FUNCTIONAL BLOCK DIAGRAM

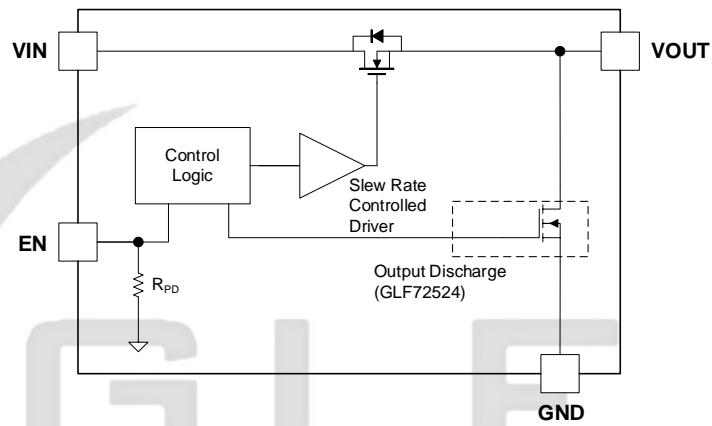
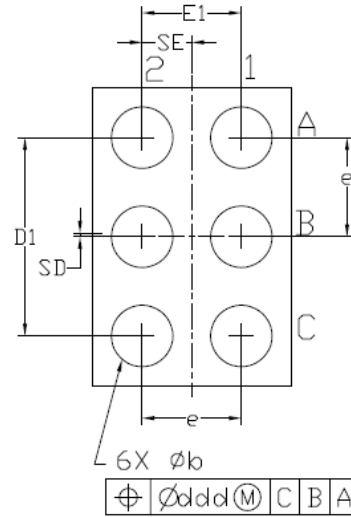
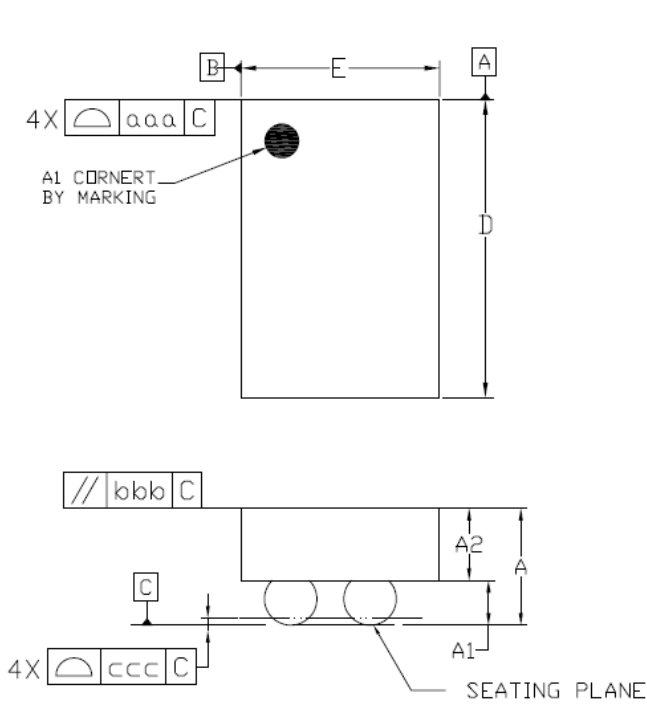


Figure 1. Functional Block Diagram

INTEGRATED POWER

WLCSP PACKAGE OUTLINE



Dimensional Ref.			
REF.	Min.	Nom.	Max.
A	0.500	0.550	0.600
A1	0.225	0.250	0.275
A2	0.275	0.300	0.325
D	1.460	1.470	1.485
E	0.960	0.970	0.985
D1	0.950	1.000	1.050
E1	0.450	0.500	0.550
b	0.260	0.310	0.360
e	0.500 BSC		
SD	0.000 BSC		
SE	0.250 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.