

DESCRIPTION

The GLF72520 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 GLF72520 has a constant low on-resistance of 10 mΩ at room temperature and a supply current consumption of 105 nA to 3.0 uA at defined supply voltage range. 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 GLF72520 draws only 6.5 nA typical at 3.6 V input supply voltage.

The GLF72520 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.

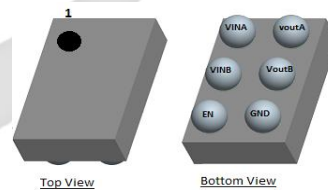
FEATURES

- Supply Voltage Range : 0.8 V to 3.6 V
- Low R_{ON} : 10 mΩ Typ
- Ultra-Low I_Q :
 - 105 nA Typ at 0.8 V_{IN}
 - 120 nA Typ at 1.0 V_{IN}
 - 740 nA Typ at 2.5 V_{IN}
 - 2.3 uA Typ at 3.0 V_{IN}
 - 3.0 uA Typ at 3.3 V_{IN}
- Ultra-Low I_{SD} : 6.5 nA Typ at 3.6 V_{IN}
- I_{OUT} Max: 4 A
- V_{OUT} Rise Time : 1150 us at 0.8 V_{IN}
- Internal EN Pull-Down Resistor
- 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

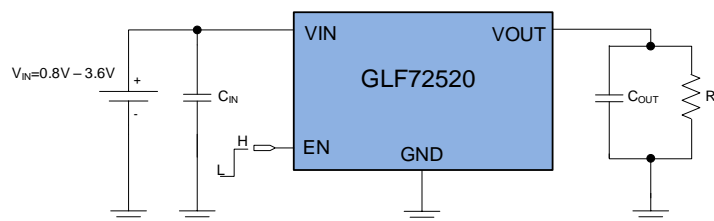
- Wearables
- Data Storage, SSD
- Low Power Subsystems

PACKAGE



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

APPLICATION DIAGRAM



FUNCTIONAL3 BLOCK DIAGRAM

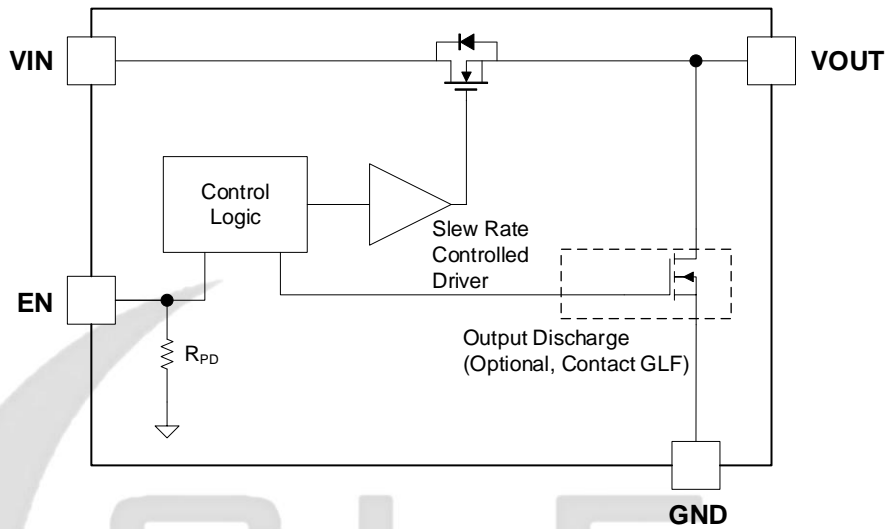
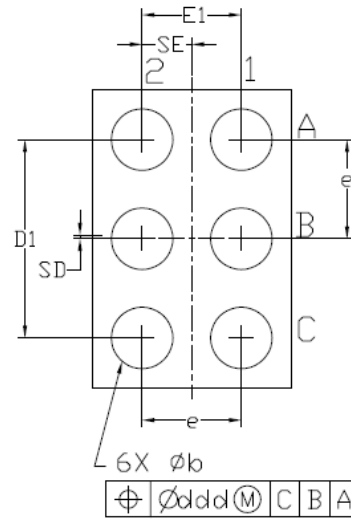
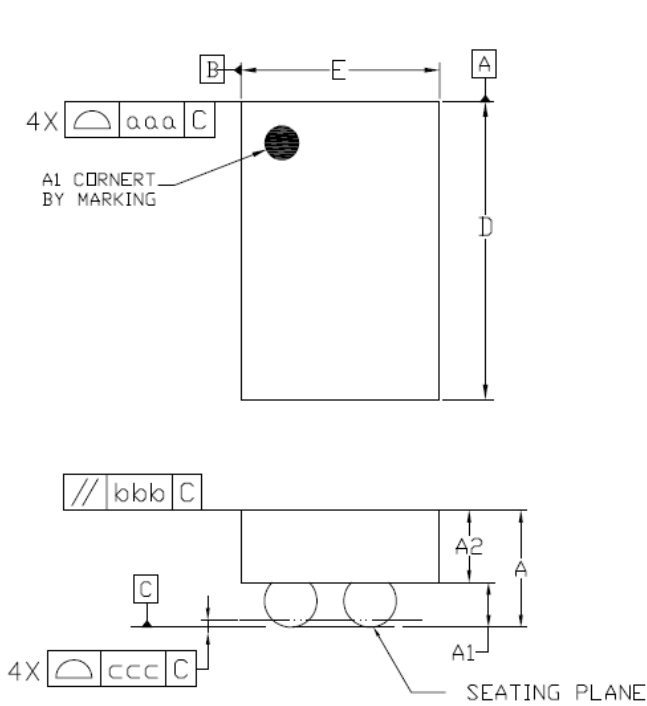


Figure 1. Functional Block Diagram

GLF
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.