

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 features a reverse current blocking protection. When the GLF72524 is disabled, it prevents reverse current flowing from the output to the input source.

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.

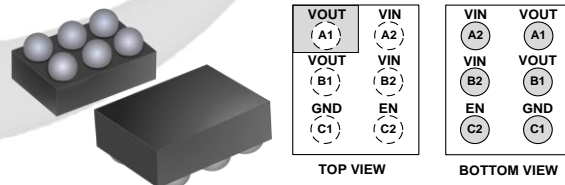
FEATURES

- 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}
- 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
- Reverse Current Blocking Protection When Disabled
- 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

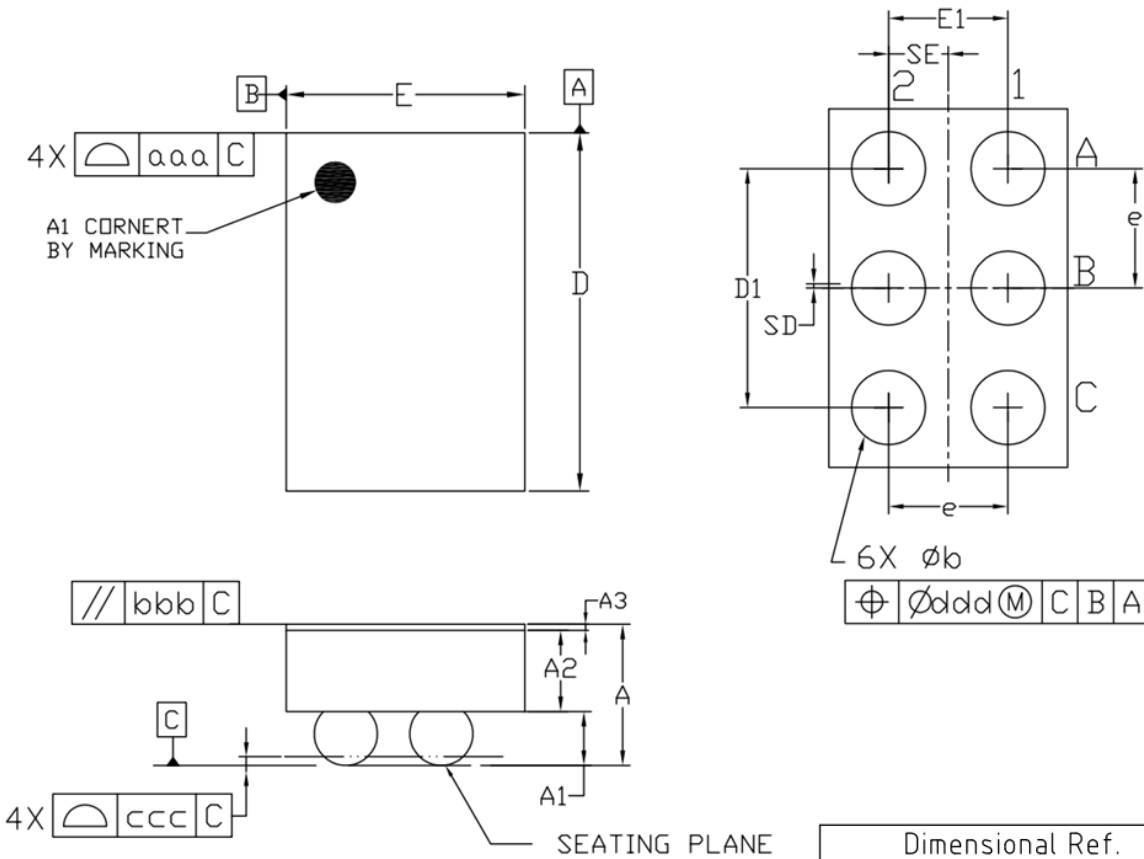
- Data Storage, SSD
- Wearables
- Low Power Subsystems

PACKAGE



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

WLCSP PACKAGE OUTLINE



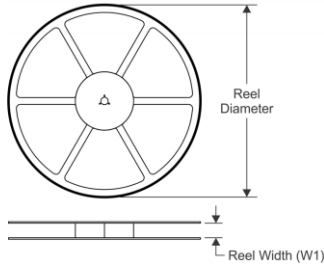
Dimensional Ref.			
REF.	Min.	Nom.	Max.
A	0.500	0.550	0.600
A1	0.225	0.250	0.275
A2	0.250	0.275	0.300
A3	0.020	0.025	0.030
D	1.460	1.470	1.485
E	0.960	0.970	0.985
D1	0.950	1.000	1.050
E1	0.450	0.500	0.550
b	0.260	0.310	0.360
e	0.500 BSC		
SD	0.000 BSC		
SE	0.250 BSC		
Tol. of Form & Position			
aaa	0.10		
bbb	0.10		
ccc	0.05		
ddd	0.05		

Notes

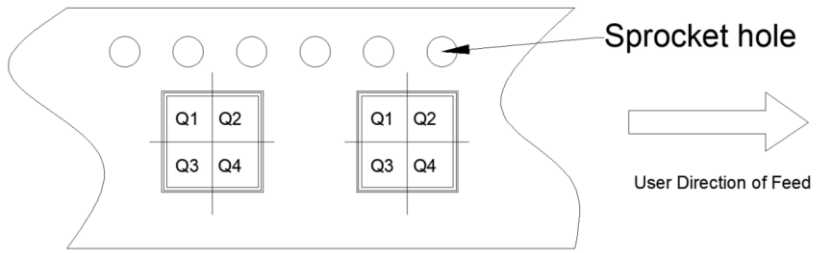
1. ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES)
2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
3. A3: BACKSIDE LAMINATION

TAPE AND REEL INFORMATION

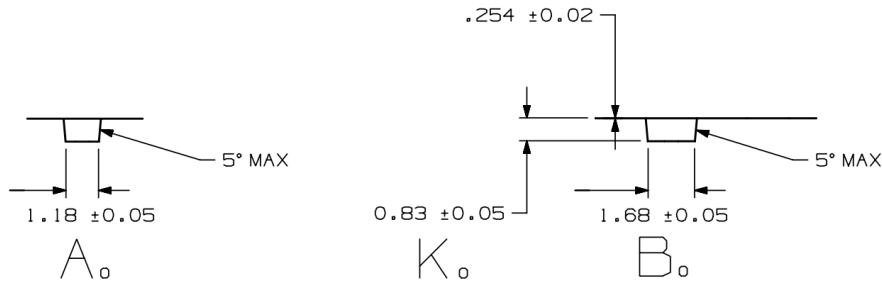
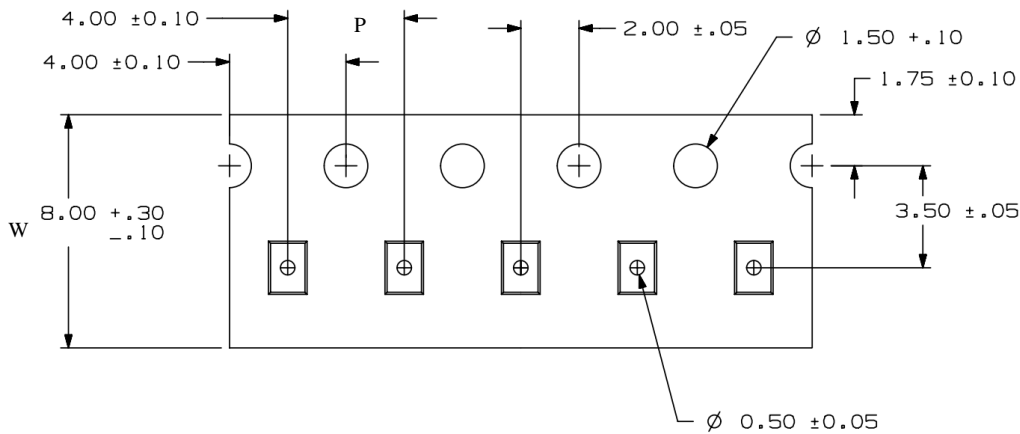
REEL DIMENSIONS



QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE



TAPE DIMENSIONS



Device	Package	Pins	SPQ	Reel Diameter(mm)	Reel Width W1	A0	B0	K0	P	W	Pin1
GLF72524	WLCSP	6	3000	180	9	1.18	1.68	0.83	4	8	Q1

Remark:

- A0: Dimension designed to accommodate the component width
- B0: Dimension designed to accommodate the component length
- C0: Dimension designed to accommodate the component thickness
- W: Overall width of the carrier tape
- P: Pitch between successive cavity centers