

GLF72119

3A, Ultra-low Power I_QSmart[™] Load Switch with True Reverse Current Blocking

Product Specification

DESCRIPTION

The GLF72119 is an advanced technology fully integrated I_QSmart[™] load switch device with True Reverse Current Blocking (TRCB) technology and slew rate control of the output voltage.

The GLF72119 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 VOUT pin voltage exceeds the VIN voltage.

The GLF72119 has industry leading efficiency. It features a R_{ON} as low as 29 $m\Omega$ 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 GLF72119 can achieve an I_{SD} as low as 24 nA typical at 5.5 V.

The GLF72119 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 GLF72119 load switch device is small, utilizing a chip scale package with 4 bumps in a 0.97 mm x 0.97 mm x 0.55 mm die size and a 0.5 mm pitch.

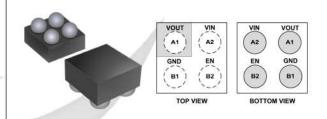
FEATURES

- True Reverse Current Blocking
- Ultra-Low I_Q: 1.4 μA Typ @ 5.5 V_{IN}
- Ultra-Low I_{SD}: 24 nA Typ @ 5.5 V_{IN}
- Low R_{ON}: 29 mΩ Typ @ 5.5V_{IN}
- I_{OUT} Max: 3 A
- Wide Input Range: 1.5 V to 5.5 V
 - 6 V_{Abs} max
- Controlled Rise Time: 1.2 ms at 3.3 V_{IN}
- Internal EN Pull-Down Resistor, R_{EN}
- Integrated Output Discharge Switch
- 0.97 mm x 0.97 mm x 0.55 mm Wafer Level Chip Scale Package

APPLICATIONS

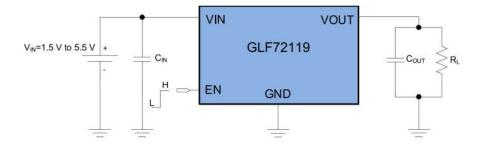
- Mobile Devices
- Wearables
- Low Power Subsystems

PACKAGE



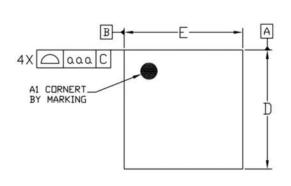
0.97 mm x 0.97 mm x 0.55 mm WLCSP

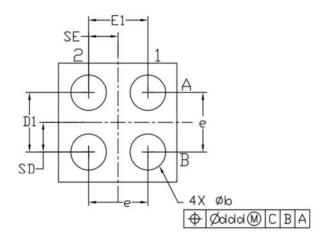
APPLICATION DIAGRAM

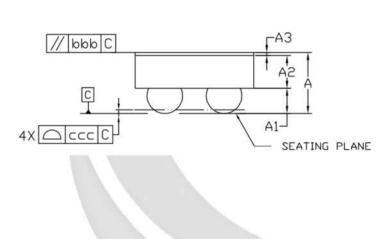




PACKAGE OUTLINE







Dimensional Ref.										
REF.	Min.	Nom.	Max.							
Α	0.500	0.550	0.600							
A1	0.225	0.250	0.275							
A2	0.255	.255 0.275 0.3								
Α3	0.020	0.025	0.030							
D	0.960	0.970	0.985							
Ε	0.960	0.970	0.985							
D1	0.450	0.500	0.550							
E1	0.450	0.500	0.550							
Ь	0.260	0.310	0.360							
е	0.500 BSC									
SD	0.250 BSC									
SE	0.250 BSC									
Tol. of Form&Position										
999	0.10									
ььь	0.10									
CCC	0.05									
ddd	0.05									

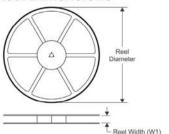
Notes

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

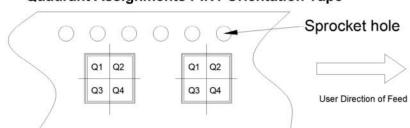


TAPE AND REEL INFORMATION

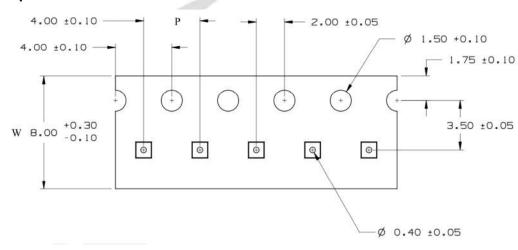
Reel Dimensions

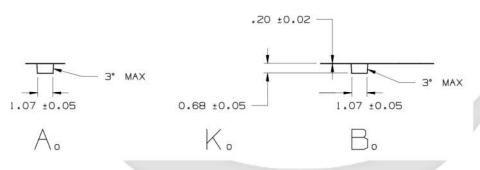


Quadrant Assignments PIN1 Orientation Tape



Tape Dimensions





Device	Package	Pins	SPQ	Reel Diameter(mm)	Reel Width W1	Α0	В0	K0	P1	w	Pin1
GLF72119	WLCSP	4	3000	180	9	1.07	1.07	0.68	4	8	Q1

Notes

- 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