

GLF71511

Nano-Current Consumed, IoSmart™ Load Switch

Product Brief

DESCRIPTION

The GLF71511 is an ultra-efficiency, 2 A rated, Load Switch with integrated slew rate control. The best in class efficiency makes it an ideal chose for use in IoT, mobile, and wearable electronics.

The GLF71511 features ultra-efficient I_QSmart^{TM} technology that supports the lowest quiescent current (I_Q) and shutdown current (I_{SD}) in the industry. Low I_Q and I_{SD} solutions help designers to reduce parasitic leakage current, improve system efficiency, and increase battery lifetime.

The GLF71511 integrated slew rate control can also enhance system reliability by mitigating bus voltage swings during switching events. Where uncontrolled switches can generate high inrush currents that result in voltage droop and/or bus reset events, the GLF slew rate control specifically limits inrush currents during turn-on to minimize voltage droop.

GLF71511 Load Switch devices support 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 reduce operating cost.

GLF71511 Load Switch device is small utilizing a chip scale package with 4 bumps in a 0.97 mm x 0.97 mm x0.55 mm die size and a 0.5 mm bump pitch.

FEATURES

 Wide Operating Temperature Range: -40°C ~ 105°C

Ultra-Low I_Q: 5 nA Typ @ 3.3 V_{IN}
 Ultra-Low I_{SD}: 9 nA Typ @ 3.3 V_{IN}
 Low R_{ON}: 30 mΩ Typ @ 3.3V_{IN}

• I_{OUT} Max: 2 A

• Wide Input Range: 1.1 V to 5.5 V

6 V abs max

Controlled Rise Time: 2.2 ms at 3.3 V_{IN}

• Internal EN Pull-Down Resistor

Integrated Output Discharge Switch

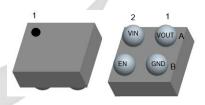
• HBM: 6 kV, CDM: 2 kV

 Ultra-Small: 0.97 mm x 0.97 mm x 0.55 mm WLCSP 4 Bumps, 0.5 mm Pitch

APPLICATIONS

- Telecommunication Module
- Data Storage
- Mobile Devices
- Low Power Subsystems

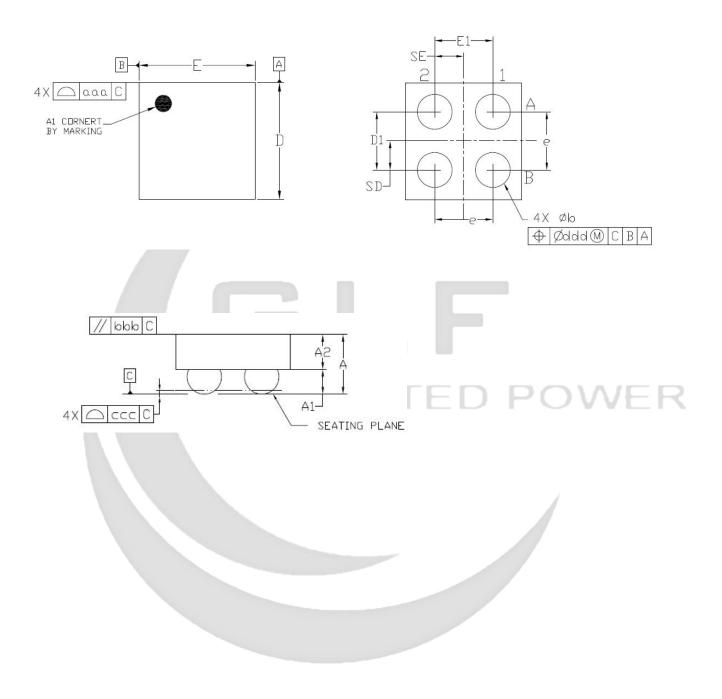
PACKAGE



0.97 mm x 0.97 mm x 0.55 mm WLCSP



PACKAGE OUTLINE



Dimensional Ref.										
REF.	Min.	Nom.	Max.							
А	0.500	0.550	0.600							
Α1	0.225	0.250	0.275							
A2	0.275	0.300	0.325							
D	0.955	0.970	0.985							
Ε	0.955	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									
To	ol. of Fo	rm&Po:	sition							
ааа	0.10									
ььь	0.10									
CCC	0.05									
ddd	0.05									

Notes

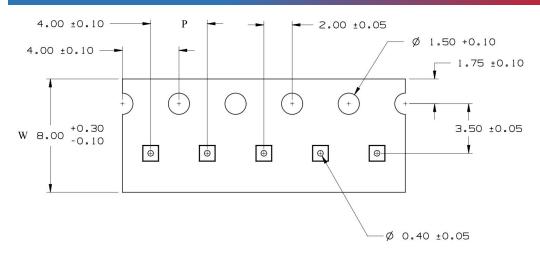
- 1. AU DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
- 2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.

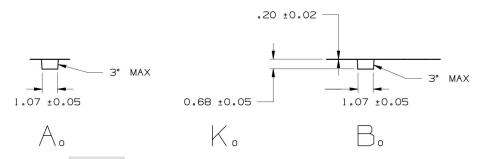
INTEGRATED POWER

TAPE AND REEL INFORMATION

REEL DIMENSIONS QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE Sprocket hole Q1 Q2 Q1 Q2 Q3 Q4 User Direction of Feed

TAPE DIMENSIONS





Device	Package	Pins	SPQ	Reel Diameter(mm)	Reel Width W1	Α0	В0	КО	P	w	Pin1
GLF71511	WLCSP	4	3000	180	9	1.07	1.07	0.68	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