

GLF71310 p-Current Consumed IoSmart™

Nano-Current Consumed I_QSmart[™] Load Switch with Slew Rate

Product Brief

DESCRIPTION

The GLF71310 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 GLF71310 features ultra-efficient I_QSmart[™] 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 GLF71310 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.

GLF71310 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.

GLF71310 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 bump pitch.

FEATURES

Ultra-Low Iq: 7 nA Typ @ 5.5 V_{IN}
Ultra-Low I_{SD}: 28 nA Typ @ 5.5 V_{IN}

 $\bullet \quad \text{Low Ron}: \qquad 31 \text{ m}\Omega \text{ Typ } @ 5.5 \text{ V}_{\text{IN}}$

• I_{OUT} Max: 2 A

• Wide Input Range: 1.1 V to 5.5 V

6 Vabs max

Controlled Rise Time: 335 us at 3.3 V_{IN}

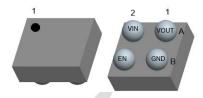
• Internal EN Pull-Down Resistor

Ultra-Small: 0.97 mm x 0.97 mm

APPLICATIONS

- Wearables
- Data Storage, SSD
- Mobile Devices
- Low Power Subsystems

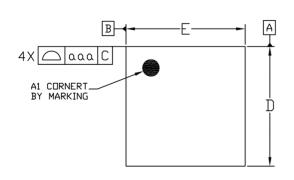
PACKAGE

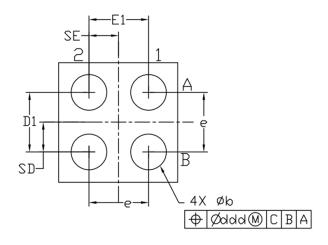


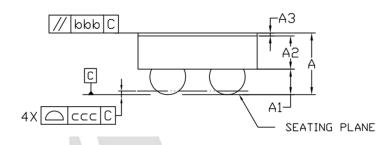
0.97 mm x 0.97 mm x 0.55 mm WLCSP



PACKAGE OUTLINE







Dimensional Ref.									
REF.	Min.	Nom.	Max.						
Α	0.500	0.550	0.600						
Α1	0.225	0.250	0.275						
Α2	0.255	0.255 0.27\$ 0.30							
Α3	0.020	0.020 0.025 0.03							
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									
ааа	0.10								
ЬЬЬ	0.10								
CCC	0.05								
ddd	0.05								

Notes

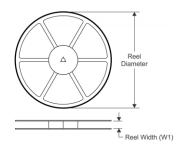
- 1. ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGRESS)
- 2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
- 3. A3: BACKSIDE LAMINATION

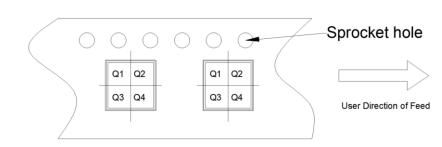
INTEGRATED POWER Nano-Current Consumed, IQSmartTM Load Switch with Slew Rate

TAPE AND REEL INFORMATION

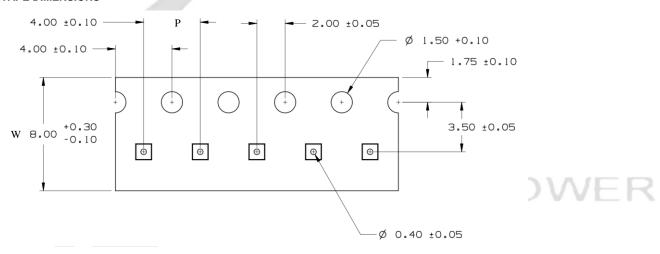
REEL DIMENSIONS

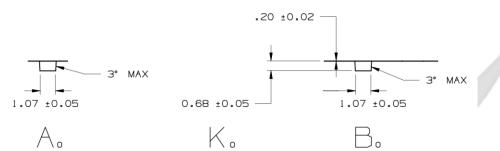
QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE





TAPE DIMENSIONS





Device	Package	Pins	SPQ	Reel Diameter(mm)	Reel Width W1	Α0	В0	K0	Р	w	Pin1
GLF71310	WLCSP	4	3000	180	9	1.07	1.07	0.68	4	8	Q1
GLF71310	WLCSP	4	3000	180	9	1.07	1.07	0.68	4	8	Q1
GLF71312	WLCSP	4	3000	180	9	1.07	1.07	0.68	4	8	Q1
GLF71313	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