

# GLF72110

## 3A, Ultra-low Power I<sub>Q</sub>Smart™ Load Switch with True Reverse Current Blocking

### Product Brief

#### DESCRIPTION

The GLF72110 is an advanced technology fully integrated I<sub>Q</sub>Smart™ load switch device with True Reverse Current Blocking (TRCB) technology and slew rate control of the output voltage.

The GLF72110 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 V<sub>OUT</sub> pin voltage exceeds the V<sub>IN</sub> voltage.

The GLF72110 has industry leading efficiency. It features a R<sub>ON</sub> as low as 29 mΩ typical at 5.5 V, reducing power loss during conduction. The device also features ultra-low shutdown current (I<sub>SD</sub>) to reduce power loss and battery drain in the off state. When EN is pulled low, and the output is grounded, the GLF72110 can achieve an I<sub>SD</sub> as low as 24 nA typical at 5.5 V.

The GLF72110 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 GLF72110 load switch device is small, utilizing a chip scale package with 4 bumps in a 0.97 mm x 0.97 mm die size and a 0.5 mm pitch.

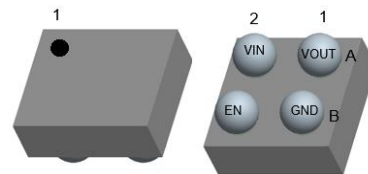
#### FEATURES

- True Reverse Current Blocking
- Ultra-Low I<sub>Q</sub>: 1.4 uA Typ @ 5.5 V<sub>IN</sub>
- Ultra-Low I<sub>SD</sub>: 24 nA Typ @ 5.5 V<sub>IN</sub>
- Low R<sub>ON</sub> : 29 mΩ Typ @ 5.5V<sub>IN</sub>
- I<sub>OUT</sub> Max: 3 A
- Wide Input Range: 1.5 V to 5.5 V  
6 Vabs max
- Controlled Rise Time: 1.2 ms at 3.3 V<sub>IN</sub>
- Internal EN Pull-Down Resistor, R<sub>EN</sub>
- 0.97 mm x 0.97 mm x 0.55 mm Wafer Level Chip Scale Package

#### APPLICATIONS

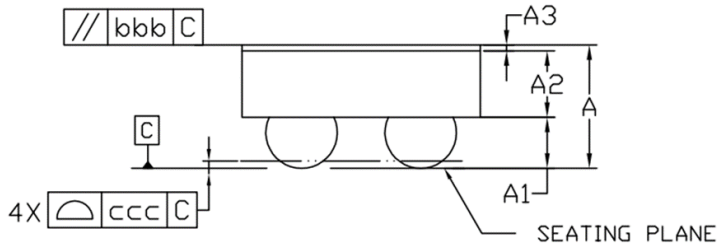
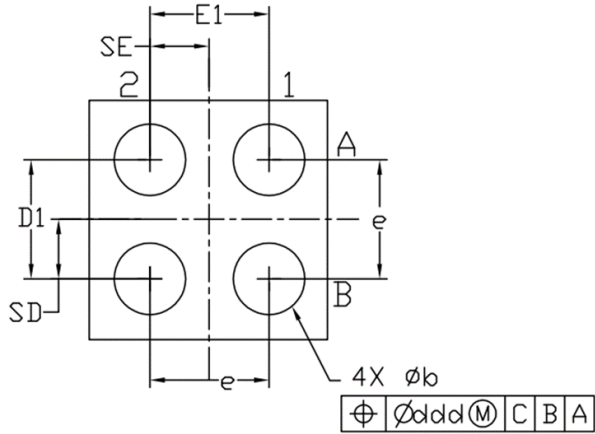
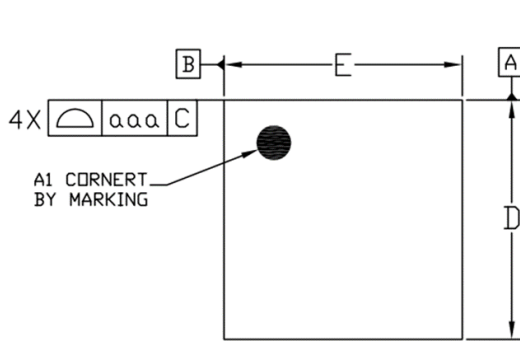
- Mobile Devices
- Wearables
- Low Power Subsystems

#### PACKAGE



0.97 mm x 0.97 mm x 0.55 mm WLCSP

**PACKAGE OUTLINE**



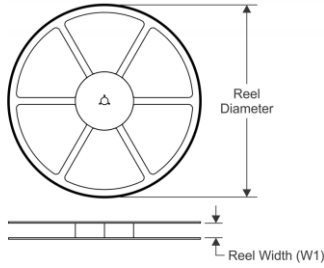
Dimensional Ref.			
REF.	Min.	Nom.	Max.
A	0.500	0.550	0.600
A1	0.225	0.250	0.275
A2	0.255	0.275	0.300
A3	0.020	0.025	0.030
D	0.960	0.970	0.985
E	0.960	0.970	0.985
D1	0.450	0.500	0.550
E1	0.450	0.500	0.550
b	0.260	0.310	0.360
e	0.500 BSC		
SD	0.250 BSC		
SE	0.250 BSC		
Tol. of Form&Position			
aaa	0.10		
bbb	0.10		
ccc	0.05		
ddd	0.05		

Notes

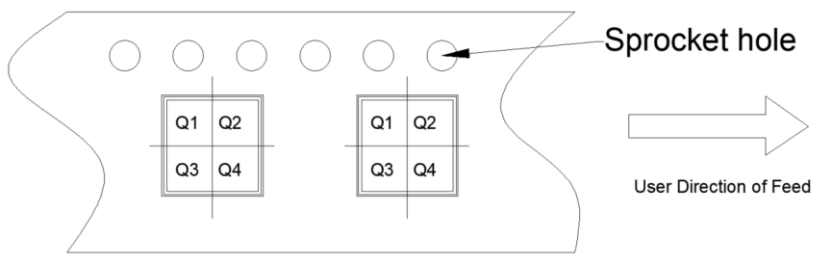
1. ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES)
2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
3. A3: BACKSIDE LAMINATION

**TAPE AND REEL INFORMATION**

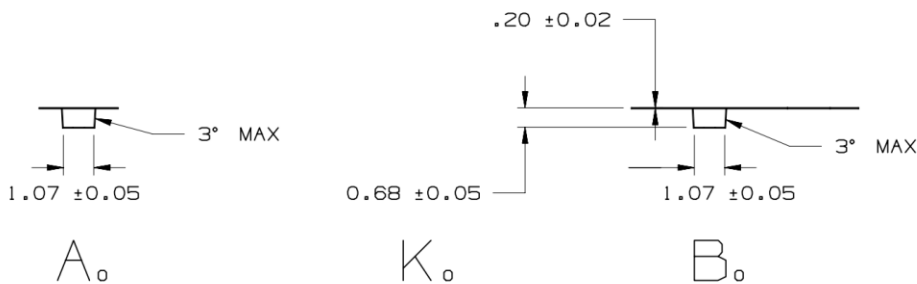
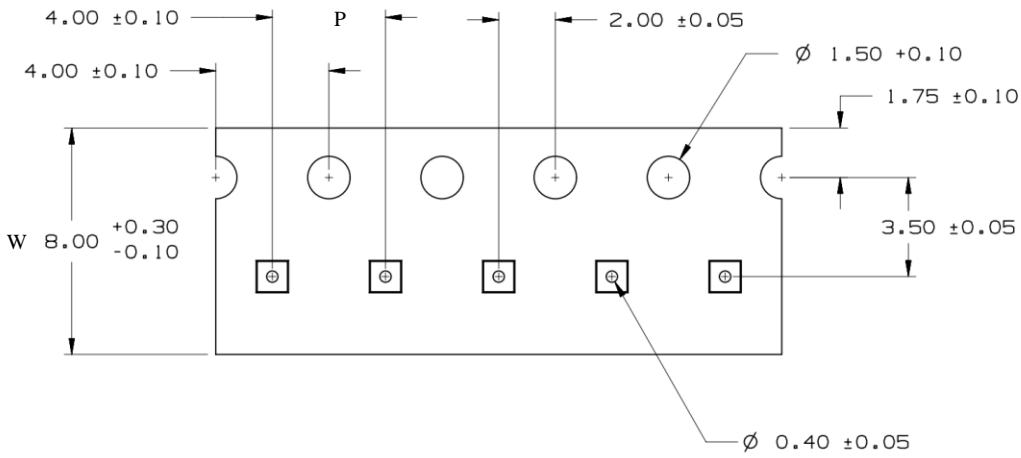
**REEL DIMENSIONS**



**QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE**



**TAPE DIMENSIONS**



Device	Package	Pins	SPQ	Reel Diameter(mm)	Reel Width W1	A0	B0	K0	P	W	Pin1
GLF72110	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