

## DESCRIPTION

The GLF7210x product family is an advanced technology fully integrated I<sub>Q</sub>Smart™ load switch device with reverse current blocking (RCB) protection and slew rate control of the output voltage.

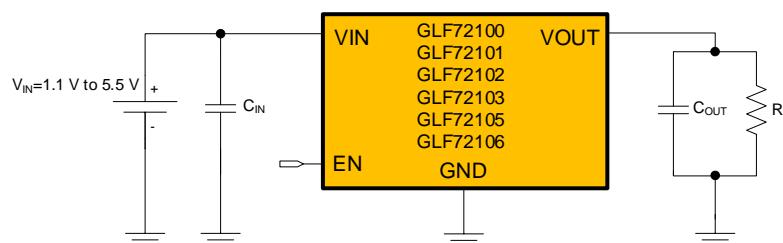
The GLF7210x product family offers industry leading reverse current blocking (RCB) protection performance, featuring an ultra-low threshold voltage. The GLF7210x product family minimizes reverse current flow in the event that the V<sub>OUT</sub> voltage exceeds the V<sub>IN</sub> voltage.

The GLF7210x product family has an industry leading power efficiency. The GLF7210x product family features an on-resistance (R<sub>ON</sub>) as low as 37 mΩ typical at 5.5 V, reducing power loss during conduction. The GLF7210x product family 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 GLF7210x product family can achieve an I<sub>SD</sub> as low as 20 nA typical at 5.5 V.

The GLF7210x product family of load switch device supports an industry leading wide input voltage range that helps to improve system operating life and overall performance. One GLF7210x device can be used in multiple voltage rail applications which helps mitigate inventory management and reduces BOM cost.

The GLF7210x product family utilizes a chip scale package with 4 bumps in a 0.77 mm x 0.77 mm x 0.46 mm die size and a 0.4 mm pitch.

## APPLICATION DIAGRAM



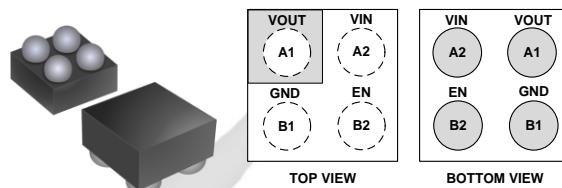
## FEATURES

- Wide Input Range: 1.5 V to 5.5 V  
6 V<sub>abs</sub> max
- Ultra-Low I<sub>Q</sub>: 0.45 μA Typ at 5.5 V<sub>IN</sub>
- Ultra-Low I<sub>SD</sub>: 20 nA Typ at 5.5 V<sub>IN</sub>
- Low R<sub>ON</sub>: 37 mΩ Typ at 5.5 V<sub>IN</sub>
- I<sub>OUT</sub> Max: 2 A
- Reverse Current Blocking Protection
- Controlled V<sub>OUT</sub> Rise Time
- Internal EN Pull-up/down Resistor on EN Pin
- Integrated Output Discharge Switch:  
GLF72101, GLF72103, GLF72105

## APPLICATIONS

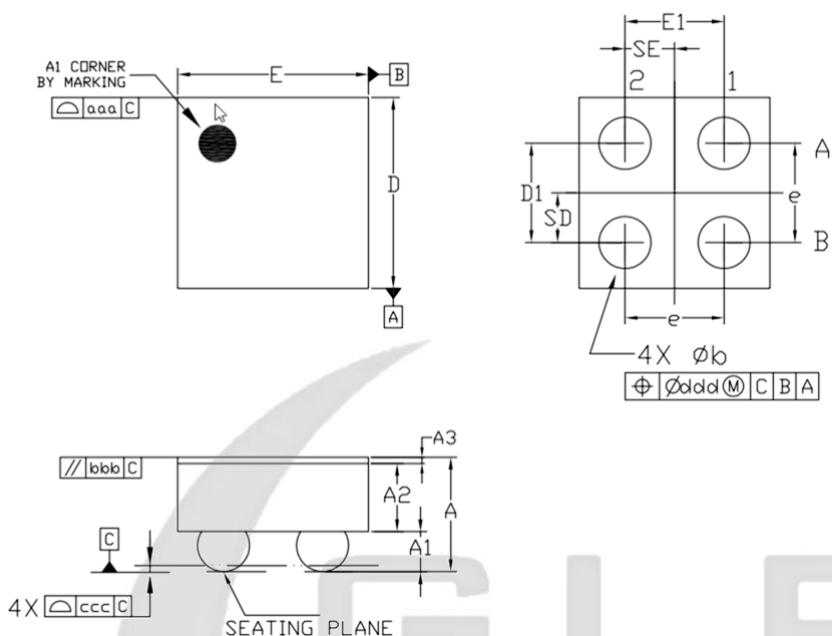
- Portable Devices
- Wearable Devices
- Low Power Subsystems
- Smart IoT Devices

## PACKAGE



0.77 mm x 0.77 mm x 0.46 mm WLCSP

## PACKAGE OUTLINE

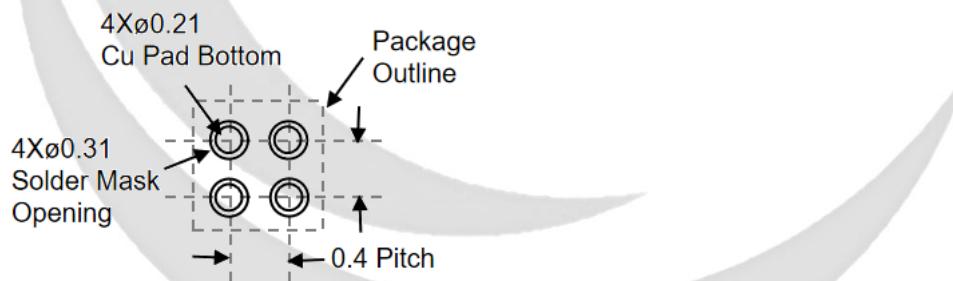


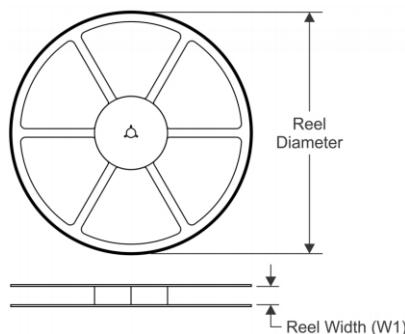
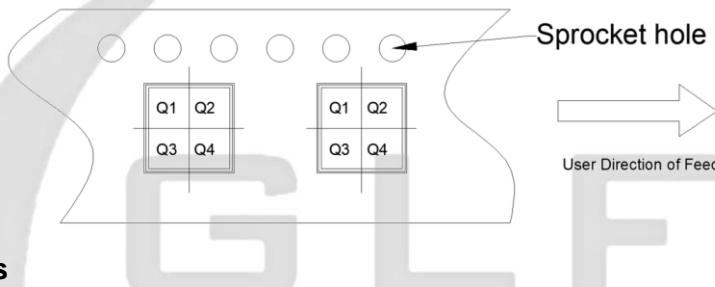
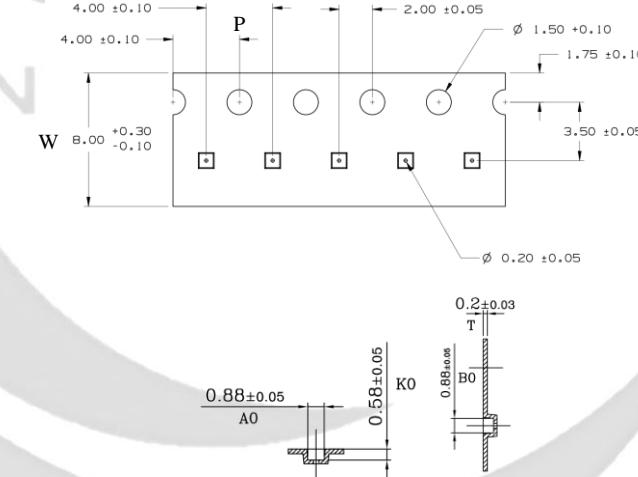
Dimensional Ref.			
REF.	Min.	Nom.	Max.
A	0.410	0.460	0.510
A1	0.135	0.160	0.185
A2	0.250	0.275	0.300
A3	0.020	0.025	0.030
D	0.755	0.770	0.785
E	0.755	0.770	0.785
D1	0.350	0.400	0.450
E1	0.350	0.400	0.450
b	0.170	0.210	0.250
e	0.400 BSC		
SD	0.200 BSC		
SE	0.200 BSC		
Tol. of Form&Position			
aaa	0.10		
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

### Recommended Footprint



**TAPE AND REEL INFORMATION**
**Reel Dimensions**

**Quadrant Assignments PIN1 Orientation Tape**

**Tape Dimensions**


Device	Package	Pins	SPQ	Reel Diameter (mm)	Reel Width W1	A0	B0	K0	P	W	Pin1
GLF72100	WLCSP	4	4000	179	9	0.88	0.88	0.58	4	8	Q1
GLF72101	WLCSP	4	4000	179	9	0.88	0.88	0.58	4	8	Q1
GLF72102	WLCSP	4	4000	179	9	0.88	0.88	0.58	4	8	Q1
GLF72103	WLCSP	4	4000	179	9	0.88	0.88	0.58	4	8	Q1
GLF72105	WLCSP	4	4000	179	9	0.88	0.88	0.58	4	8	Q1
GLF72106	WLCSP	4	4000	179	9	0.88	0.88	0.58	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

P1: Pitch between successive cavity centers