## **GLF76431**



### 6A Integrated Load Switch with Configurable Power Reset Timer

**Product Specification** 

### DESCRIPTION

The GLF76431 is a 6 A load switch with a configurable reset timer for portable devices. The /SRO pin offers a true reset function enabling the load switch to completely disconnect the load from the input battery after a reasonable long delay time. After the reset period, the main switch of the GLF76431 reconnects the output load to the input battery for normal operation. The programmable delay time to the power reset mode by an external resistor on the REXT pin provides designers with system design flexibility.

The OFF input pin allows the GLF76431 to achieve complete shutdown with total downstream standby current of 360 nA typical. With the switch placed between a battery and system, this switch can help to significantly extend system battery life in mobile devices during shipping or periods of extended off time.

The GLF76431 helps to reduce power consumption with the best in class  $R_{ON}$  and a breakthrough on state  $I_Q$  of only 420 nA typical when the switch is on.

The GLF76431 integrated 1 ms slew rate control can also enhance system reliability by mitigating bus voltage swings during switching events. Where uncontrolled switching can generate high inrush currents that result in voltage droop and/or bus reset events, the GLF76431 slew rate control specifically limits inrush currents during turn-on to minimize voltage droop. The output discharge function makes output voltage off quickly during the reset period.

### **FEATURES**

Ultra-Low I<sub>SD</sub>: 360 nA Typ @ 3.6 V<sub>BAT</sub>
Ultra-Low I<sub>Q</sub>: 420 nA Typ @ 3.6 V<sub>BAT</sub>
Low R<sub>ON</sub>: 19 mΩ Typ @ 3.6 V<sub>BAT</sub>

• I<sub>OUT</sub> Max: 6 A

• Wide Input Range: 1.8 V to 5.5 V

6 V<sub>abs</sub> max

- Power Reset Mode by /SRO Pin Disconnect the downstream system from Battery Source
- Programmable delay and reset duration by one external resistor, Rext
  - Reset delay time by /SRO pin
  - · Turn-off delay time by OFF pin
  - Power reset duration time
- Integrated Output Discharge During Reset Period
- Controlled Output Rise Time: 1 ms at 3.6 V<sub>BAT</sub>
- Operating Temperature Range: 40 °C to 85 °C
- HBM: 8 kV, CDM: 2 kV

### **APPLICATIONS**

- Smart Wearables
- IoT Devices
- Medical Devices

### **PACKAGE**

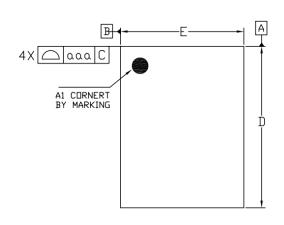


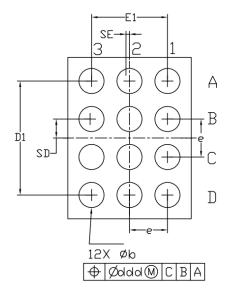
VOUT	VOUT	VOUT
(A1)	(A2)	$(\widehat{A3})$
VBAT	VBAT	VBAT
(B1)	(B2)	(B3)
GND	DSR	/SRO
(C1)	(C2)	(C3)
REXT	OFF	WAKE
(D1)	(D2)	(D3)
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TOP VIEW

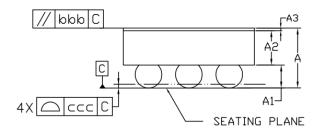
1.27 mm x 1.67 mm x 0.55 mm, 0.4 mm Pitch, WLCSP

### **PACKAGE OUTLINE**









Dimensional Ref.							
REF.	Min.	Nom.	Max.				
Α	0.500	0.550	0.600				
A1	0.175	0.200	0.225				
A2	0.300	0.325	0.350				
А3	0.020	0.025	0.030				
D	1.655	1.670	1.685				
Е	1.255	1.270	1.285				
D1	1.150	1.200	1.250				
E1	0.750	0.800	0.850				
Ь	0.215	0.265	0.315				
е	0.400 BSC						
SD	0.200 BSC						
SE	0.000 BSC						
Tol. of Form&Position							
aaa	0.10						
ЬЬЬ	0.10						
ccc	0.05						
ddd	0.05						

### Notes

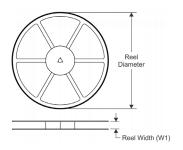
- 1. ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGRESS)
- 2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
- 3. A3: BACKSIDE LAMINATION

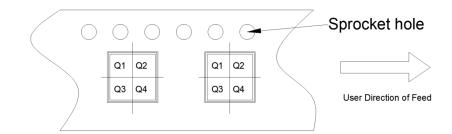
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### TAPE AND REEL INFORMATION

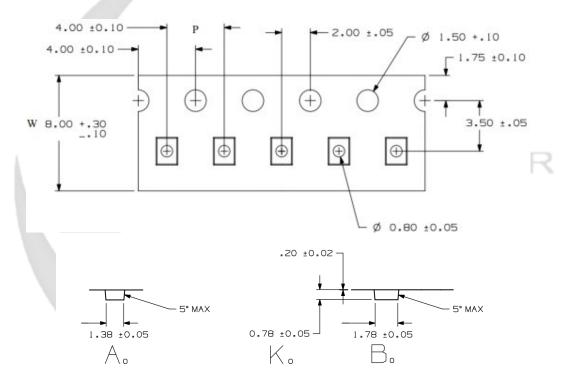
### **REEL DIMENSIONS**

### **QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE**





### TAPE DIMENSIONS



Dev	rice	Package	Pins	SPQ	Reel Diameter(mm)	Reel Width W1	A0	В0	K0	Р	w	Pin1
GLF7	6431	WLCSP	12	3000	180	9	1.38	1.78	0.78	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

# 单击下面可查看定价,库存,交付和生命周期等信息

# >>GLF(杰夫微)