



GLF74130

4.5A Power Mux Switch with Auto & Manual Input Selection

Product Specification

DESCRIPTION

The GLF74130 I_QSmart™ is an advanced technology fully integrated power path load switch with the ability to automatically select between two input sources depending on the input voltage level of each source. The power path switch is targeted for the data storage and mobile markets and is therefore available as a chip scale package utilizing 12 bumps in a 1.27 mm x 1.67 mm x 0.55 mm die size to deliver the highest performance lowest cost power path switch solution in the industry.

The GLF74130 has a built-in reverse current blocking protection. When both switches are at the off mode, the GLF74130 prevents the reverse current from a higher output voltage to the input side.

The EN pin can be used along with the SEL pin to control the switches of the GLF74130. By the combination of these two pins, one of input source selection modes is set among the automatic, VIN1, or VIN2 selection.

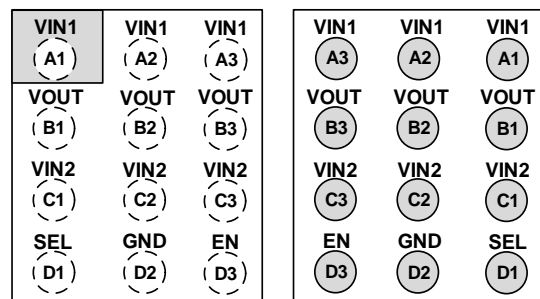
FEATURES

- Two-Input and Single-Output Power Multiplexer Switch
- Automatic and Manual Input Selection Modes
- Supply Voltage Range : 1.5 V to 5.5 V
- R_{ON} = 20 mΩ Typ. at 5.5 V_{IN1} or V_{IN2}
- 4.5 A Continuous Output Current Capability Per Channel
- Ultra-Low Supply Current at Operation
I_Q : 4 uA Typ at 5.5 V_{IN}
- Ultra-Low Stand-by Current
I_{SD} : 50 nA Typ at 5.5 V_{IN}
- Reverse Current Blocking when Disabled
- Operating Temperature Range: -40 to 85 °C
- HBM: 6 kV, CDM: 2 kV
- 1.27 mm x 1.67 mm x 0.55 mm, 12 Bump Wafer Level Chip Scale Package

APPLICATIONS

- IoT Tracking System
- Smart Devices
- Communication / Network System
- Subsystem with Backup Power

PACKAGE

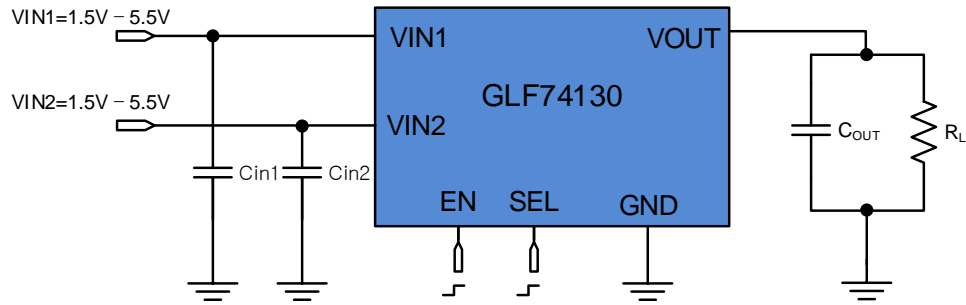


TOP VIEW

BOTTOM VIEW

1.27 mm x 1.67 mm x 0.55 mm, 0.4 mm pitch

APPLICATION DIAGRAM



FUNCTIONAL BLOCK DIAGRAM

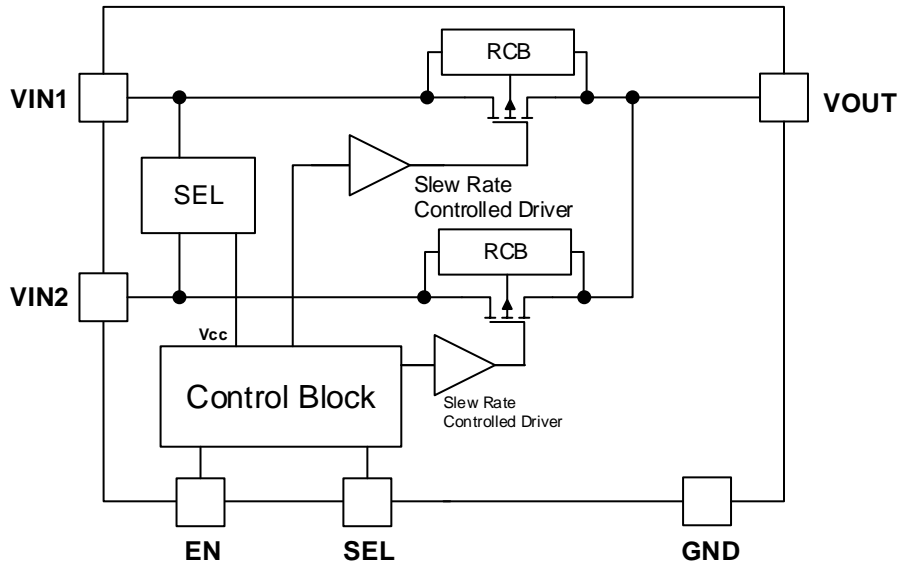


Figure 1. Functional Block Diagram

PIN CONFIGURATION

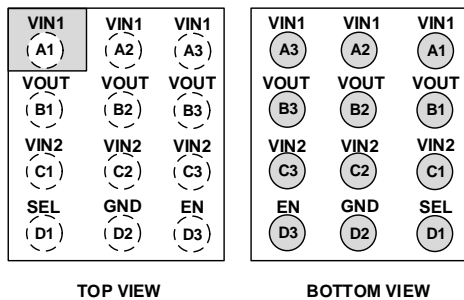


Figure 2. 1.27mm x 1.67mm x 0.55mm WLCSP

PIN DEFINITION

Pin #	Name	Description
A1, A2, A3	VIN1	Switch Input 1. Supply Voltage
B1, B2, B3	VOUT	Switch Output
C1, C2, C3	VIN2	Switch Input 2. Supply Voltage
D1	SEL	Input Source Selection. Do not leave the SEL pin floating.
D2	GND	Ground
D3	EN	Enable to control the switch. Do not leave the EN pin floating.

ABSOLUTE MAXIMUM RATINGS

Stresses exceeding the absolute maximum ratings may damage the device. The device may not function or be operable above the recommended operating conditions; extended exposure to stresses above the recommended operating conditions may affect device reliability. The absolute maximum ratings are stress ratings only.

Symbol	Parameter	Min.	Max.	Unit
VIN1, VIN2 VOUT, EN	Each Pin Voltage Range to GND	-0.3	6	V
I _{OUT}	Continuous Current		4.5	A
	Pulse, 100 us pulse and 2 % duty cycle		6.5	A
P _D	Power Dissipation at T _A = 25 °C		1.2	W
T _{STG}	Storage Junction Temperature	-65	150	°C
T _A	Operating Temperature Range	-40	85	°C
θ _{JA}	Thermal Resistance, Junction to Ambient		85	°C/W
ESD	Electrostatic Discharge Capability	Human Body Model, JESD22-A114	6	kV
		Charged Device Model, JESD22-C101	2	

RECOMMENDED OPERATING CONDITIONS

Symbol	Parameter	Min.	Max.	Unit
VIN1, VIN2	Supply Voltage	1.5	5.5	V
T _A	Ambient Operating Temperature	-40	+85	°C

单击下面可查看定价，库存，交付和生命周期等信息

[>>GLF](#)