



SIP321XX

Vishay Smart Load Switches



EBV Elektronik presents a 6.5 mΩ, bi-directional battery switch in compact WCSP.

The SiP32101, SiP32102, and SiP32103 bidirectional switches feature reverse blocking capability to isolate the battery from the system. The internal switch has an ultra-low 6.5 mΩ (typ at 3.3 V) on-resistance and operates from a +2.3 V to +5.5 V input voltage range, making the devices ideal battery-disconnect switches for high-capacity battery applications.

Other features like slew rate control provide a controlled supply ramp, reducing inrush current. With quick output discharge, the output node has a defined decay and does not leave the node floating. Fault protection and isolation allows load switches to have integrated protection features like reverse current, over temperature, current limiting and short circuit, thus increasing robustness. And with a small package size, these integrated load switches use significantly less PCB area compared to a discrete implementation.

Reduced BOM count translates to lower manufacturing costs.

KEY FEATURES

- In-rush control
- Low voltage control logic
- Output discharge
- Reverse blocking
- Hot plug
- Programmable over current protection
- Over current clamping
- Short circuit protection
- Load condition-current read back
- Over voltage protection
- Over voltage clamping
- Over temperature protection
- Fault flag

APPLICATION EXAMPLES

- Portable instruments
- Healthcare devices
- Smartphone/cellular phones
- PMP, GPS, DSC
- Tablets
- Digital still/video cameras
- Portable meters and test instruments
- Communication devices with embedded batteries
- Data storage
- Battery bank

