

# Quick Start Guide

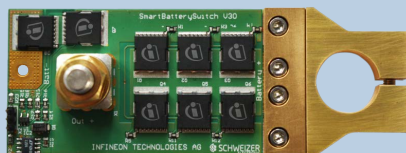
## Smart Battery Switch (SBS) HW Version 3

### Product Safety Warnings

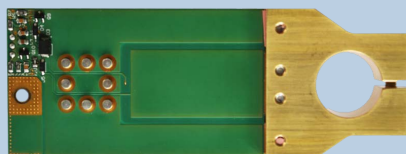
- The Smart Battery Switch (SBS) is only intended to be used as an engineering demonstrator. It is not intended for extensive use or to be re-used in a product or system that is sold to consumers.
- The SBS is intended to be used by electrical engineers who are experts in the field of high current design. If you are not qualified, seek the help of an expert before using the demonstrator.
- Questions about the SBS should be directed to Infineon Application Engineering.
- The cable, cable lug, washer and nut used to connect to the bolt mounted onto the SBS demonstrator's circuit board must all be made of high current-capable metals which will not experience a significant temperature rise while conducting the current.
- Battery Camping compliant to IEC 60095-2\_Ed.4 (2009)
- The cable lug must be mounted directly to the bolt (torque  $6\text{Nm} \pm 1\text{Nm}$ ).
- Keep the current below 1800 A. The time a current may be applied is limited by the temperature rise.
- Don't exceed 1 Joule of switching energy.
- Switching to high currents or to high switch off energy may destroy the switch and the test setup and end up in fire.

### Content

- Schematic
- How to connect the SBS

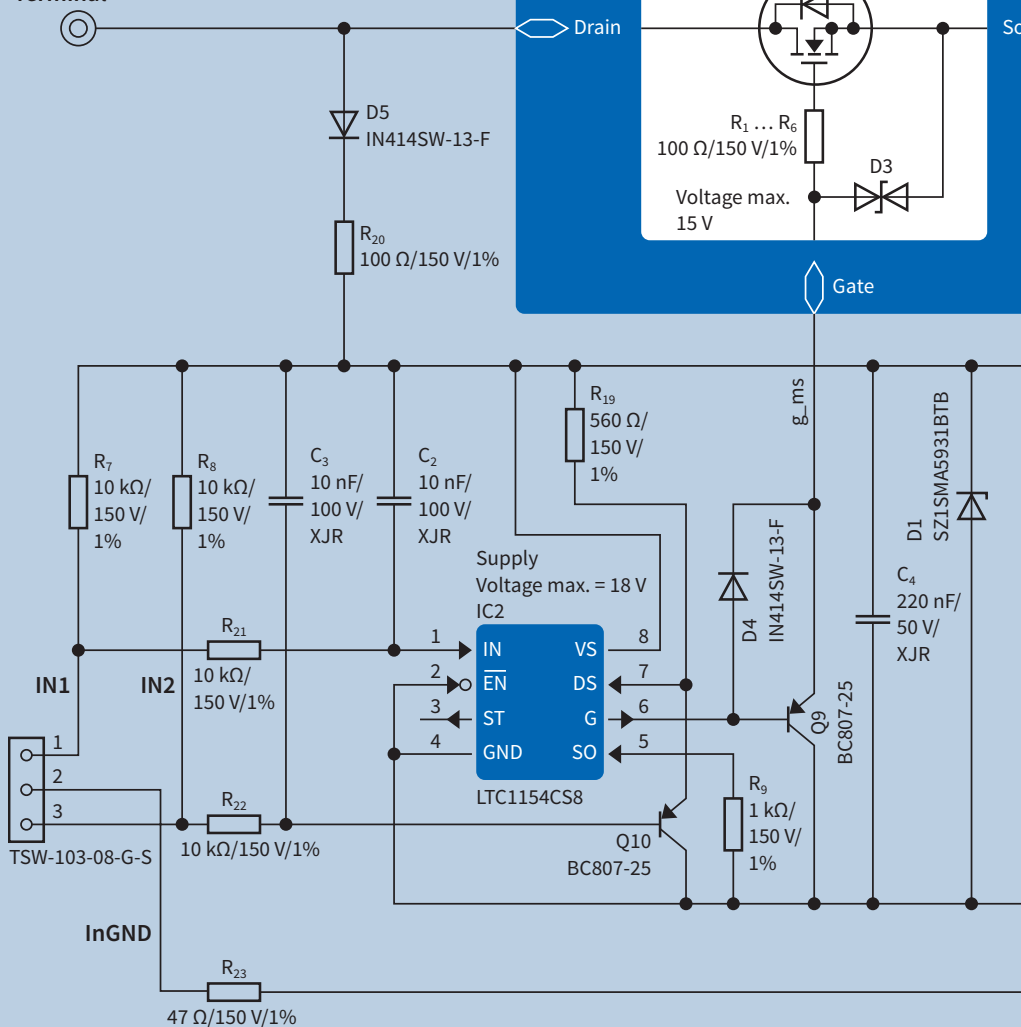


Top



Bottom

## Battery Positive Terminal

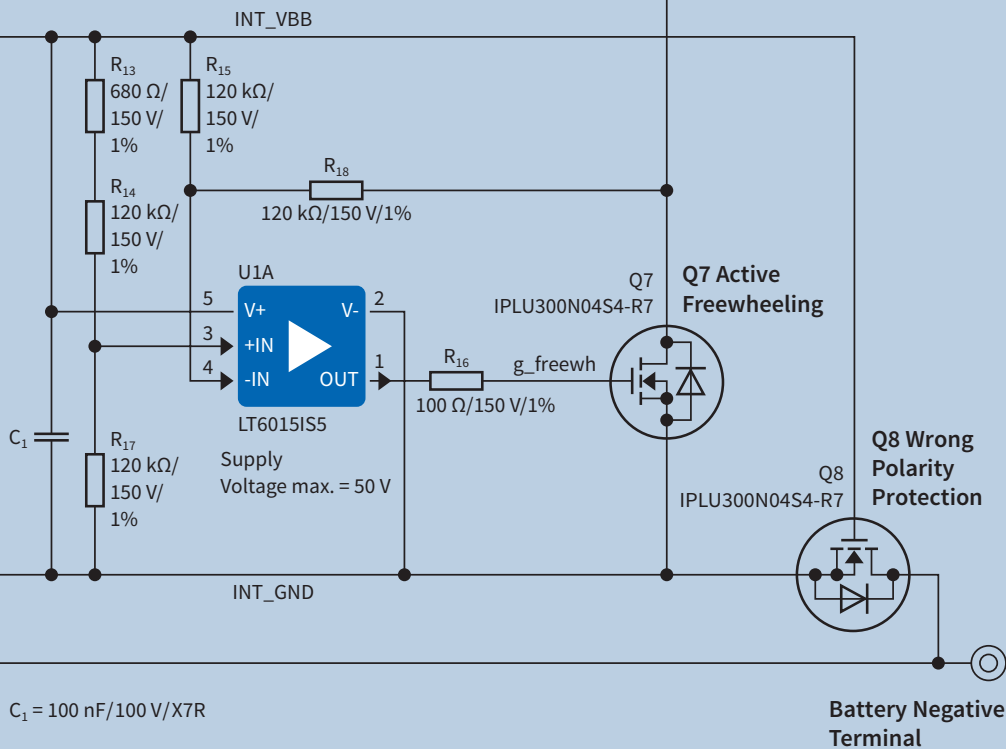


Designator  
SmartBatterySwitch\_Main\_SW\_V30.SchDoc

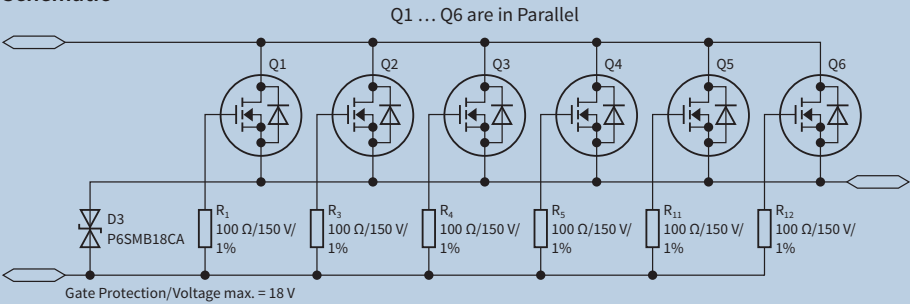
Output Terminal

Power  
Clamp

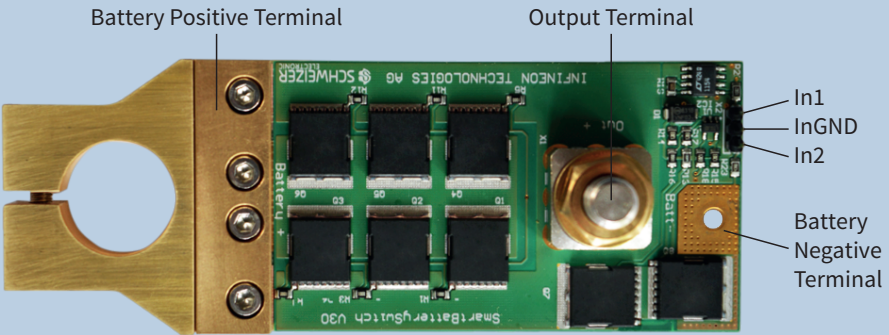
Source



### Schematic



### How to Connect the SBS



IN1	IN2	Switch
N.C.	N.C.	On
L	N.C.	Off
N.C.	L	Off (latched)
	N.C.	Reset latched

N.C. = Not connected

L = Connected to InGND

= Pull down In2 to InGND and release again



Thermal Image after 10 minutes and 250A.

[www.infineon.com/smart-battery-switch](http://www.infineon.com/smart-battery-switch)

[www.infineon.com/mosfet](http://www.infineon.com/mosfet)

Order Number: DEMO\_BATT\_SW\_V3 SP001332050

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