

High Efficiency 6-A Switched Capacitor Direct Charger with VOOC PHY Integrated

1 Descriptions

SC8547 is a high efficiency battery charging solution using a switched cap architecture. The switched cap architecture and the integrated FETs are optimized to enable a 50% cycle, allowing the cable current to be half the current delivered to the battery, reducing the losses over the charging cable as well as limiting the temperature rise in the application.

SC8547 adopts 36pin CSP 2.62mm X 2.62mm package.

2 Applications

- Smartphones
- Tablet PCs

3 Device Information

Part Number	Package	Body Size
SC8547CFFR	CSP36	2.62mm x 2.62mm

4 Features

- 10-way system protection
 - ✓ VAC_OVP
 - ✓ IBUS/IBAT/VBAT regulation
 - ✓ VDROP_OVP
 - ✓ VBUS_OVP
 - ✓ IBUS_OCP
 - ✓ IBUS_UCP
 - ✓ VOUT_OVP
 - ✓ VBAT_OVP
 - ✓ IBAT_OCP
 - ✓ TSHUT
- 6-way charge-pump protection
 - ✓ VBUS_ERROR_HI protection before switch
 - ✓ VBUS_ERROR_LO protection before switch
 - ✓ FLY cap short/open detection before switch
 - ✓ BST cap short/open detection before switch
 - ✓ PMID2OUT_OVP during switch
 - ✓ PMID2OUT_UVP during switch
- 7-channel 12-bit ADC
 - ✓ VAC,VBUS,IBUS,VOUT,VBAT,IBAT,TDIE