



High Efficiency 8-A Switched Capacitor Direct Charger with UFCS PHY Integrated

1 Descriptions

SC8549D 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.

SC8549D adopts 36pin CSP 2.545mm x 2.605mm package.

2 Applications

- Smartphones
- Tablet PCs

3 Device Information

Part Number	Package	Body Size
SC8549DCFFR	CSP36	2.545mm x 2.605mm

4 Features

- 8-way system protection
 - ✓ VAC_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