

Southchip Product Selection Guide

Two-in-one: charging management + reverse discharging

Part Number	Rating	Topology	Internal MOS	External MOS	Gate Driver	Must-Have ISENSE Resistor	QC2.0 Charging	VBUS ILIM	Battery ILIM	VBUS Dynamic Scaling	ILIM Dynamic Scaling	Package
SC8801	40V	Buck-boost charging/discharging		4	Internal, 10V	2	Yes	Yes	Yes	yes, by a PWM signal		4x4 QFN
SC8802	40V	Buck-boost charging/discharging		4	Internal, 10V	2		Yes	Yes	yes, by a PWM signal	yes, by a PWM signal	4x4 QFN
SC8803	40V	Buck charging, boost discharging		2	Internal, 10V	2		Yes	Yes	yes, by a PWM signal	yes, by a PWM signal	4x4 QFN
SC8803C	40V	Buck charging, boost discharging		2	Internal, 10V	2	Yes	Yes	Yes	yes, by a PWM signal		4x4 QFN
SC8804	40V	Boost charging, buck discharging		2	Internal, 10V	2		Yes	Yes	yes, by a PWM signal	yes, by a PWM signal	4x4 QFN
SC8805	28V	Buck-boost charging/discharging		4	External, 10V	2		Yes	Yes	yes, by a PWM signal	yes, by a PWM signal	4x4 QFN
SC8913	30V	Buck charging, boost discharging	2		Internal, 10V	2		Yes	Yes	yes, by a PWM signal	yes, by a PWM signal	6x6 QFN

DCDC controller

Part Number	Rating	Topology	Internal MOS	External MOS	Gate Driver	Must-Have ISENSE Resistor	Input ILIM	Output ILIM	Output Voltage Dynamic Scaling	ILIM Dynamic Scaling	PFM Mode	Package
SC8701	40V	Buck-boost		4	Internal, 10V	1	Yes	Yes	yes, by a PWM signal	yes, by a PWM signal		4x4 QFN
SC8702	20V	Buck-boost		4	External, 10V	1	Yes	Yes	yes, by a PWM signal	yes, by a PWM signal		4x4 QFN
SC8703	30V	Buck-boost		4	Internal, 10V	2	Yes	Yes		yes, by a PWM signal	Yes	4x4 QFN
SC8001	40V	Buck		2	Internal, 10V	1	Yes	Yes	yes, by a PWM signal			4x4 QFN
SC8201	40V	Boost		2	Internal, 10V	1	Yes	Yes	yes, by a PWM signal			4x4 QFN
SC8913	30V	Boost	2		Internal, 10V	2	Yes	Yes	yes, by a PWM signal	yes, by a PWM signal		6x6 QFN