



High Power Wireless Power Transmitter

1 Descriptions

The SC9610 is a highly integrated, highly efficient, magnetic induction wireless power transmitter. Operate with a wide input voltage range of 4V to 22V. Up to 50W maxpower output. and Complication with WPC-Qi2.0 protocol.

The transmitter integrates a 32-bit powerful digital core, rich memory, and peripherals. 64KB MTP and 8KB SRAM for user to develop wireless power transmitter and other application.

Up to 3 channels enhanced PWM output, and the clock frequency up to 192Mhz.

The transmitter integrates a full bridge driver, a Amplitude-Shift-Key (ASK) demodulation module, a Frequency-Shift-Key (FSK) modulation module, a Analog-to-Digital converter module, 6 Timer modules and a Capture module.

The transmitter also integrates fast charge interface. Including DP/DM, USB-PD, VOOC, AFPCP and UFCS.

The transmitter support Q-factor detection to achieve high quality foreign object detection.

The device is available in QFN44_5x5 package.

3 Applications

- Wireless power transmitter
- DC-motor driver

2 Features

- 4.0V to 22.0V input voltage range
- 1.0V to 42.0V converter voltage range
- Qi2.0 compliant wireless power transmitter
- Integrated 64KB MTP, 8KB SRAM
- Support MTP on-line upgrade
- Integrated LDO 5V, LDO3.3V and LDO1.5V
- Support USB PD3.0
- Support DP/DM/UFCS/VOOC
- Support I2C(master/slave) interface
- Integrated full bridge drivers
- Integrated capture module
- Integrated 3 pairs enhanced PWM generator
- Integrated 3 pairs general PWM generator
- Integrated external crystal driver
- Integrated 192Mhz PLL
- Integrated accurate current sense for FOD
- Low Power Mode
- OVP/OCP/OTP

4 Device Information

ORDER NUMBER	PACKAGE	BODY SIZE
SC9610	44 pin QFN	5mm x 5mm x 0.75mm