



SKYWORKS®

PRODUCT SUMMARY

SKY12248-492LF: 2.3 to 4.2 GHz 120 W High-Power Single Pole, Double Throw (SPDT) Switch

Applications

- TDD 3G/4G/5G LTE systems
- High-power switch for micro base stations and macro base stations
- Active antenna arrays

Features

- Compact, integrated high-power switch
- Small PCB footprint with minimal external components
- 120 W average LTE power with 8 dB pulse amplitude ratio (PAR) at 120 °C case temperature
- Low TX/RX insertion loss: < 0.4 dB typ. @ 2.6 GHz
- High TX to RX isolation: 47 dB typ. @ 2.6 GHz
- Low dc power consumption: $I_{dd} = 150$ mA @ Vcc 5 V in TX or RX mode
- Small 20-pin, 5 x 5 mm Quad Flat No-lead (QFN) package (ML3, 260 °C per JEDEC J-STD-020)
- For RoHS and other product compliance information, see the [Skyworks Certificate of Conformance](#).

Description

The SKY12248-492LF is an SPDT switch for TDD-LTE applications. The switch operates with both a 5 V supply and a 16 to 48 V supply. It can be tuned to specific RF bands within the range of 2.3 to 4.2 GHz by modifying select external surface mount technology (SMT) components.

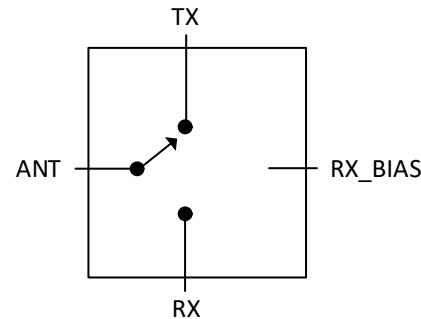


Figure 1. Functional Block Diagram

The device features high-power handling, low TX and RX insertion loss, and high isolation with low dc power consumption. The device requires minimal external components, enabling a smaller PCB footprint.

A functional block diagram is shown in Figure 1.

Ordering Information

Part Number	Description	Evaluation Board Part Number
SKY12248-492LF	2.3 to 4.2 GHz 120 W High-Power SPDT Switch	SKY12248-492LFEK1 2.3 to 3.8 GHz SKY12248-492LFEK2 3.8 to 4.2 GHz

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