



SKYWORKS®

PRODUCT SUMMARY

SKYR23001-11: 5G NR TDD 4T4R RF Front End Reference Design for Small Cell Radios

Applications

- 5G NR enterprise small cell
- 5G DAS
- 5G private networks

Features

- Four integrated RF channels with transmit, receive and observation receive paths
- Single band TDD 4T4R or dual band TDD 2T2R
- 5G n48/CBRS frequency band default operation
- Re-tunable to other frequency bands with pin-to-pin compatible parts/BOM change
- Completely integrated power management with single 30 to 60 V power supply
- Automated bias-sequencing for rapid bring-up to test
- Integrated board protection circuitry with current and temperature monitors



Skyworks Green™ products are compliant with all applicable legislation and are halogen-free. For additional information, refer to *Skyworks Definition of Green™*, document number SQ04-0074.

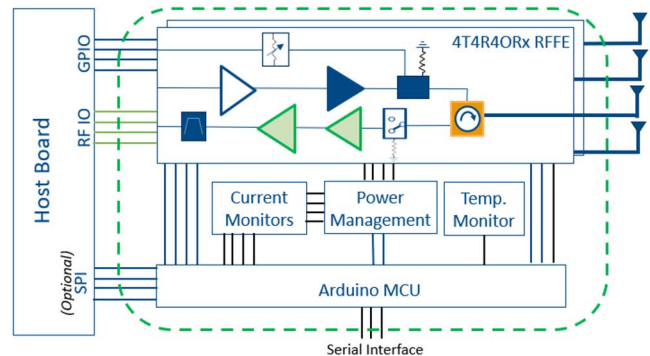


Figure 1. SKYR23001 4T4R RF Front End Reference Design

Description

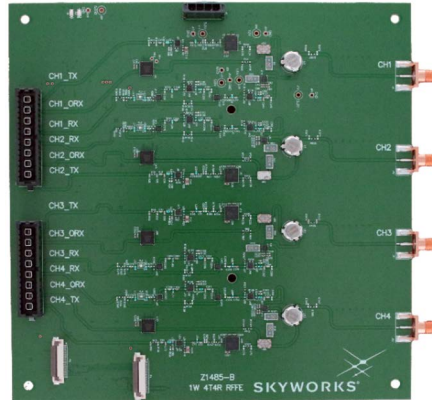
The SKYR23001 is a highly integrated 5G TDD RF front end reference design with four transmit, receive, and observation receiver paths.

The board is designed to operate with the Analog Devices ADRV904x radio system platform for full system evaluation of a 5G TDD Remote Radio Unit with transceiver and DPD. The SKYR23001 can also be used as a standalone RF input/output or with any other generic transceiver platform.

The design features the Skyworks suite of RF front-end components including the SKY6652x family of pin-to-pin compatible power amplifiers, circulators, wide-band LNA, RF switches and DSA enabling design variations across multiple cellular frequency bands.

This design achieves an instantaneous bandwidth of 200 MHz. This board is pre-tuned for RF input/output match and post-DPD linearity, reducing design time and enabling fast time to market.

Ordering Information



Product Description	Featured Power Amplifier	Part Number
4T4R 5G ORAN Reference Design for 3300 MHz to 3800 MHz	SKY66520-11	SKYR23001-11EK1
Combo 2T2R 5G 2300 MHz to 2700 MHz + 2T2R 3550 MHz to 4200 MHz ORAN Reference Design	SKY66522-11, SKY66523-11	SKYR23001-11EK2

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