

PRODUCT SUMMARY

SKY5A2205: Sky5® TX/RX Front-end Module with 15 Linear TRx Switch Ports (No 2G Integration)

Applications

- 4G/5G automotive and telematics Network Attached Device (NAD)
- 4G/5G Customer Premises Equipment (CPE)

Features

- P2P compatible with SKY5A2204
- TX harmonics below -40 dBm
- 15 low loss/high linearity/high isolation TRx switch ports
- RF input switching to external 5G/4G/3G path
- Integrated directional coupler with forward directionality
- Dual antenna downlink inter-band Carrier Aggregation (CA) support with dedicated LB and M/HB antenna ports
- Built-in IEC-compliant antenna ESD protection
- RF ports internally matched to 50 Ω with 0 DC offset
- Fully Baseband Agnostic Design:
 - MIPI RFFE control with dual-standard support
 - User-selectable register mappings
- Automotive support:
 - Production Part Approval Process (PPAP)
 - AEC-Q104 qualification
 - International Material Data System (IMDS)
- Small, low profile land grid array (LGA) package:
 - 5.5 mm x 5.5 mm x 0.755 mm
 - 44-pad configuration

Description

The SKY5A2205 TX/RX Front-End Module (FEM) offers switching solutions for 4G/5G automotive and telematics NAD or CPE. The SKY5A2205 is pin-to-pin compatible with the SKY5A2204 device. It delivers flexibility and efficiency by providing common PCB design capability for multiple regional variant designs, where 2G functionality is required selectively.

The FEM facilitates flexible broadband RF switching using 15 transmit/receive (TRx) antenna switch ports, covering all 3G/4G/5G bands, from 700 MHz through 2300 to 2700 MHz.

In support of downlink inter-band CA, the TRx ports are partitioned into two independent switch blocks, including six LB ports and nine M/HB ports. Each switch block includes a forward direction coupler that may be monitored on the CPL port.

For dual antenna application designs, the SKY5A2205 has dedicated LB and M/HB antenna ports. These ports provide the simultaneous LB and M/HB reception required for downlink CA.



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.

Ordering Information

Part Number	Part Description	Evaluation Board Part Number
SKY5A2205	Sky5® TX/RX Front-end Module with 15 Linear TRx Switch Ports (No 2G Integration)	SKY5A2205EK1

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