

PRODUCT SUMMARY

SKY65313-11: 900 MHz Transmit/Receive Front-End Module

Applications

- Automated meter reading
- Advanced metering infrastructure
- ISM systems

Features

- Transmit output power > +30.5 dBm
- High efficiency PA
- Analog power control
- LNA NF < 1.4 dB
- LNA bypass mode
- Integrated control logic
- Internal RF match and bias circuits
- All RF ports internally DC blocked
- Low leakage current shutdown mode
- Small footprint, MCM (28-pin, 6 x 6 mm) package (MSL3, 260 °C per JEDEC J-STD-020)



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

Description

Skyworks SKY65313-11 is a high performance, transmit/receive (T/R) Front-End Module (FEM). The device provides a complete T/R chain with T/R switches.

The device transmit chain features +30.5 dBm output power and a 40 percent Power Added Efficiency (PAE) including harmonics filter and switch losses.

The device receive chain features a Low Noise Amplifier (LNA) with a 1.4 dB Noise Figure (NF) and 16.6 dB gain. The cascaded NF and gain, taking into account the 0.5 dB insertion loss transmit/receive antenna switch, is 1.9 dB and 16.1 dB, respectively, which make the SKY65313-11 ideal for medium power microwave links such as 900 MHz Industrial, Scientific, and Medical (ISM) band applications.

The module also has a shut-down mode and Low-Noise Amplifier (LNA) bypass mode to minimize power consumption.

The device is mounted in a 28-pin, 6 x 6 mm Multi-Chip Module (MCM) Surface-Mounted Technology (SMT) package, which allows for a highly manufacturable low-cost solution.

The device package and pinout for the 28-pin MCM are shown in Figure 1.



Figure 1. SKY65313-11 Pinout – 28-Pin MCM (Top View)

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Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY65313-11 T/R Front-End Module	SKY65313-11	EN40-D205-001

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