



SKYWORKS®

PRODUCT SUMMARY

SKY85629-11: Non-Linear 6 GHz Front-End Module for Wi-Fi® 7 and Wi-Fi® 8 Applications

Applications

- Wireless routers
- Access points
- Home gateways
- Customer Premise Equipment (CPE)
- Mesh/whole-home Wi-Fi® systems
- Wi-Fi based home entertainment systems

Features

- Integrated non-linear, medium-high performance 6 GHz PA, LNA with bypass mode, low-gain mode, high-gain mode, T/R switch and coupler
- Fully matched input and output
- Integrated logarithmic power detector
- Transmit gain: 32 dB
- Receive gain: 16 dB
- AM/AM distortion: 1 dB
- AM/PM distortion: 3 degrees
- 24-pin, 3 x 5 mm MCM package (MSL3, 260 °C per JEDEC J-STD-020)
- For RoHS and other product compliance information, see the [Skyworks Certificate of Conformance](#).

Description

The SKY85629-11 is a highly integrated front-end module (FEM) incorporating a transmit/receive (T/R) switch, a low-noise amplifier (LNA) with high-gain, low-gain, and bypass mode, and a power amplifier (PA) intended for Wi-Fi 7 and Wi-Fi 8 (802.11be/bn) applications and systems.

The LNA and PA disable functions ensure low leakage current in off mode. An integrated logarithmic power detector is included to provide closed-loop power control within the system.

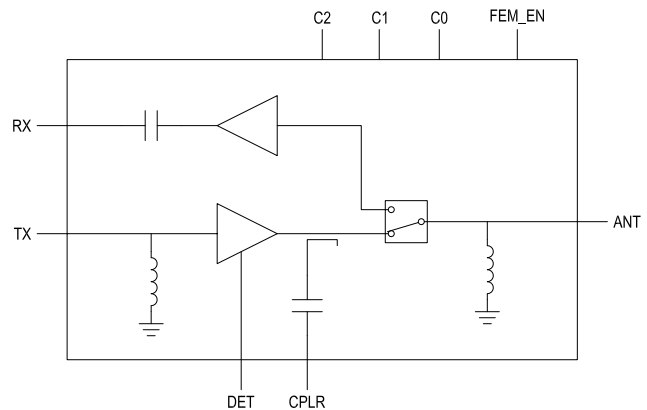


Figure 1. Functional Block Diagram

Ordering Information

Part Number	Description	Evaluation Board Part Number
SKY85629-11	Non-Linear 6 GHz Front-End Module for Wi-Fi® 7 and Wi-Fi® 8 Applications	SKY85629-11EK1

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