



SKYWORKS®

PRODUCT SUMMARY

SKY85358-11: 2.4 GHz High-Power Front-end Module for Wi-Fi 7 Applications

Applications

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

Features

- Integrated high-performance PA, LNA with bypass, T/R switch, and coupler for Wi-Fi 7 (802.11be) applications
- Fully matched input and output
- Integrated logarithmic power detector and directional coupler
- Transmit gain: 32 dB
- Receive gain: 16 dB
- Output power:
 - MCS13, +18.5 dBm, -47 dB DEVM
 - MCS11, +21 dBm, -43 dB DEVM
 - MCS9, +24.5 dBm, -35 dB DEVM
 - MCS7, +26 dBm, -30 dB DEVM
 - MCS0, +28 dBm, mask compliant
- Small (16-pin, 3 x 3 mm) LGA package (MSL3, 260 °C per JEDEC J-STD-020)



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.

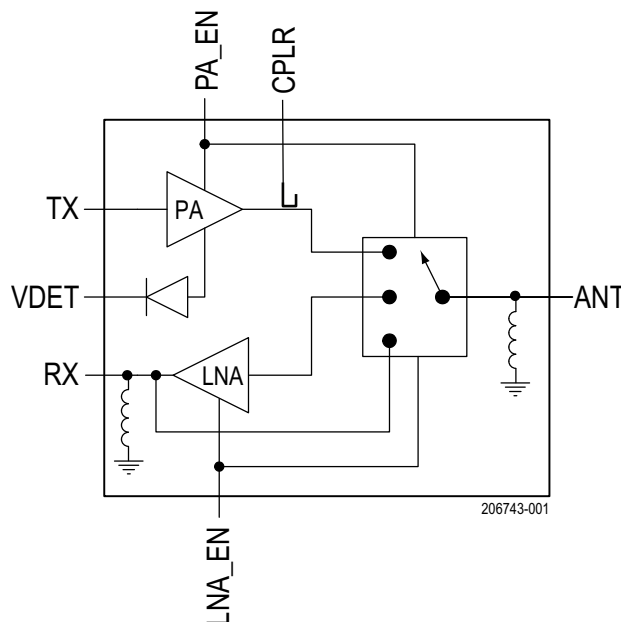


Figure 1. SKY85358-11 Block Diagram

Description

The SKY85358-11 is a highly efficient, highly integrated, 2.4 GHz front-end module (FEM) incorporating a 2.4 GHz single-pole, double-throw (SPDT) transmit/receive (T/R) switch, a 2.4 GHz low-noise amplifier (LNA) with bypass, and a 2.4 GHz power amplifier (PA) with integrated digital pre-distortion (DPD) coupler intended for Wi-Fi 7 (802.11be) 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.

The device is provided in a compact LGA package. A functional block diagram is shown in Figure 1.

Ordering Information

Part Number	Part Description	Evaluation Board Part Number
SKY85358-11	2.4 GHz High-Power Front-End Module for Wi-Fi 7 Applications	SKY85358-11EK1

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