

#### PRODUCT SUMMARY

# SKY85354-11: 2.4 GHz Wi-Fi 6 (802.11ax) Front-End Module

## **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 802.11ax 2 GHz PA, LNA with bypass, and T/R switch
- · Fully matched input and output
- Integrated logarithmic power detector and directional coupler
- Transmit gain: 31 dB
- Receive gain: 15 dB
- Output power:
  - MCS11, 20 dBm, -43 dB DEVM
  - MCS9, 21.5 dBm, -35 dB DEVM
- Small LGA (16-pin, 3 x 3 mm) package (MSL3, 260 °C per JEDEC J-STD-020)



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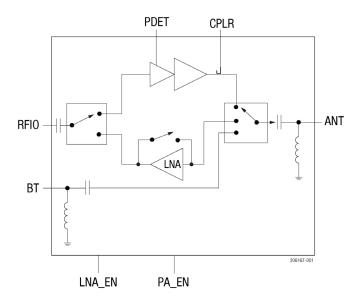


Figure 1. SKY85354-11 Block Diagram

## **Description**

The SKY85354-11 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 802.11ax 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, 16-pin 3 x 3 mm Land Grid Array (LGA) package. A functional block diagram is shown in Figure 1.

#### **Ordering Information**

Part Number	Product Description	Evaluation Board Part Number
SKY85354-11	2.4 GHz WLAN Front-End Module	SKY85354-11EK1

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