

**PRODUCT SUMMARY**

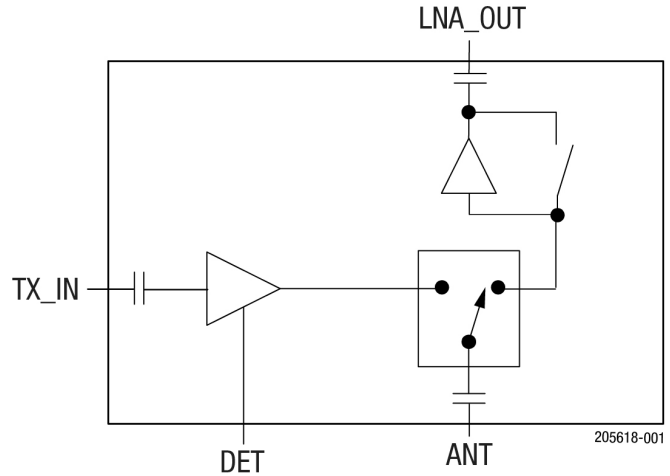
# SKY85789-11: Skyworks ICE™ 6 GHz Mid-High Power Front-End Module for Wi-Fi 6E

**Applications**

- Wi-Fi 6 networking systems and set-top boxes
- WLAN-enabled wireless video streaming systems

**Features**

- Integrated high-efficiency, high-performance 6 GHz PA, LNA with bypass mode, and T/R switch
- Fully matched input and output
- Integrated logarithmic power detector
- Integrated, temperature-compensated log detector
- Receive gain: 15 dB
- AM/AM distortion: 5 dB
- AM/PM distortion: 10 degrees
- 24-pin, 3 x 5 mm laminate package (MSL3, 260 °C per JEDEC J-STD-020)



**Figure 1. SKY85789-11 Block Diagram**

**Description**

The SKY85789-11 is a highly integrated 6 GHz front-end module (FEM) incorporating a 6 GHz single-pole, double-throw (SPDT) transmit/receive (T/R) switch, a 6 GHz high-gain, low-noise amplifier (LNA) with bypass mode, and a non-linear power amplifier (PA) intended for high-power Wi-Fi 6 applications and systems.

An integrated logarithmic power detector is included to provide closed-loop power control within the system.

The device is housed in a 24-pin 3 x 5 mm Land Grid Array (LGA) package. A functional block diagram is shown in Figure 1.



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	Product Description	Evaluation Board Part Number
SKY85789-11	6 GHz Mid-High Power FEM for Wi-Fi 6E	SKY85789-11EK1

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