

**PRODUCT SUMMARY**

# SKY85752-88A: Skyworks ICE™ 5 GHz Wi-Fi 6 High-Power Front-End Module

**Applications**

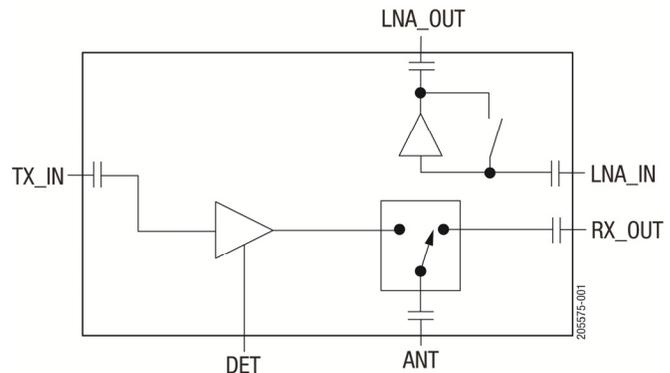
- Indoor and outdoor Wi-Fi 6 networking systems
- WLAN-enabled wireless video streaming systems

**Features**

- Integrated non-linear, high-performance 5 GHz PA, LNA with bypass mode, and T/R switch
- Fully matched input and output
- Integrated logarithmic power detector
- Transmit gain at mask power: 32 dB
- Integrated, temperature-compensated log detector
- Receive gain: 15 dB
- AM/AM distortion: 2 dB
- AM/PM distortion: 2 degrees
- Small (24-pin, 3 x 5 mm) laminate 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. SKY85752-88A Block Diagram**

**Description**

The SKY85752-88A is a highly integrated 5 GHz front-end module (FEM) with Skyworks ICE™, incorporating a 5 GHz single-pole, double-throw (SPDT) transmit/receive (T/R) switch, a 5 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. The SKY85752-88A is part of the Skyworks ICE technology of high efficiency, energy saving products.

The LNA and PA disable functions ensure low leakage current in the 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, 24-pin 3 x 5 mm conformally shielded Land Grid Array (LGA) package. A functional block diagram is shown in Figure 1.

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## Ordering Information

Part Number	Product Description	Evaluation Board Part Number
SKY85752-88A	Skyworks ICE™ 5 GHz Wi-Fi 6 High Power Front -End Module	SKY85752-88AEK1

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