

PRODUCT SUMMARY

SKY85743-21: 5 GHz High-Power WLAN Front-End Module

Applications

- Indoor and outdoor 802.11ax networking systems
- WLAN-enabled wireless video streaming systems

Features

- Integrated high-performance 5 GHz PA, LNA with bypass, and T/R switch
- Fully matched input and output
- Integrated logarithmic power detector and directional coupler
- Transmit gain: 32 dB typical
- Supports 802.11ax: output power:
 - +21 dBm, -43 dB DEVM, MCS11
 - +22 dBm, -40 dB DEVM, MCS11
 - +24 dBm, -35 dB DEVM, MCS9
- Conformally shielded part
- Integrated, temperature-compensated log detector
- Highly sensitive, jammer-tolerant ($> +10$ dBm IIP3), high gain (16 dB) LNA
- Small (24-pin, 3 x 5 mm) conformally shielded package (MSL3, 260 °C per JEDEC J-STD-020)



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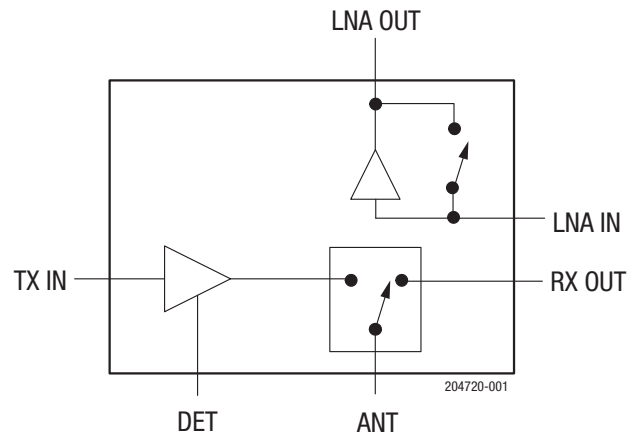


Figure 1. SKY85743-21 Block Diagram

Description

The SKY85743-21 is a highly integrated, 5 GHz front-end module (FEM) 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, and a 5 GHz power amplifier (PA) intended for high-power 802.11ax applications and systems.

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 over 20 dB of dynamic range.

The device is provided in a compact, 24-pin 3 x 5 mm conformally shielded Land Grid Array (LGA) package, which may reduce the front-end board space by more than 50 percent. A functional block diagram is shown in Figure 1.

Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY85743-21: 5 GHz WLAN Front-End Module	SKY85743-21	SKY85743-21EK1

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