PRODUCT SUMMARY

SKY85408-11: High-Power (+23 dBm) 802.11ax Ultra-Linear WLAN Power Amplifier with Integrated Power Detector

Applications

- IEEE 802.11ax WLAN enabled:
  - Access points
  - Media gateways
  - Set-top boxes
  - LCD TVs
- Other broadband triple-play multimedia applications

Features

- Extremely linear output power of +23 dBm for IEEE 802.11ax, MCS11, HT80, DEV < –43 dB @ 5.0 V
- Linear output power of +24 dBm for IEEE 802.11ac, MCS9, HT80, DEV < –35 dB @ 5.0 V
- High gain of 35 dB @ 5.0 V
- Integrated conformal shield
- Industry leading power-added efficiency: 20% at +26 dBm, MCS7
- Fully matched at RF input/output ports
- Load insensitive logarithmic power detector
- Small footprint laminate (20-pin, 4 x 4 mm) SMT 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.

Description

The Skyworks SKY85408-11 is a 5 GHz Microwave Monolithic Integrated Circuit (MMIC) power amplifier (PA) with superior output power, linearity, and efficiency. These features make the SKY85408-11 ideal for Wireless Local Area Network (WLAN) IEEE 802.11ax applications.

The SKY85408-11 features an internal band-gap regulator that eliminates the need for an external reference supply. The PA is activated with a standard 1.8 V to 5.0 V low current CMOS logic signal.

The device is fabricated using Indium Gallium Phosphide (InGaP) Heterojunction Bipolar Transistor (HBT) technology. The device is internally matched and mounted in a 20-pin, 4 x 4 mm laminate surface-mount technology (SMT) package, which allows for a highly manufacturable, low-cost solution.

A block diagram of the SKY85408-11 is shown in Figure 1.
PRODUCT SUMMARY  •  SKY85408-11: HIGH-POWER (+23 dBm) 802.11ax ULTRA-LINEAR WLAN PA

Ordering Information

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<th>Model Name</th>
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<th>Evaluation Board Part Number</th>
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<td>SKY85408-11: High-Power WLAN Power Amplifier</td>
<td>SKY85408-11</td>
<td>SKY85408-11EK1</td>
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