

**PRODUCT SUMMARY**

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

**Applications**

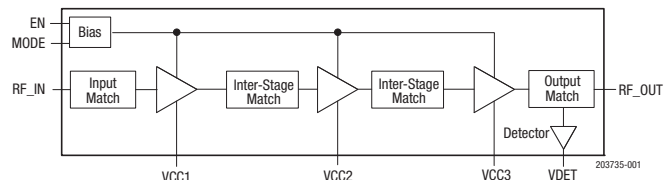
- IEEE 802.11ax WLAN enabled:
  - Access points
  - Media gateways
  - Set-top boxes
  - LCD TVs
- Other broadband triple-play multimedia applications

**Features**

- Extremely linear output power of +23 dBm for IEEE 802.11ax, MCS11, HT80, DEVM –43 dB @ 5.0 V
- Linear output power of +24 dBm for IEEE 802.11ac, MCS9, HT80, DEVM < –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.



**Figure 1. SKY85408-11 Block Diagram**

**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.

## Ordering Information

| Model Name                                   | Manufacturing Part Number | Evaluation Board Part Number |
|--|---------------------------|------------------------------|
| SKY85408-11: High-Power WLAN Power Amplifier | SKY85408-11               | SKY85408-11EK1               |

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