

## PRODUCT SUMMARY

# SKY66318-11: 3300 to 3600 MHz Wide Instantaneous Bandwidth High-Efficiency Power Amplifier

## Applications

- 4G LTE and 5G NR systems
- Supports 3GPP Bands 22, 42, n77, and n78
- Driver amplifier for micro base stations and macro base stations
- Enterprise small cell and massive MIMO

## Features

- Wide instantaneous signal bandwidth: 100 MHz
- High-efficiency and power: PAE = 25% @ +28 dBm
- High linearity: <-50 dBc ACLR @ +28 dBm with linearization (100 MHz 5G, 8.0 dB PAR signal)
- High gain: 35 dB
- Excellent input and output return loss
- Integrated active bias
- Integrated enable On/Off function: PAEN = 1.7 to 2.5 V
- Single supply voltage: 5.0 V
- Pin-to-pin compatible PA family supporting major 3GPP bands
- Compact (16-pin, 5 × 5 × 1.3 mm) package (MSL3, 260 °C per JEDEC J-STD-020)

## Description

The SKY66318-11 is a high-efficiency power amplifier (PA), designed for the stringent requirements of enterprise small cell applications. The PA offers wide instantaneous bandwidth and is fully input / output matched with high gain and efficiency. Active biasing circuitry is also integrated to compensate for PA performance over temperature, voltage, and process variation. With a compact 5 x 5 mm package, the SKY66318-11 is ideal for 4G LTE and 5G NR systems operating from 3300 to 3600 MHz. The SKY66318-11 is available on major transceiver reference designs.

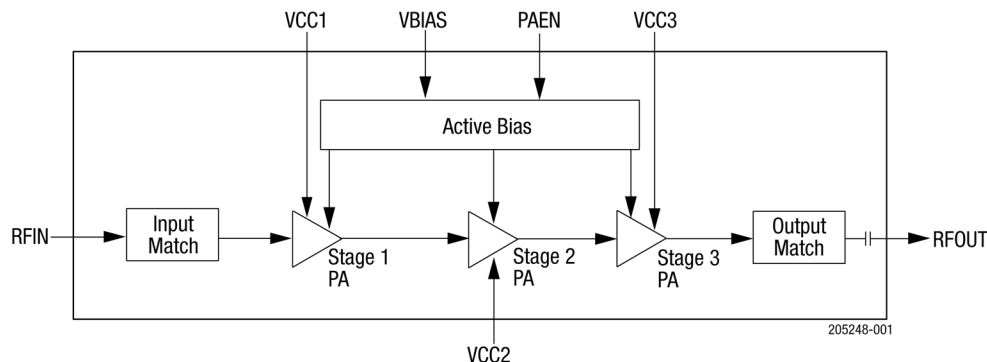
The SKY66318-11 is part of a high-efficiency, pin-to-pin compatible PA family supporting major 3GPP bands. Table 1 lists the pin-to-pin compatible parts in the PA family. A block diagram of the SKY66318-11 is shown in Figure 1.

**Table 1. Pin-to-Pin Compatible PA Family**

| Part Number | Frequency (MHz) | Band                       |
|-------------|-----------------|----------------------------|
| SKY66312-11 | 2300 to 2400    | Bands 30 and 40            |
| SKY66317-11 | 2496 to 2690    | Bands 7, 38, and 41        |
| SKY66313-11 | 3400 to 3600    | Bands 22, 42, and n78      |
| SKY66318-11 | 3300 to 3600    | Bands 22, 42, n77, and n78 |
| SKY66319-11 | 4400 to 5000    | Band n79                   |
| SKY66320-11 | 3600 to 3800    | Band 43                    |



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. SKY66318-11 Block Diagram**

## Ordering Information

| Part Number | Product Description                                    | Evaluation Board Part Number |
|-------------|--------------------------------------------------------|------------------------------|
| SKY66318-11 | 3300 to 3600 MHz Wide Instantaneous High-Efficiency PA | SKY66318-11EK1               |

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