

#### **PRODUCT SUMMARY**

# SKY66522-11: 2300 to 2690 MHz Wide Instantaneous Bandwidth High-Efficiency Power Amplifier

## **Applications**

- 5G NR systems and 4G LT
- Driver amplifier for micro base stations and macro base stations
- Enterprise small-cell and massive MIMO

#### **Features**

- Wide instantaneous signal bandwidth: 200 MHz
- High linearity: +31 dBm with < -48 dBc ACLR with pre-distortion (200 MHz LTE, 8.5 dB PAR signal)
- High gain: 36.5 dB
- Internally matched input and output for 50 ohm systems
- Integrated active bias: performance compensated over temperature
- Integrated enable ON/OFF function: PAEN = 1.5 to 2.5V
- Supply voltage: 5V and 12V
- Pin-to-pin compatible PA family supporting major 3GPP bands
- Compact (16-pin, 5 × 5 × 1.04 mm) package (MSL3, 260°C per JEDEC J-STD-020)



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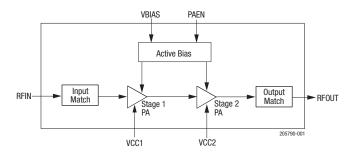


Figure 1. SKY66522-11 Block Diagram

### **Description**

The SKY66522-11 is a highly efficient, wide instantaneous bandwidth, fully input/output matched power amplifier (PA) with high gain and linearity. The compact  $5 \times 5$  mm PA is designed for 5G NR and 4G LTE systems operating from 2300 to 2690 MHz.

The active biasing circuitry is integrated to compensate PA performance over temperature, voltage, and process variation.

The SKY66522-11 is part of high-efficiency, pin-to-pin compatible PA family supporting major 3GPP bands.

A block diagram of the SKY66522-11 is shown in Figure 1. Table 1 lists the pin-to-pin compatible parts in the PA family.

Table 1. Pin-to-Pin Compatible PA Family

| Part Number | Freq (MHz)   | 3GPP Band                  |
|-------------|--------------|----------------------------|
| SKY66522-11 | 2300 to 2690 | B7, B38, B40, B41, and n41 |
| SKY66520-11 | 3300 to 3800 | n78, B42, and B43          |
| SKY66523-11 | 3700 to 4200 | n77                        |

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## **Ordering Information**

| Part Number | Part Description   | Evaluation Board Part Number |
|-------------|--|------------------------------|
| SKY66522-11 | 2300 to 2690 MHz Wide Instantaneous High-Efficiency PA                     | SKY66522-11EK1               |
|             | 2300 to 2690 MHz Wide Instantaneous High-Efficiency PA (Dual Combined PAs) | SKY66522-11EK2               |

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