

SKY66525-11: 3450 to 4200 MHz Wide Instantaneous Bandwidth High-Efficiency Power Amplifier

Applications

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

Features

- Wide instantaneous bandwidth: 400 MHz
- High-efficiency: PAE = 26% @ +30 dBm
- High linearity: < -45 dBc ACLR at +30 dBm with pre-distortion (400 MHz IBW, 9 dB PAR signal)
- High gain: 31.5 dB
- Integrated active bias
- Integrated enable ON/OFF function
- Pin-to-pin compatible with PA family supporting major 3GPP bands
- Compact (16-pin, 5 x 5 x 1.04 mm) package (MSL3, 260 °C per JEDEC J-STD-020)



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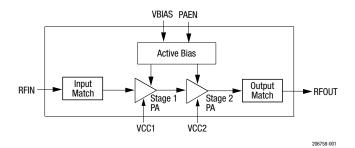


Figure 1. SKY66525-11 Block Diagram

Description

The SKY66525-11 is a highly efficient, wide instantaneous bandwidth, fully input/output matched power amplifier (PA) with high gain and linearity. The compact 5 x 5 mm PA is designed for 5G NR systems operating from 3450 to 4200 MHz.

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

The SKY66525-11 is part of a pin-to-pin compatible family of high efficiency PAs supporting major 3GPP bands.

A block diagram of the SKY66525-11 is shown in Figure 1. Table 1 lists the pin-to-pin compatible PA family.

Part Number	Frequency (MHz)	3GPP Band	IBW (MHz)
SKY66522-11	2300 to 2700	B7, B38, B40, B41, and n41	200
SKY66520-11	3300 to 3800	n78, B42, and B43	200
SKY66523-11	3550 to 4200	n77	200
SKY66524-11	3300 to 3800	n78, B42, and B43	400
SKY66525-11	3450 to 4200	n77	400

Table 1. Pin-to-Pin Compatible PA Family

Ordering Information

Part Number	Part Description	Evaluation Board Part Number
SKY66525-11	3450 to 4200 MHz Wide Instantaneous Bandwidth High-Efficiency Power Amplifier	SKY66525-11EK1

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